

Question text [NOTE: Questions that received responses from committee members and speakers are listed in the matrix below. This list does not reflect every question that was submitted into SLIDO during the workshop.]

How are employers implementing sustainable models in their workflow? For example, several states allow RPH prescribed hormonal contraception with payment. Can Lorri elaborate how reimbursable services are being implemented. How can national organizations or schools accelerate this to happen faster?

Will we discuss the “why” behind the pharmacies closing? Is it lack of enrollment/highly trained pharmacists or is it a failed/failing business model? Thanks.

I appreciate hearing about all the unique ways that students can tailor their PharmD education by adding on residency training, certificates, or other degrees. I do wonder if there is still a place in the profession for the entry level PharmD who doesn't want to seek additional training (or debt).

Can you discuss the role of ageism in the profession? While it is essential to support new pharmacists, the profession needs to support pharmacists throughout their career. One major area where ageism exists (and it's not just in pharmacy but in the other disciplines as well) is in academia. Ideas?

Are applications down across all healthcare fields or is pharmacy an outlier?

Is there any research on class size, duration of program , entry profile (demographics, prior career, feeder schools)on outcomes and career satisfaction. ? Some provocative ideas proposed by Dr Youmans that would be interesting to study

Question for Doctor Youmans for the Pharm Tech to PharmD Program at UCSF, and for the Walgreens Pharmstart program what activities are done in regards to improve academic readiness for technicians to potentially handle the rigor and load of Pharmacy School?

Can you address issues with decreasing NAPLEX passing rates and what is being done to address this?

It seems it is difficult for employer pharmacies (both hospital and community settings) to balance IPPE/APPE offerings due to pharmacy staffing challenges - yet students are the answer to the staffing challenges long term. What suggestions do panelists have for colleges to navigate these concerns?

I also wonder how we can offer incentives for our learners to do their APPE and IPPE experiences in rural areas - rural health certificate programs?

What are the panelist's response to folks that say "Pharmacy school is too expensive" while also providing high quality education that a perspective community pharmacist could apply healthcare services like pharmacogenomics?

Can we look at having pharmacy included in HRSA scholarship opportunities that are currently available for medicine, psychology, and dentistry?

Has there been discussion of pharmacist salary and how that has impacted recruitment, both to pharmacy schools and in community pharmacies? Even a slight increase in salaries may have a positive impact in the profession, especially when there may be more lucrative paths people may want to pursue.

If a Walgreens tech taps into PharmStart and PEAP, what requirements do they have to the Walgreens corporation? Is there a "loan repayment" commitment and if they want to practice in small rural areas where a Walgreens doesn't exist (ie, traditional rural independent pharmacy)?

Responses [NOTE: Responses are the opinions expressed by the respondent and are not necessarily representative of their organization or affiliation]

Lorri Walmsley, Walgreen Co: There are a variety of factors that impact implementation - market demand, payment for services, the number of plans that pay, differences in state by state regulations and training requirements and the ability for pharmacies to implement technologies to reduce workload in the community pharmacy.

Lorri Walmsley, Walgreen Co: It is not one thing, its a combination of factors.

Marilyn Speedie: I don't have data on the closures. I think NASPA and NACP do, so the questioner should probably look there. I do have some impressions from my experience in Minnesota so will respond that way. Some of the closures are indeed a matter of not finding someone to purchase the pharmacy when the pharmacist owner wants to retire or move on. The wholesalers have some programs to assist with such transfers but I don't know how successful they are. Asking a young pharmacist to assume sole responsibility for an independent pharmacy is a big ask that requires the right combination of someone at the right stage of their career, with the financial wherewithal to buy, and evidence that the pharmacy is a going concern. The financial aspects are difficult, especially with the unfair practices of the PBMs, and unless a sole owner has another pharmacist to substitute for him/her at times, it is extremely demanding with no breaks or vacations and no time to advance the practice. In Minnesota the pharmacies in the rural areas that are surviving seem to be the small chains in multiple small towns (Thrifty-White, Coburns, etc). The pharmacists can support each other for vacations, etc. and there is the advantage that some use of central fill, etc. The successful ones tend to be highly diversified with service to local nursing homes and sometimes the small hospitals, as well as offering the paid MTM, vaccination, and other patient services the Minnesota law has provided for. Those extra patient services are not enormously remunerative and require credentialing and billing expertise, but we have passed laws requiring commercial payers to pay for them and the state pays for MTM for Medicaid patients. The legislature also just passed a bill giving qualified pharmacies (independent, rural etc) extra payment for the dispensing fee for prescriptions for Medicaid patients. Most of our rural pharmacists are extremely committed to continue serving their communities so a decision to close is not taken lightly.

Lee Vermeulen, AACP: Absolutely. Over 40% of our graduates across all 143 current colleges and schools of pharmacy go direct to practice in the community setting, and that rate is consistent across all of our institutions – private and public, research-intensive and practice-focused, etc. While we should continue to promote community practice residencies and encourage our graduates to gain more skills post-PharmD, the direct to practice route is something we all need to acknowledge and, in fact, celebrate!

Marilyn Speedie: Our PharmD graduates are prepared to provide patient care. The experience that is acquired in a residency can be developed with experience in a pharmacy that supports the beginning practitioner. We have many examples of non-residency trained pharmacists who are outstanding practitioners. PGY1 residencies certainly standardize the process and probably speed up the acquisition of experience. I think certifications that can be acquired through CE-type programming are probably essential for even residency-trained individuals since they tend to educate pharmacists to provide advanced services that are newly approved for reimbursement. In Dual-degree programs (Pharm D + MPH or MBA) are like PGY2 residencies in that they prepare graduates for specialized careers and are an important option for some, but are not necessary for success.

Nicole Brandt, UMD: Ageism in the workplace is pervasive. That is why national initiatives are taking action to address ways to support an aging workforce. For instance, combatting Ageism is a pillar of the work being done by the Gerontological Society on Aging and American Geriatrics Society. Resources: Gerontological Society of America (<https://www.reframingaging.org/>) and American Geriatrics Society (<https://www.americangeriatrics.org/media-center/news/ags-launches-new-initiative-addressing-intersection-structural-racism-and-ageism>)

Sharon Youmans, UCSF: I am not aware of any significant decreases in other fields. In California there is an explosion of applications for Physician Assistant programs. It's a 24- 28 month program, and graduates have prescriptive authority.

Sharon Youmans, UCSF: I am not aware of any specific studies. You raise an important point as these data should be routinely collected to assess if our programs are preparing graduates as we intended for practice and their careers. At UCSF, we are about to survey our post-bac students on their career outcomes.

Lorri Walmsley, Walgreen Co: Walgreens program is currently focused on the pre-pharmacy work, I think it is a little too soon to determine if that is a concern.

Sharon Youmans, UCSF: At UCSF we do not have undergraduate courses, our admissions staff provide advising and recommendations on courses to take. Some of our students right out of undergraduate programs have to adjust to way we teach and assess knowledge in our PharmD program.

Sharon Youmans, UCSF: Problem is multi-factorial. It is not clear what the root cause is. We are discussing more openly with students. Schools provide all kinds of resources to prepare for the exam.

Lorri Walmsley, Walgreen Co: Walgreens Deans Advisory Council is addressing this concern as well. We are revisiting a number of elements and expect updates soon.

Sharon Youmans, UCSF: Talking with preceptors is a major strategy. We understand the pressures. We also need to help preceptors to perhaps alter the way they teach. Students can and do add value to the sites. Having clear and realistic expectations of what students can do at the "trainee" stage. The preceptor burnout is very concerning.

Sharon Youmans, UCSF: Well, we can't pay them. That would be a great collaborative project with the sites and the schools. If you can recruit students from the area and they go back to do their experiential in that communities, that will work. We've done that at UCSF for years, the central valley of California.

Sharon Youmans, UCSF: (1) Education is expensive and it is expensive to live in certain parts of the country. To provide state of the art education with technology support it is expensive. In the end it is an investment with a high return. (2) I am not clear about the pharmacogenomics question. I would think more training would be needed if such services were to be provided. I would like to see robust chronic disease medication management provided to patients in community pharmacies and a specialty service would be referred to a specialty clinic or health-system.

Lorri Walmsley, Walgreen Co: This is an excellent point, states determine how those funds are allocated and many do not include pharmacy.

Sharon Youmans, UCSF: We are, however, we are in the category of allied health. I just submitted a HRSA grant for scholarships for disadvantaged students. There is a history of warding these grants to pharmacy schools.

Lorri Walmsley, Walgreen Co: There have been changes to rates since the pandemic.

Lorri Walmsley, Walgreen Co: We do have loan repayment commitments for our PEAP program.

Nicole Brandt, UMD: Health and Human Services has geriatric workforce programs that foster interprofessional collaboration. (<https://bhwh.hrsa.gov/>) There have been examples based out of the 50 programs of how professionals work together. (<https://www.hrsa.gov/advisory-committees/interdisciplinary-community-linkages>)

Are there any initiatives to support collaborative efforts between pharmacy schools and other health professions like nursing?

For instance, at the University of Maryland School of Pharmacy. We have several programs that foster collaboration. One is an enduring partnership between the UMB Schools of Nursing and Pharmacy. This program focuses on meeting the needs of primarily older adults in the community that reside within low-income senior housing communities. Here are some references to this work:

1. **Besnick, B., Brandt, N., Holmes, S.D., & Klinedinst, N.J. (2024).** Build it and they will come: Interdisciplinary primary care in subsidized housing. *Journal of Community Health Nursing*, 1-13. <https://doi.org/10.1080/07370016.2024.2388043>
2. **Besnick, B., Brandt, N., Holmes, S.D., & Klinedinst, N.J. (2024).** Feasibility of aging in place clinics in low-income senior housing. *Geriatric Nursing*, 59, 271-277. <https://doi.org/10.1016/j.gerinurse.2024.07.026>

Is there anything to learn from the wide variety of workforce development models (degrees and roles) in nursing? The large leap from working technician to immersion in a PharmD program is an impediment. Are there incremental approaches to consider?

Marie Chisholm-Burns, OHSU & Sharon Youmans, UCSF: Nursing has many degrees with many entry points. For example, 2-year RN program leads to a license. Then there is the BSN program that leads to a license. Thus, you can step into nursing from more than one degree, unlike pharmacy which only now has the PharmD. for new graduates. Some of us remember and may even hold the BS in Pharmacy and/or the PharmD. US schools, several decades ago, stopped offering the BSPharm as the entry level degree. Therefore to model nursing with multiple degree entry points will take a big paradigm shift. I do appreciate the question and perhaps more consideration is needed.

Also, the shift in nursing now is to have the Doctor of Nursing Practice (DNP) as the entry level for practicing nurses. This has not yet been fully implemented. At UCSF all of the master's nurse practitioner programs were discontinued. The bachelor's in nursing still exists for entry into the profession.

What are the criteria to define or qualify a pharmacy as a keystone pharmacy? And I know the presenter mentioned 28.9 million people live in a keystone area, is there a map of that can be shared to identify these locations and areas?

Please see speaker slide deck presentations under meeting materials

Autonomy, mastery, and sense of purpose are key ingredients to our sense of wellbeing. Are these the key factors that contribute to a positive work and learning environment?

Suzanne Harris, UNC: There are many factors that can contribute to a positive work/learning environment, including those you listed especially if promoted by leadership/employers. These factors also align closely with key factors for fulfillment, which we know helps to mitigate burnout. Other goals under this priority can be found on pages 12-16 of the NAM's National Action Plan: <https://doi.org/10.17226/26744>

Have we considered whether pharmacist salaries should be reconsidered? Entry-level salaries in 1995 were \$25/hour. In 2015, it was \$55/hour. Fast forward to 2025, pharmacists are still making \$55/hour (all averages). Tech industries pay more and cost less for degrees. Is it time to recalibrate?

Clay Johnston, Harbor Health: Pharmacists' salaries are determined by the marketplace and many factors impact them, with advocacy and policy having little role in the US. One consequence of reduced compensation will be fewer trainees and, ultimately, fewer practitioners. Whether this leads to demand exceeding supply and a reset of salaries remains to be seen, particularly as other competitors enter, such as AI. Efforts to increase the value of the work of pharmacists, such as through direct billing for services, is another pathway that could lead to increased compensation.

The Prior Authorization issue huge issue of burnout in health care in general - and pharmacists could help so much with choosing the most cost-effective medications - although insurance companies/PBMs are auditing and requiring prescriber prescriptions

Suzanne Harris, UNC: This is a great point and aligns with Goal 4.3 of the NAM National Action plan that state "Prior authorization requirements are reimagined in a manner that places a focus on supporting quality patient care while also reducing unnecessary burden on health workers, pages 39-40.

The regulatory approach used by pharmacy often adds a lot to the transactional elements. If pharmacists could be trusted to work at the top of their training and expertise, it seems like many of these top issues could be addressed. What are your thoughts on supporting more permissive regulation?

Suzanne Harris, UNC: This is a great point and aligns with NAM Action Plan Priority Area 4 "Address Compliance, Regulatory, and Policy Barriers for Daily Work" pages 35-42

There is still a stigma with mental health among healthcare professionals. Lorna Breen Foundation has done a lot of work in this space. Employers can be passive in their approach by only providing access to virtual counseling services, or actually empower leaders to help staff get help they need

Suzanne Harris, UNC: I completely agree! Supporting and making mental health resources easily accessible is very important for employees to feel supported in seeking help for mental health! Thank you for sharing the Lorna Breen Foundation work. This also aligns with NAM Action Plan Priority Area 3 "Supporting Mental Health and Reduce Stigma" by eliminating barriers and reducing stigma associated with seeking services to address mental health challenges, pages 25-34 <https://doi.org/10.17226/26744>.

Is there any national initiative to incorporate Mental Health First Aid training into pharmacy curricula or other professional training programs?

Suzanne Harris, UNC: BMHFA is extremely valuable training and even the National Council for Mental Wellbeing, which sponsors MHFA, recognizes that pharmacists on the front lines with Mental Health First Aid on their website. While I am not aware of any national initiative requiring MHFA training for pharmacy students, trainees, or pharmacists, there are many national pharmacy associations that promote and offer the trainings to their members, and a growing number of schools/colleges of pharmacy beginning to offer MHFA in their required or elective curricula. Here is a recent publication which surveyed S/COPs to assess the current state of MHFA in existing curricula: DOI: 10.1016/j.cptl.2025.102363

While not a true survey or assessment, APhA and NASPA offer the PWWR Tool which allows individuals to anonymously input stories and examples of positive and negative workplace situations from their practice settings. The aggregate reports do include reference to root causes. May be a place to start

Suzanne Harris, UNC: Thank you for sharing this tool! I'm also copying the link for other who may want to learn more about it: <https://www.pharmacist.com/Advocacy/Well-Being-and-Resiliency/PWWR>. The opportunity to elevate positive or negative workplace experience in an anonymous way is a great way for peoples' voices to be heard without worry of repercussion. Additionally it appears this online tool can help identify some of those 'root causes' or workplace factors that can be limited with validated well-being assessments to measure burnout or well-being—but perhaps also less time intensive than focus groups/interviews which can also be helpful in qualitative research.

We are experiencing clinic rooms being taken away from our pharmacy services since, as a hospital-based clinic, we only generate a facility fee. Is anyone else experiencing this? If so, how have you navigated around this?

Mary Ann Kliethermes, ASHP: I have had ambulatory pharmacists relay to me over the years what you have described. This is purely a financial decision looking at maximizing reimbursement dollars for the space being used. If there is limited space and a facility fee plus a professional fee can be retrieved from that space, generation of only a facility fee will likely lose that space. Adding other reimbursement opportunities for now will not likely add to the amount you generate unless there is a significant amount where you are not collecting facility fee reimbursement for some reason (potentially commercial or state Medicaid not reimbursing facility fee). Your best counter is to look at contribution to quality measures that provide positive financial bonuses or prevent negative financial consequences for which your institution is being measured. For example, re-hospitalization rates from your clinic if significantly positive compared to the institutions overall re-hospitalization rate could be significant dollars saved and an argument to overcome the lack of a professional fee.

For Troy: Do you think that the friction reductions you're seeing with CPESN network pharmacies can be replicated among the later adopters or is the journey that CPESN pharmacies have taken over time necessary to getting to more efficient care delivery? I.e., can we accelerate scaling?

Troy Trygstad, CPESN: Yes, absolutely. We are trying to be "not special" but rather create/catalyze/operate services, contracting, dataflows and administration that matches up with the level of care (Pharmacy, Pharmacy +, Pharmacy ++, Pharmacy ++++) where any willing and able pharmacy can operate at any one of those levels/sets of services/offers and do so in an economically sustainable way that expends most resources on care delivery and not administration. The "implementation energy" and associated time horizon may be different for different pharmacies having different human capital, software/hardware capabilities, and patient mixes, but any pharmacy performing at any "plus" level should be able to do it since the market and IT capabilities are starting to converge toward common, non-proprietary, data-liquid processes and contracting.

Can we all work together to calculate the cost of delivering evaluation and management services- Clinical/Cognitive services so we can know the upfront investment by any community-based practice to add or expand into adding or offering them...As we did with cost of delivering prescription services?

Has anyone thought about the value of our learners add to these models?

What about having a minimum "base" practice model (PPCP, CMM, etc.) as a starting point to establish a basis for practice and payments, and then this can be built upon by individual practice settings and specialties?

I wanted to comment on credentialing. We are currently credentialing community based pharmacists in NC to provide contraception services and be paid by Medicaid. Having training from our state association NCAP with hands on support from anac Medicaid had been key.

As pharmacists, we consistently hear about the need to provide evidence when we push to change legislation, expand scope of practice, and seek payment for the work that we do. Is there truly a lack of evidence, do we not have the right types of evidence, or is this a convenient excuse?

I very much appreciate Dr. Rodgers presence and statements. As an advocate for sustainable pharmacy practice at a local, state, and national level, what are your suggestions to expand that message and gain buy in from our physician colleagues?

Is there a way to change the payment models without passing along costs to our patients? Increased access can improve outcomes, but does that come with more co-pays that may be financially difficult for our patients?

Troy Trygstad, CPESN: I would love to see this done as a collective exercise across all settings (different settings have different human capital and cost inputs and may or may not justify different rates) but by analyzing and getting much better at modeling as a profession we can put to bed the idea that "pharmacies/pharmacists just don't want to do it" - when in reality, very few (if any) economically viable service opportunities/billing that are low administration, at scale, and with a multi-year time horizon have come along over the years. (MTM Part D is neither low admin or scaled or all that helpful to patient or care team). I would suggest asking JCPP to make this ask an agenda item for discussion as multi-stakeholder exercise. APhA might be a good candidate for this exercise as an association that is setting -agnostic.

Mary Ann Kliethermes, ASHP: *I am not sure exactly how to answer this question.* I would like to pull question #5 into the answer. We may first as a profession agree to a base standard model. From my point of view that is what the PPCP provides. With that there are various intensities of service depending on the complexity of the patient, although you consider all the elements of the process, you may not necessarily do all of them based on patient needs. That flexibility in all practice sites was certainly something we considered in the updated PPCP which should be released shortly. This is where with the AMA's 2021 guidance (adopted by most payers) for new and established patient CPT codes and their 5 levels of risk and medical decision-making map very well to pharmacist patient care work. We have seen in states where pharmacists are able to use those codes, potentially sustainability if all payers paid in this manner. *(Laura - I know I have seen this from your group previously)* Any calculation of cost would have to be a range because of the variation in cost per square foot, pharmacist salaries and payers' reimbursement that occur geographically across the US. This is based on a fee for service reimbursement. For payments per member per month or year used for team-based care with pharmacists' part of the team, there have been several published estimates and the CMS innovation center initiatives as well as other payers have that data to help determine this cost. There will again be variation depending on the population served in the Alternative payment model. *(Amanda - I think you may have this as well).* All feel free to edit this answer with your knowledge.

Troy Trygstad, CPESN: Yes, CPESN has found leaners to be valuable "positive deviants" - especially residents and fellows. Quite often the pharmacy learns more from the resident than the resident learns from the pharmacy because they have more freedom to innovate and adopt. Residencies are not particularly scalable, though. So I wish we'd consider post-PharmD fellowships focused on implementing a focused service that is economically sustainable so it continues on when they finish/leave and the price point to the pharmacy is more like \$5-\$10k per fellow above what they pay them for working/staffing.

Mary Ann Kliethermes, ASHP: Coming from academia on the pharmacy practice side, I can say yes that is definitely a goal within academia because it allows learners to actually learn advanced models. There are barriers however that need to be overcome. Relying on learners being fully integrated into the workflow is tough because of breaks and time off in the curriculum where no rotations at sites are occurring, or for the practitioner not having their rotation filled for one or more blocks. Someone needs to pick up that workload and the workload can be tough during those times having been in that situation. Some sites contract with multiple colleges with different schedules to make sure that they are covered. That makes for more difficult management of the entire process. Another barrier is various billing rules that do not allow learners to contribute to the billable service. For example, for Medicare, the time-based Chronic Care Management codes do not allow learner time providing as service to be used in calculating the total monthly time calculation.

Troy Trygstad, CPESN: In my view the idea of setting a "base" other than NAPLEX would be like saying "lets establish the base family medicine cardiac service as an angiogram with angioplasty". In our quest to be "recognized and respected" we keep upping the bar (education, cost, etc.) beyond the need. We have GREAT amcare and specialist CMM, Super CMM, Super Duper CMM, and Best in the World CMM pharmacists out there. Yet, the vast majority of drug therapy problems out there are not complicated (at all). Do you need an ophthalmologist sub-specialist to do an exam to diagnose near-sightedness? I would submit that to be bad public policy that would cause access and financial woes. I would re-iterate two realities: 1) most existing licensed pharmacists are plenty capable of identifying and solving drug therapy problems (and if they are not ready to "practice", a simple month or two of training/refreshing would do it) and 2) real "recognition for the profession" comes when the average patient sees an average pharmacist and believes they have received a valuable and pain-avoiding, lifesaving or disease progression slowing encounter.

Mary Ann Kliethermes, ASHP: See question 3 - agree this is a good strategy.

Troy Trygstad, CPESN: Yes! an important role for associations, state agencies, and groupings of pharmacies and health systems. I continue to be bothered by a lack of a pharmacist section in the "provider handbook". Every other provider has a section that tells them which encounters, with what credentialing and which codes with what documentation for payment.... but yet despite all of the forward progress on "pharmacist provider status" and even payment.... why no "Pharmacist Provider Handbook"? Collaborative efforts like the one you describe create informal and unpublished handbooks - but we should demand formal published ones for widespread adoption to occur.

Mary Ann Kliethermes, ASHP: Being credentialled is standard for other patient care providers. As a profession we need to understand this process and create the best practices for pharmacist credentialing. I believe it will be as standard as licensure as we move forward in securing payment for services, definitely in the fee-for service process, and likely not by the payer but the organization in alternative payment team-based models.

Mark Atalla, Fmr CMMMS: This is a really important question and it's part of a broader theme of how to both advance and re-define the general discussion of what pharmacy is and where it provides value.

The more obvious place the profession started was generating data for how pharmacists provide value inside of a hospital or health system. Pharmacists are paid by the health system and hence sought to justify their value locally to the system. As we pull back to how people access care more broadly, it becomes more obvious that consumers and patients heavily value pharmacists and pharmacies. Both are easy to access, allow for self-triage, and solve most problems without the need for other follow up. This is the exact definition of value.

Entities, whether provider groups or health systems, also rely on pharmacists and pharmacy as part of value-based care risk arrangements. This is because they are incented for the care a person doesn't consume. So when providers and others move away from fee-for-service to the counterfactual - fee-for-value, they naturally look to services that are higher value, and there is data they often look to pharmacists to drive higher quality and financial savings.

Payers are the last stakeholder that would use existing data on pharmacist value. This answer becomes a bit more complicated - payers generally will look for structured programs that scale, which is not what most pharmacies offer. However, as pharmacists offer more and more services under state scope of practice, and the profession collectively drives broad stakeholder education and awareness on what pharmacists can do, payers will be able to create networks of pharmacies to deliver more than basic medication management services.

At this point, the profession needs to move to an education and capabilities push, backed by a trove of data, told in a way that meets the problems of different stakeholders. Despite years of data, the narrative and story of pharmacist value has been too diffuse and not focused on the problems the system needs to solve for: affordability and access while delivering outcomes and value.

Mark Atalla, Fmr CMMMS: Pharmacist care services will be a substitute for existing care provided by others, so patients and payers will be incented to design benefit structures that limit cost barriers to higher-value pharmacist care. In a lot of plan benefit designs, either due to a requirement or plan choice, primary care services have limited or zero cost-sharing. Most or all care services provided by a pharmacist will be in that same tier, as if the care was provided by a nurse practitioner, physician assistant, or physician.

Nicole Brandt, UMD: As a past state and national president for a pharmacy organization, engagement and retention of new graduates has been an enduring issue. It is important to meet them where they are at with involvement. Many of them have debt from their training and starting in their careers. There needs to be incentives for residencies, fellowships as well as employees to see the value in their participation and to help support their efforts. For instance, we have limited number of employers who support their team members going to advocacy days, yet this is an important aspect of professional engagement and development. Suggestions from recent graduates:

- Professional development forums, a strong local chapter presence, and mentor programs pairing active members with younger folks to keep people engaged.

- Specifically, having a professional development forum for ALL residents and fellows on the value of being engaged in a professional organization.

- Mandate having forums for pharmacists engaged in professional organizations talk with students during their training.

- As a post-graduate trainee, my concerns are the financial barriers. Membership fees for professional organizations can get pricey—I am fortunate my institution offers a conference/membership stipend.

The younger generations are not joining the state associations nor any association after they graduate...how do we address encouraging this added value to their professional development?

Hi Al, I love the uniform MPJE approach. I am curious how this will impact current practicing pharmacists who took state specific MPJE exams? Will they automatically be able to practice in any state or will they need to take this new uniform MPJE?

Al Carter, NABP: Under the current recommendation, as long as they have successfully passed a state specific MPJE, they would not be required to take another uniform state MPJE to practice in those states that recognized the uniform MPJE. They would still have to obtain licensure, if required by state law, but they would not have to take an exam as part of the licensure process.

Increasing rates of skipping licensure could also represent expansion of the roles of pharmacists in areas where a state license is not relevant. How do we embrace such roles and migrate away from licensure as a measure of overall success?

Al Carter, NABP: Licensure isn't a measure of overall success. In many states (as is the case with many other professions), licensure is required to be recognized as a pharmacist. Licensure shows that you have met the minimum competency to practice as a pharmacist. There are roles in research and pharma that do not require a different level of degree. However, for individuals that will be providing patient care and consulting on the health of the patients they see, licensure in all states is required. **Joseph DiPiro, Virginia Commonwealth University:** I think we should embrace non-traditional roles but encourage graduates to get their license because they may not know what job opportunities are in the future that could require or be advantaged by a license. Also, there are a few states that do not let you legally call yourself a pharmacist unless you are licensed in that state.

I hear most state law violations brought against pharmacists are not because they did not know the law. Why is the approach to create a different exam when the issue isn't knowing the law? Why can't we universally advocate to eliminate law exams and rely on professional obligation to know the laws?

See recording for full response

@Marie Smith: Expanding patient access and improving quality of care is compelling to policy makers. What other metrics under the Value of Impact could you recommend to highlight the benefits to patients?

Marie Smith: Value of Impact metrics can align with the Quintuple Aim - so any metrics used for the 5 dimensions - patient access, patient experience, care quality outcomes, smarter spending, better provider experience/well-being, and impact on health disparities can be considered.

What is needed to create better pathways between academia and entry-level pharmacist employers and post-graduate training programs to align knowledge, skill, attitude development? PharmD programs are overloaded with content and need to differentiate entry-level vs. post-graduate learning.

Joseph DiPiro, Virginia Commonwealth University: A good approach is to have employer representation on the school curriculum committee or advisory committee. Also, drafts of proposed curricula could be sent to selected employers for their comment or input. Perhaps selected employers could be present at school retreats that discuss or plan curriculum.

Is there any platform to share a digital tool that is developed to support clinical pharmacy practice? Thanks

How can we move closer to personalized education, with feedback, which is essential for the individual to improve, both within PharmD programs, post-graduate training, and continuing professional development? And incorporate skills for the future, which may not be in the current curricula

Joseph DiPiro, Virginia Commonwealth University: This is much needed, however, it would require a much different approach than we currently use. Better methods would be needed to assess competency and provide an individualized education path forward. Ideally, we would have self-assessment tools that would assist students and practitioners to assess their competence.

Marie's comments about a Capstone Project aligns with many of the concepts in Competency-based Education (where time is de-emphasize and demonstrated competency is essential). Do you see CBE becoming the norm in PharmD education and residency training? If so, how do we get there?

Marie Smith: Competency-based education can include completion of a capstone project or independent study research projects, Honors projects, etc.

Rafael, are there opportunities or partnerships that we could forge to encourage pharmacists who enter careers in industry to take the NAPLEX exam and secure their pharmacy license, even if it's not explicitly required for their job function? Our license is our most valuable asset!

Rafael Alfonso: I'm not aware of any existing partnerships specifically designed to encourage pharmacists in industry to take the NAPLEX exam and secure their license. That said, it's worth exploring different approaches to make licensure feel valuable—not just for the pharmacists themselves, but for their employers as well. Here are a few ideas to get the ball rolling:

- Partnering with Professional Organizations:** Collaborate with groups like APhA or AMCP to highlight the importance of licensure in industry roles. They're well-positioned to spread the message through educational campaigns and resources.
- Employer Incentives:** Companies could step up by covering NAPLEX fees, offering prep courses, or even providing bonuses for pharmacists who obtain their license. It's a tangible way to show that licensure is valued.
- Mentorship Opportunities:** Pair new industry pharmacists with seasoned professionals who can share how their license has been an asset—even in non-patient-facing roles. Sometimes hearing firsthand experiences makes all the difference.
- Career Flexibility Messaging:** Help pharmacists see licensure as a safeguard for their future. Whether they want to shift into clinical, consulting, regulatory, or public health roles down the line, having their license keeps those doors open.
- Recognition Programs:** Create opportunities to celebrate licensed pharmacists within the industry. A little public acknowledgment can inspire others to follow suit.

Pharmacists need to be involved in diagnosis! Pharmacists often help patients establish a diagnosis for their complaints, and can also catch diagnostic errors made by prescribers. Pharm Ed needs to orient future pharmacists to the key roles they can play to improve diagnosis and catch errors.

Joseph DiPiro, Virginia Commonwealth University: Catching diagnostic errors falls within a narrow range. Perhaps one example is a medication adverse effect recognized by the pharmacist that was not attributed by the prescriber to the patient's medication and is exacerbating or creating a medical issue.

Colleges/schools have had a hard time recruiting enough preceptors for the Experiential parts of the curriculum. How can employers/colleges collaborate to incentivize precepting? Our students benefit significantly from seeing pharmacy practice in action.

Joseph DiPiro, Virginia Commonwealth University: One way would be for schools to assist practitioners with the great need for pharmacy technicians. Obviously, students should not work and be an IPPE/APPE student under that same preceptor but there is much more that schools could do to connect students who want to work with pharmacy employers. It is possible for employers then to have a great technician for 4 years.

Many of the suggestions proposed for a future practice model are current practice or being developed but perhaps not known to many. Is there a mechanism (other than journal pubs or PQA report for health equity) to collect these data, use it to create awareness, and the build on current knowledge?

Joseph DiPiro, Virginia Commonwealth University: Much of this information is presented at national pharmacy meetings.

Hearing a lot about how valuable the skills and perspective of students (and early career practitioners) are today, and yet we are not hearing FROM students or new practitioners consistently. As we transition to taking action, I would challenge us to have these voices included on our teams.

Marie Smith: Agree - especially need to include new and current pharmacist practitioners already in the pharmacy workforce in these discussions.

Given the rapid evolution of pharmacy service billing mechanisms, how can educational programs equip students with the foundational knowledge and adaptive skills they need to understand and navigate these systems, while also preparing them for the reality that payer structures may continue to shift?

Joseph DiPiro, Virginia Commonwealth University: Many of our schools have experts in health economics and health care systems who bring much expertise on health financing to the curriculum. However, it would be helpful to bring in instructors who are working day-to-day within health care organizations and have the most current "real world" experience. It is difficult for students (or anyone) to understand healthcare financials, however, it would be useful for them to understand some examples of how it works.

Any thoughts on how to show students the value of post-graduate training whether it be residencies or fellowships?

Joseph DiPiro, Virginia Commonwealth University: They need to see it from practitioners who are in roles that benefited from residency training and hear it from their faculty.