The Report of the Ad Hoc Committee:
The Future of PAs in Primary Care/Family Practice
June 2020

Introduction

The original intent for the creation of the Physician Assistant (PA) profession in the mid-1960s was to augment and expand medical resources and healthcare delivery, particularly in the primary care sector.[1] A shortage of primary care physicians led to the development of specialized training for a group of well-trained Navy Corpsman. These four people were the first PAs who originated the PA profession at Duke University. The intent was to prepare them for the practice of general medicine in partnership with physicians.[1] MEDEX was born shortly after the Duke PA program and held an even sharper primary care focus.[2] The PA concept quickly gained federal acceptance as a solution to physician shortages in the primary care sector. As the profession grew, PAs increased access to primary care and eventually expanded to include areas of specialty medicine.[3] Like physicians, PAs have drifted away from primary care over the past two decades for a variety of reasons, which we will discuss in more detail later. By 2017, only 27% of PAs were working in primary care areas of Family Practice, Internal Medicine and Pediatrics.[4]

The expansion of PAs into specialty medicine has been primarily driven by lower salaries in primary care specialties,[5,6] and may be compounded by labor market trends.[7] The additional burden of substantial student debt adds looming financial considerations for graduating PAs who must make decisions that allow them to repay those loans.[6] In addition to financial burdens, the workload and level of responsibility for primary care PAs have grown significantly, and professional burnout has risen exponentially.[8] Further, an increasingly complex administrative hierarchy and more burdensome reimbursement requirements have negatively impacted the number of PAs entering the primary care workforce. Despite these many barriers to primary care PA practice, there are emerging innovative care models that may help draw PAs back to the primary care fold.

The Committee has considered and differentiated the barriers to PAs practicing in primary care and has attempted to define viable solutions to address those barriers. The intention is to take a "30,000-foot view" to identify how PAs can embrace a return to primary care and answer the call of what is missing in modern day-to-day patient care.

The Committee was charged with evaluating the future of PAs in primary care. The charges appear below with the Committee's recommendations.

CHARGE TO THE COMMITTEE:

Identify current and/or emerging barriers to PAs entering primary care specialties. Discuss options to address and/or eliminate those barriers.

Student Debt

Student debt is a primary deterrent preventing many PAs from entering primary care specialties. Many PAs and students have the desire to practice the generalist medicine of their training, but as they move closer to graduation, looming student debt drives new graduates to more lucrative specialty practice.[9,10] A mainstay for primary care is office visits, rather than procedure-driven practice. This reality means that primary care PAs have fewer opportunities to generate revenue that can increase salary in the current fee-for-service payment model. The value of the primary care clinician is reduced as a result of lower reimbursement for more time-consuming primary care patient needs.[11,12] An example of this is

prevention and counseling. This presents a juxtaposition for PAs who desire to practice primary care yet need a higher income base.

To remedy this, the Committee recommends collaborating with other clinicians including physicians and nurse practitioners to lobby for better reimbursement for primary care services. The Committee also suggests that Physician Assistant Education Association (PAEA) better inform students about options for loan repayment. Additionally, the Committee requests all PA programs be knowledgeable about loan repayment options in primary care settings and that program leadership advise graduating students of these options.

As Optimal Team Practice (OTP) expands state by state, the Committee recognizes there is a tremendous opportunity to develop innovative practice models that can both reinvigorate interest in primary care but also elevate salaries for PAs interested in exploring new types of practice. There is potential for direct reimbursement, practice ownership, partnership, and profit-sharing to help address the pressure of student loan burden. Additionally, the Committee hopes to see loan repayment to draw PA clinicians to rural and under-served areas.

Proposed Solutions:

- *Develop tuition repayment programs for practicing in primary care for a certain number of years.*
- *Work toward higher reimbursement for complicated primary care services.*
- *Examine economic approaches to help pay off loans such as grants to establish innovative delivery systems, grants for providing primary care, tax relief and more.*

Direct Payment from Insurance

PAs are unable to receive direct reimbursement for rendered services from CMS and insurance companies.[13,14] It is vitally important for CMS and insurance payors to change this industry standard. Additionally, many PA services, particularly in primary care, are billed under the collaborating physician's NPI. Some insurance companies require physician NPI billing as they do not credential PAs.[13,14] Some clinical practices default to physician billing in an attempt to capture higher reimbursement.[13,14] These billing practices must change to allow for both direct PA billing and direct PA reimbursement to most accurately quantify the PA contribution to the U.S. healthcare system. This will augment PAs' value to any practice as it will allow PAs with experience to command higher salaries commensurate with their quantifiable value.

Proposed Solutions:

- *Pursue policy and legislative changes allowing direct reimbursement to PAs.*
- *Pursue value-based primary care services to level primary care reimbursement compared to specialties.*
- *Advocate to end "incident to" billing.*

Time Commitment, Administrative Hassles and Free Work

PAs are expected to take work home, perform administrative duties, stay late to complete charts or see late appointments, and perform other duties for which they are not compensated. These demands occur in every specialty, but for primary care PAs, these tasks are extensive. PAs in primary care must be given adequate time to do the administrative work needed as part of their typical workday, not in addition to it.

Additionally, many medical practices fail to leverage the full potential of the PA clinician as the PA role is misunderstood and underutilized.[15] In some practices, PAs are expected to function as scribes. As a result, many practices are not capitalizing on full reimbursement for PA services. Practices that under-utilize PAs leave millions of dollars behind due to unbilled and unreimbursed PA services.[15] Improving productivity and efficiency and allowing the PA clinician to practice to their full potential must be a focus. PAs should never be used as a scribe or pseudo-scribe for physicians. Since 1998, Medicare Part B has covered services delivered by PAs, specifically those that a physician would otherwise have to provide. To this day, many practices and hospitals still do not comprehend the value and productivity of their PAs .[15]

PAs are a proven commodity and are versatile, cost-effective clinicians.[16] PAs can be increasingly utilized in an expanding variety of practice settings, including novel and innovative models of care. The Committee would like to eliminate utilization of PAs as scribes/pseudo-scribes for physicians. We must ensure that PAs work to the fullest degree of their scope of practice.[13,14,15,16]

Proposed Solutions:

- *Offer flexible schedules with PA input, administrative support of PAs with scribes, and equal workload for all clinicians providing the same services.*
- *Educate PAs to reinforce that they are medical practitioners, not "assistants" to any other clinician. This concept must be integral to PA training.*
- *Provide training so that every PA graduates with a solid identity as to who they are and what they can bring to patient care.*

Patient Complexity

The depth, breadth, and variance of patient presentation in primary care is astounding. From the routine to the significantly complex, the expectation of knowledge in assessment, diagnosis and plan of care development in primary care is extremely broad. Complex patients take time and the complicated patient deserves the full attention of the clinician.[16] More allotted time and increased schedule flexibility are required to ensure providers have the time to care for patients properly and to ensure patients are not rushed through a system that only allows a 15-minute visit. It is not possible to satisfy quality of care and patient satisfaction in the current delivery model of care.

Proposed Solutions:

- *Correlate flexible time slots with the patient's complaint(s).*
- *Consider patient complexity when scheduling appointments.*
- *Train scheduling staffs to better understand the patient's medical needs and how to allow for corresponding appointment times.*

EHRs

Well-intentioned, electronic health records remove clinicians from the emotional and physical contact needed to provide high-quality care. EHR systems would improve their utility with fewer variables. EHRs that are engineered and programmed *by clinicians* to be user-friendly would also be beneficial.[17] Elimination of the "pay for clicks" processes clinicians are required to complete for quality measurement should be programmed differently. All of these things have impaired PAs' ability to connect with patients, are very time-consuming, and are often overly cumbersome to complete.

Proposed Solutions:

- *Make EHRs provider intuitive, not administrator intuitive.*
- *Eliminate provider requirements to satisfy coding and billing requirements.*
- *Simplify EHR systems to allow for increased patient/clinician interaction.*
- *Consider utilization of scribes during patient interaction for PA clinicians.*

Salary

Salary is a multifactorial problem in attracting PAs to enter and remain in primary care. New ways of reimbursement need to be a focus to compensate clinicians for patient lifestyle management that addresses disease. The Committee requests that AAPA work with the AAFP, ACP, and AANP to collaborate on how best to communicate to legislators, employers, and payors that prevention works.

Another factor impacting salary is an oversaturation of PA and Nurse Practitioner (NP) programs in certain states.[18] As more clinicians apply for the same or similar positions, competition can lead to reduced compensation for services, poor working conditions, increased likelihood of burnout, and clinician turnover.

Proposed Solutions:

- *Promote awareness of each PAs' worth to the practice.*
- *Make the revenue that PAs produce transparent and readily available.*
- *Provide fair reimbursement for PA services.*

Loss of Positions

PAs have increasingly experienced loss of job opportunities in recent years. In some geographical areas, there are too many NPs, physicians, and PAs competing for the same positions.[18] In other areas, PAs lose employment opportunities because of antiquated laws that inhibit PA practice in all specialties, but especially in primary care. The most significant barrier is legislated supervision. Practice administrators, when faced with the necessity of complying with supervision requirements, are increasingly excluding PAs from employment. Additionally, laws preventing or limiting PAs from practice ownership or partnership also keep PAs from entering primary care.[19] The Committee believes that if these barriers were removed PAs would migrate to primary care specialties including family practice, internal medicine and pediatrics.

Proposed Solutions:

- *Encourage all states and Constituent Organizations (COs) to seek OTP. OTP will address many barriers affecting PAs' ability to provide unique services. OTP is significant for a positive future for PAs in primary care.*
- *Remove barriers to allow PAs to more readily enter primary care specialties.*
- *Encourage PAs to work with all providers to provide care to those in need and seek innovate ways to provide that needed care.*

Burnout

Most available research focusing on PA burnout is limited to rural and specialty settings. However, there is research available that addresses burnout, happiness, and work-related stress that included responses from over 7,500 PAs from multiple specialties and geographic locations.[20] Results of this national survey revealed that a substantial percentage of PAs felt some degree of burnout (described as emotional

exhaustion, depersonalization, or reduced personal achievement). Less experienced, younger, and female PAs were more at risk for high burnout.[18, 19, 20]

Proposed Solutions:

- *Address the PA specific barriers (title, OTP, reimbursement) that would allow all PAs to feel they are valued members of the team, while also working with other professions to address areas of concern that lead to burnout in general.*
- *Conduct further studies to investigate this issue to develop effective interventions to reduce the level of burnout in this specific medical population.*
- *Improve job satisfaction through rewards, incentives, EHR efficiency, career development, and educational opportunities to help increase feelings of personal achievement.*
- *Reduce depersonalization through employee involvement, role resolution, and support from supervisors and colleagues.*
- *Help develop PAs to be eligible for leadership roles such as hospital committees, board positions, and other professional leadership roles.*

Medicare

A number of Medicare issues should be addressed to benefit the PA profession. The co-signature requirement for home care, DME, and other Medicare services is a long-standing barrier for PAs and patients that should also be eliminated. Medicare must recognize PAs as full providers and allow for direct reimbursement. Reimbursement by Medicare must be to the provider and should be equitable for the service rendered. "Incident to" billing should be eliminated as it essentially hides PAs and services they provide to the patient and healthcare system.[21] Further, data generated by CMS is inherently inaccurate due to "incident to" billing as PA-provided services are hidden by being billed as physician-provided care.[21] CMS utilizes system-generated data to drive policy decisions.[21] When such a large portion of data is inherently inaccurate due to "incident to" billing, it's clear this mechanism should be eliminated. PAs should be able to provide all services and be recognized as a full provider in the system.

Proposed Solution:

- *Eliminate CMS "incident to" billing and allow for same service, same reimbursement and direct reimbursement to PAs.*

Lack of Mentorship/Preceptors

The Committee feels that a national list of preceptors could be developed as a resource for PA programs as well as students. PA mentors would be a tremendous benefit to the profession to teach and guide both students and new graduates in primary care.[22] This could be accomplished through innovative government grants, both state and nationally. Instilling the desire to be a mentor comes from many directions, the most obvious of which is the PA training program.[22] PAs who have the time and ability to teach could be offered tax advantages or some form of reimbursement. AAPA has a mentorship program, Mentor Match, that students can take advantage of for this purpose.

Proposed Solutions:

- *Encourage primary care PAs and Distinguished Fellows to sign up for the AAPA Mentor Match Program.*
- *Focus on service to underserved areas coupled with loan repayment, then follow with expansion of such loan forgiveness locations across the country.*

- *Establish PA program affiliations with local healthcare institutions to ensure both preceptors and rotation sites in primary care as it is challenging to provide this learning experience in an unstructured way.*[21,22]

New Employee Onboarding Is Critical to Retention

People leave primary care if they do not receive strong onboarding. This is a workforce and personnel issue. Similar to onboarding in other industries, healthcare onboarding or organizational socialization is about recruiting people, and helping new hires understand their role and the organization's rules and regulations while ensuring a productive and successful work experience for employees.[23] Healthcare providers who move into new jobs from other parts of the organization can also be onboarded for a smooth transition into their next role.

Resistance to change is natural and is no different in healthcare. Change can be challenging whether instituting a formal onboarding process at ground level or building transformational change in delivery strategies. Barriers to healthcare onboarding can include the following:

- Changing Models of Care: The Patient-Centered Medical Home (PCMH) transformation is an approach to providing comprehensive primary care for children, youth, and adults to ensure better-coordinated and personalized care with improved access to treatment and services.[24] PCMH facilitates partnerships between personal healthcare providers, individual patients, and when useful, patient family members. It requires extensive onboarding and education for practitioners to transform traditional practices into this revolutionary approach.
- Lack of Management Buy-In: Onboarding has apparent benefits (it saves money and time), but some institutional administrations may not see the value. Without upper management endorsement, the onboarding process can come to a stop before it even begins. Organizations can gain support by easing organizational roadblocks and presenting the benefits based on the talent crisis.
- Limited Bandwidth: Those who manage the onboarding process, including human resources and department leadership, likely have many other projects occupying their time. As a result, they may not be able to dedicate their full attention to onboarding details with new employees. Automation and dedicated online portals can streamline the onboarding processes, including paperwork, orientation, training, and deadline reminders. All of these things relieve the load for department leaders, team members, and new employees.
- Poor Execution: Poor planning and execution may lead new hires to conclude the organization is badly managed — and even decide it was a mistake to take the job.
- Tight Job Market: If a department is short on staff and needs clinicians in practice immediately, it is tempting to bypass onboarding. The lack of onboarding can cost the institution time and money due to job dissatisfaction and resulting turnover.

Proposed Solutions:

- *Make onboarding an important component to both the continued education and retention of new PAs. This shows the PA that the institution cares about them and is willing to invest in their future. It acclimates the PA to the specific healthcare system. It improves patient care, especially among new graduates who will increase their knowledge.*
- *Expose new and seasoned PAs to one or two weeks of training on the institution's values and culture.*[23,24]
- *Help medical systems and individual practices recognize the importance of onboarding in recruitment, retention and wellness of primary care PAs.*

- *Focus onboarding on clinical efficiency, quality improvement, technology/EMR, referrals and resources, staff support and regulatory issues.*
- *Pair new graduate PAs and new primary care PAs with experienced PA mentors in a formalized process, providing compensation/support to the mentor.*

Administrative Barriers

In many practices, PAs are faced with administrative barriers. These include lack of professional recognition, incorrect use of the PA title, lack of inclusion in marketing efforts such as office signage, office stationery and business cards, and exclusion from institutional directories, among other unintentional – and sometimes intentional – exclusions.[25] An additional under-addressed issue is the lack of training of frontline office personnel, including reception and nursing staff in the proper script to embrace patient acceptance of care provided by PA team members. These issues culminate and speak to the institutional culture and perception of PAs.

Proposed Solutions:

- *Embrace professional advocacy and educate both administrative and clinical staff – as well as patients - about the PA role. Accurate portrayal of the PA clinical role is paramount to avoid misrepresentation and misinterpretation in all settings. Patients have a choice in where and who they see for medical care.*
- *Recommend that clerical staff not address PAs by their first name when making appointments.*
- *Advocate for positive portrayal by other clinical and administrative leadership.*
- *Initiate conversation of inclusion and positive portrayal of the PA role individually.*

Title Change

The word "assistant" must be removed from the lexicon of our profession's nomenclature. The assistant title undermines the PA's competence and level of training. The title also undermines and diminishes our contribution to healthcare in general. Most importantly, the assistant moniker misrepresents our role to the general public. PAs are often not viewed as full providers, but instead, as providers who "help" others provide care. The role of the PA has evolved far beyond what the profession's founders would have imagined. Our expanded scopes of practice, clinical expectations, and ability to contribute to the healthcare team has dramatically changed; thus, our title must evolve as well. As healthcare becomes primarily driven by consumerism and data-driven outcomes, a title representative of our role is critical. Further, the PA title should be marketable to the general public, the healthcare industry, and, most importantly, policymakers. [25]

Proposed Solutions:

- *Thoughtfully consider results of the upcoming TCI Report and expeditiously choose a new title in the AAPA House of Delegates.*
- *Aggressively educate the entire PA profession so the new title is embraced and adopted.*
- *Encourage the four organizations of the profession including AAPA, PAEA, ARC-PA, and the NCCPA, as well as their constituencies and supporting organizations, to resolutely accept and adopt the new title. A culture change involving all PA organizations will be beneficial to this effort.*
- *Engage the state organizations to accept and adopt the new title as each will be crucial for a positive outcome.*
- *Institute the title change over a number of years; the change need not be immediate.*

Ease of Access for Primary Care

Primary care needs well-trained clinicians. Patients desire competent and compassionate caregivers. PAs are well-suited to fulfill those roles in primary care spaces.[26] Additionally, patients drive choice by choosing alternative models with alternative access such as staying open at night and offering weekend hours. And, primary care should offer preventative counseling, as opposed to disease management-driven care, as well as innovative delivery models, including mobile clinics and telemedicine. PAs are well-suited to provide primary care no matter the location or hours. The question is whether PAs will lead other clinicians in their acceptance of consumer-driven alternatives to the 9 to 5 model. The Committee advocates that PAs view as opportunities these evolving changes in primary care and recognizes that innovation typically out-paces policy. If PAs are to participate in the reorganization and evolution of primary care, the profession must be involved in policy and legislation that will allow PAs to practice in these new and innovative spaces.

Proposed Solutions:

- *Pursue Optimal Team Practice (OTP) to address many critical barriers affecting PAs.*
- *Recognize and accept alternative ways to deliver care such as mobile vans, mini-clinics and expanded hours.*
- *Start, own or partner with others to deliver medical services to areas of need and opportunity in primary care spaces. Underserved, rural and vulnerable populations will depend on it and consumer-driven spaces will demand it.*

Representation of PAs on Institutional Administrative Committees

PAs have a responsibility to embrace leadership and administrative roles. Many administrative leaders don't consider PAs as viable administrative leaders or simply presume that PAs are not interested in fulfilling these roles. Some institutions actively exclude PAs from holding such roles. Some institutions allow involvement in medical staff committees or boards but do not allow PAs to participate in policy development or administrative decisions, including those that directly impact the PA's clinical practice, their patients, or their fellow providers. There has historically been a glass ceiling requiring the PA to nimbly maneuver into administrative roles. PAs must advocate for participation. They must develop a willingness to serve in administrative capacities. PAs must be allowed to become leaders and serve on all committees. Any clinician with a vested interest in the policies that affect their professional role will experience less burnout and feel engaged as a relevant part of the decision-making process. Institutional culture that embraces PAs in administrative roles will ultimately benefit PA job satisfaction and, indirectly, patient care. This is critical for PAs in primary care. [26]

Proposed Solutions:

- *Advocate for a cultural evolution that comes from within the PA profession. Recognize that institutional culture often overlooks the PA as administrator or committee member.*
- *Seek and create administrative opportunities as individual PAs. PAs must seek representation at every organizational decision-making level. Senior PAs with administrative experience can best create culture change at their institutions by launching leadership tracks to encourage PA participation.*
- *Create opportunities for post-graduate training in administration and leadership as a crucial component of every PA's education.*

Research on PAs as Primary Care Providers

The Committee believes that research on emerging delivery systems utilizing PAs and other providers is imperative in understanding the future direction of healthcare. OTP will impact the PA profession significantly. The removal of "incident-to" billing, if CMS proceeds with that recommendation, will also directly impact data collection and the accuracy with which PAs care can be tracked. Data will drive quality-based care and will change current best practices. Questions such as whether residency-trained PAs have better outcomes than those who learn on the job and whether new-hire on-boarding programs improve quality of care will be clarified. Additionally, research and data will define whether new and innovative ways to deliver care provide quality, cost-effective care. Virtual healthcare will also change how clinicians practice medicine and what patients expect regarding access to primary care services. Data will drive how telehealth and virtual medicine can best be incorporated into clinical practice.

Proposed Solutions:

- *Conduct research after states adopt OTP to define how PAs can best practice modern-day primary care. If given the opportunity to autonomously practice with the tenets of OTP in place, the Committee believes PAs will naturally migrate to patient populations in critical access areas and other populations of need. Research and data will help prove this hypothesis accurately or not.*
- *Make NIH and other grant resources available to study PA practice and changing demographics. Our profession needs to be able to show how and what we do best. Data collection can be utilized by institutions to define the PAs' contribution to their system, both financially as well as clinically.*
- *Encourage PAs interested in research to pursue projects that quantify PA quality, access, and financial data about the profession.*

Innovative Models of Primary Care

The Committee was charged with reviewing the impact of innovative healthcare models that might utilize PAs in primary care. The importance of primary care medicine cannot be overstated, and access to high-quality primary care is paramount. The healthcare system is positioned to make a considerable investment in the transformation of how primary care is delivered in the US. The market is demanding that this happen. If the system is apathetic in this effort, the result will be worsened health outcomes and increased disparities.

The Committee believes the U.S. needs to move away from insurance regulation, low reimbursement and traditional fee-for-service delivery reimbursement models to better support a broad range of primary care services. There are many emerging models that do not satisfy traditional billing requirements yet service the needs of their patients. The Committee discusses those innovative models of primary care below.

Direct Primary Care - DPC

Many necessary primary care services, including health coaching, diet counseling, and lifestyle modification, are core to preventative primary care; however, they are poorly or not reimbursed at all by payers. A direct primary care contract between a patient and his/her provider allows for the development of a care plan specific to the patient's needs. DPC also provides regular, recurring monthly revenue to practices, which typically replaces traditional fee-for-service billing to third party insurance plans. For primary care specialties, this revenue model can stabilize practice finances, allowing the provider and office staff to focus on the needs of the patient. A DPC model can allow the clinician to

focus on patient health needs and outcomes rather than coding and billing. Patients, in turn, benefit from this model because the contract fee covers the cost of many primary care services furnished in the practice.

The most significant benefit of DPC models is that insurance is removed as a factor in the delivery of care.[27] The patient pays the medical practice directly. Because there is no insurance involvement, the patient avoids insurance co-pays, deductibles, and co-insurance. DPC care also eliminates insurance-driven restraints, allowing patient and provider to determine the best plan of care, offering the most information for the least out-of-pocket cost to the patient. Many DPC models offer full medical services, including office visits, procedures, lab, x-ray and other diagnostic tests. Most of these fees can be negotiated at significantly reduced costs than what is normally charged by traditional insurance-based practices. Some DPC models, however, only offer office visits as part of the cost of care, leaving ancillary testing and procedures at market cost to the patient.

Disadvantages to DPC models include targeting uninsured patients. Uninsured patients may also be more vulnerable to, and less insulated from, catastrophic health events. Many patients do choose to pair DPC expenses with a high-deductible health plan intended to cover catastrophic health events; however, many uninsured patients simply cannot afford to both pay for healthcare and pay for the high-deductible policy. It is also important that patients understand that their DPC expenses do not apply to the deductible of their health plan should they need to access that coverage. Other industry standards can also adversely affect patients choosing this model.

PAs will have a great opportunity to function as clinicians in DPC practices. They will also have a great opportunity to impact many aspects of emerging DPC models, including:

- Ground-level involvement of practice development;
- EHR technology that focuses on patient care rather than coding and billing;
- Initiating involvement in organizations of physicians who deliver and advocate for DPC services;
- Assisting in the development of communication tools that increase and simplify improved patient contact with the healthcare delivery team;
- And, developing care algorithms and educational tools that give providers the ability to give only the care patients need.

All of these things serve to revitalize the PA profession's stake in primary care and interest in how the profession can directly impact care to patients as drivers of system change, rather than simply clinician cogs in the system. [27]

Proposed Solutions:

- *Address barriers including state laws limiting PA practice ownership or holding equity stake in the practice. As DPC models grow, the number of practices utilizing direct primary care will increase as well.*
- *Advocate for removal of legislated supervision requirements to increase the availability of PAs to transition into a DPC type of practice and remove barriers to physicians willing to collaborate with PAs. DPC practices, including those that are PA owned, will grow in number, requiring new and innovative technology for those practices.*
- *Consider DPC models that have the potential to influence the entire healthcare market by impacting healthcare costs and driving transparency in pricing by larger organizations. The Committee believes PAs are perfectly suited to influence development of the DPC model of care.*

Innovative PA-Owned Practices Will Change Healthcare Delivery in A Positive Way
In states that have adopted OTP, the ability for PAs to practice in groups with other clinicians will exponentially increase. This may or may not include a physician as a member of the group or partner. As is already the case, physicians will act as specialist consultants whenever necessary.

This will be the first time in the history of the PA profession that a group of PAs can self-identify areas of medical need and solve the barriers without reliance on any other profession. The Committee believes PAs are a vast and untapped resource capable of offering unique solutions to system problems if given the opportunity. This will also increase innovation in the places PAs choose to practice, as well as impact the type of practices PAs choose, particularly with primary care specialties in underserved and low access areas.

Advanced Mini-Clinic
There are more than 1,100 MinuteClinic locations inside CVS Pharmacy and Target stores in 33 states and the District of Columbia.[27] There are 8,774 urgent care centers in the U.S. as of November 2018.[28] These clinics thrive on what society demands - convenience. In the last few years, CMS has promoted patient-centered medical homes, yet it seems that many patients are less interested in a vested relationship with their primary care providers and more interested in getting care when and where they want it.[27] PAs already possess the clinical experience and gestalt necessary to provide quality emergent care. Also, PAs can incorporate elements of family practice into this type of clinic to serve patients seeking the convenience of urgent and quick care settings with the continuity of primary care.

A clear plan is essential for success as an advanced mini-clinic entrepreneur. The business model for PAs will require skill to execute. There are already a great many PAs who are successful owners of urgent care/walk-in clinics. The formula for success has already been developed. Application to the unique practice requirements of PAs is immediately possible though the same primary barrier exists in this model of care as for other models. Implementation of OTP will solve the legislated supervision barrier necessary for the mini-clinic model to be more accessible to more PAs. [27,28]

P*roposed solutions:*

- *Work for passage of OTP to eliminate legislated, mandated supervision and direct reimbursement to PA; both are of the utmost importance.*
- *Assist in the development of a business model blueprint to help entrepreneurial PAs with navigation of the typical start-up process of business ownership and practice development.*

Mobile Health Clinics
There is a vast amount of literature that supports the notion that mobile health clinics (MHCs) are a successful and cost-effective model of healthcare delivery uniquely positioned to assess and fulfill the needs of underserved populations nation-wide.[29] Providing primary care services at a site removed from the four walls of a clinic or facility is key to influencing quality and improving outcomes.[29] Patients have reported that MHCs help them navigate an increasingly convoluted and disconnected health care system.[29] Further, MHCs connect patients with medical and social resources in their community in a way traditional office care does not. By going directly into communities to the door of the patient, mobile clinics can more effectively engage and gain the trust of vulnerable populations. [29]

Advantages of MHCs include:

- Increased access to vulnerable and at-risk populations

- Technology advance care (i.e., mammography, mobile MRI/US/CT, interventional radiology) can be offered
- Cost-effective low overhead
- Patient-centric approach to care
- Insight into patient-specific barriers including socio-economic issues that directly impact health (food access, living conditions, transportation barriers, etc.)
- Wi-Fi enabled MHCs allow for onsite EHR access to patient records and real-time documentation
- Community presence by healthcare clinicians engenders trust

Barriers to MHC models of care include:
- Limited funding sources
- Lack of ELT recognition of cost-avoidance
- Lack of recognized reimbursement by payer sources, including CMS
- Legislated supervision

Proposed Solutions:
- *Advocate for OTP in every state to remove legislated supervision so that PAs can fully function in this model. Mobile clinic care models are another example of innovative health care delivery that PAs are well-suited to embrace.*
- *Reinvigorate the PA profession's interest in primary care by developing and staffing mobile clinics.*
- *Increase PA appearance in the community through MHCs and expose more patients to care provided by PAs.*
- *Provide grant support to establish/initiate MHCs. This affords a unique opportunity for PAs to reach patients in need of greater access to care and to play an inaugural role in this evolving healthcare delivery model.*

Telemedicine

The COVID-19 virus introduced primary care medicine to telemedicine and virtual health. As telemedicine helps to increase access to care, the Committee believes that use of telemedicine will continue to grow. In the foreseeable future, telemedicine technology will prove to be critical in bridging the care gap and ensuring patients avoid excessive wait times for access to care. Per the Cleveland Clinic in 2016, 61% of U.S. healthcare institutions and 40-50% of U.S. hospitals utilized this technology in some way and the use of this is growing. It is estimated that 59 million Americans live in health professional shortage areas.[30] To offset this, telemedicine services may be provided by phone or by other electronic means, including secure video conferencing between provider and patient. Virtual visits are typically utilized for patients with common, straightforward illnesses, although mental health, neurological evaluation, and a variety of other services can effectively and safely be delivered with telemedicine technology. Though telemedicine services may be provided by other types of clinicians, PAs are an excellent match for such provision of care.

The advantages of telemedicine visits are many and hold specific appeal to patients and practices alike.[31] Virtual visits/evaluations are typically brief and problem-focused and offer a level of convenience patients desire. Telemedicine care increases access for patients in resource-poor regions of the U.S.[31] Telemedicine visits cost less than clinic visits because of low overhead and reduced need for clinical space and support staff. Additionally, telemedicine visits reduce the financial impact of missed/no-show visits in the clinic setting and likely reduces ER over-utilization due to convenience of care delivery. For patients, a virtual visit eliminates the need for transportation and reduces lost time from daily activities

by reducing and even eliminating wait times. Such visits may also be safer for those with compromised immune systems.

Telemedicine visits have the ability to increase access to care to disadvantaged communities (rural, Native, developmental delays, mental health issues, elderly, chronic disease, LGBTQI patients) and those with chronic conditions necessitating intense, ongoing lifestyle management (COPD, CHF, Diabetes, Psychiatric Illness, etc.).[30,31] The convenience of telemedicine visits can alleviate office visits required for straightforward medication refills and counseling maintenance visits. Another distinct advantage for PAs is that telemedicine offers another pathway for positions that require increased autonomy. Today, several states allow PAs to provide this model of healthcare and others will surely follow.[30]

Clear and present disadvantages include a lack of telemedicine parity law for third party payers, low current reimbursement, interstate license issues for PAs, and the need for a supervising physician as well as the initial cost of start-up for a telemedicine business.[30] Additionally, the equipment and technology for the provision of telemedicine is costly and ever evolving. These are all costs that the practice must absorb. [30, 31]

Proposed Solutions:

- *Advocate for legislative changes for improved reimbursement, interstate licensing and removal of legislated supervision of PAs by physicians. These are all immediate necessities for PAs to succeed in this model of care.*
- *Develop PA-eligibility of grants or partnerships for start-ups, as well as innovative low-cost platforms for PAs to use. These could alleviate the financial start-up burden for PAs interested in exploring this model of care.*

Integrated Care Mental Health/Primary Care Models

In primary care settings, PAs frequently diagnose, treat, and manage common behavioral health conditions, including depression and anxiety disorders, ADHD, Autism Spectrum Disorders, eating disorders, PTSD, and substance abuse. Additionally, they educate and counsel patients on behavior modification strategies to reduce risks of complications and improve outcomes related to their physical and/or behavioral health. Strong evidence exists that demonstrates the efficacy of a collaborative care approach for delivering mental health care to patients in a primary care setting.[32] The field is rapidly growing, but few resources are available, and working models are limited. Primary care PAs need to be able to work closely with Mental Health Care managers, consulting psychiatrists, counselors and therapists, and administrators in regard to patient care by referring to the same resource and employing a common treatment framework.

Advantages of integrated primary care/mental health models include the tremendous opportunity for PAs in primary care to fill an additional void and bridge to more specialized care.[32] PAs in primary care are uniquely positioned to meet this need as they often already have an established long-term relationship with the patient and have first-hand knowledge of their co-morbidities, social situations, and family issues.

The primary disadvantage to this model is that primary care PAs may have limited experience treating behavioral health conditions and may require additional training to feel comfortable treating this population. Additional training and skill development to provide Cognitive Behavioral Therapy, Regression Therapies, and to formulate comprehensive treatment plans for such a high-risk group would be critical. Reimbursement for time-intensive mental health services is lacking and difficult to justify

under current requirements, particularly in the primary care setting.[32] Additionally, the emotional toll on already-stressed primary care PAs needs to be ameliorated before programs can be implemented.[32]

Propose Solutions:

- *Formulate programs that would provide PAs with additional training in counseling, management of psychotropic medications and enhance reimbursement for services provided at the primary care level.*

Home Care

New models of healthcare delivery are returning to house calls to improve patient access and outcomes. Home models also reduce resource utilization and cost by more safely caring for patients through high-risk care transitions such as hospital discharge.[33] Furthermore, home-based care identifies risk factors that commonly lead to readmission including fall risks, medication management issues, sepsis identification, identification of socioeconomic aggravators of health and admission diagnosis exacerbation.[33] Patients and families are, by and large, more satisfied with direct in-home care. In this model, clinicians providing home care services in the community can provide homebound patients with primary care, complex care management, advanced care planning, and health coaching in a way clinic and hospital-based care cannot.[33]

Working in home care medicine, analogous to the mobile health clinic, PAs are afforded more time and opportunity to provide meaningful, one-on-one quality care to patients. There is far greater opportunity for in-depth patient education to both patient and family/caregiver. The PA can more easily identify individual, holistic patient needs. And there are many issues more easily discussed in the comfort and security of the patient's home environment rather in in an office visit, including home environment safety risks as well as medical, social, or emotional problems.

Utilizing PAs in home-based care has not gone unnoticed by government officials, insurance companies, and state medical organizations. A bipartisan group of representatives introduced the Home Health Care Planning Improvement Act of 2019 (H.R. 2150), which was passed earlier this year.[34,35] This legislation allows physician assistants, nurse practitioners, and other advanced practice nurses to certify home health care services.[34,35] This is a prime opportunity for the PA profession to invest in this model of care at the ground level to firmly establish the profession's ability to provide this type of care.[33,34,35]

Proposed Solutions:

- *Advocate for PAs to be considered and included in legislation securing the independent provision of home health services.*
- *Include home visits and alternative care delivery models in PA program clinical training.*
- *Recommend reimbursement for home visits for PAs. It should be equitable and recognize cost savings and value-improvement associated with this level of care.*

Value Based/Cost Savings Care

Healthcare reimbursement in the U.S. is shifting from rewarding the number of procedures or treatments completed, to rewarding value-based quality outcomes. Per the University of Utah, Value is the quality of care, coupled with the patient experience at a given cost, V= (Quality + Service)/Cost.[9] The Cleveland Clinic defines an approach to improving the quality and outcomes for patients in a proactive way.[10] Value-based care involves data analysis, quality improvement processes, focus on care pathways and prevention. Payment eventually is based on outcomes against cost, rather than the number of

things “done” to a patient. This is not necessarily a capitated model and can exist within multiple payer model types.

Advantages: Changes in reimbursement models are going to drive care delivery, as more and more payers integrate value-based payment models. PAs are excellent, high value (lower cost, high quality) parts of the system. PAs also have a generalist education, which is central to our value as we can provide services in several specialties simultaneously, as opposed to other clinicians. This is an opportunity for PAs to be involved with quality improvement, developing care pathways, as leaders in value-based care teams, participation in quality improvement processes, help with cost reduction, potentially better work/life balance. Increasing PA utilization allows others to work at the top of their training (physicians, NPs, health coaches, pharmacy) in order to help with chronic disease management. There is also potential for reduced burnout when the focus is on outcomes rather than patient volume. Value-based care emphasizes team-based care models, in which PAs are naturally effective team leaders and members and aligns with PCMH models. There is additional potential to benefit financially from shared-savings models.

Disadvantages: It takes time to implement new models; typically, physician-led teams could potentially feel threatened by PAs on the team. There is increased reliance on technology/EHR, which can be intimidating for PAs who are not comfortable with this. Payment transitions can feel risky financially when providers are used to a fee-for-service model.

Proposed Solutions:

- *Integrate PAs and PA leadership/representation in all discussions regarding transitions of reimbursement models.*
- *Recognize PAs for their high quality of care and reimburse them at a level commensurate with their high-quality of care.*
- *Include PAs as part of quality-improvement process improvement teams.*

Educational Funding Resources - Loan Forgiveness/Tuition Reimbursement

For the recent PA graduate, the Committee was charged with identifying existing programs that can ease or eliminate federal student loan debt or reimburse for costs of education in exchange for service. This is particularly important for PAs entering primary care specialties, particularly those choosing public sector, non-profit or government positions (free or sliding-scale clinics) and those choosing to practice in underserved regions of the U.S. Such positions provide immense professional gratification; however, like most primary care specialties, they tend to have lower salaries.

Listed below are existing programs that are available to PA graduates that can help to reduce educational debt burden. These programs are crucial as new PA graduates have a median debt load of $105,000.[10] Additionally, 85% of respondents reported having taken out some sort of loan.

National Loan Repayment and Forgiveness Programs[36, 37]

1) AmeriCorps
2) Commissioned Corps of US Public Health Service
3) Indian Health Service
4) Military – Army, National Guard, Navy
5) National Health Service Corp
6) Income Driven Repayment Plans
7) Public Service Loan Forgiveness

State Based Programs

1) State Loan Repayment Programs – available in 30 states[37]
2) Virginia State Loan Repayment
3) Rural Area Programs

Advantages of such programs include the draw to lower-paying but vital positions. Repayment and loan forgiveness options enhance the "buying power" for the employer on behalf of the PA for such positions. And lastly, these programs reduce provider stress. With such significant debt burden relative to salary potential, the new PA graduate faces high loan-repayment costs that rival their ability to pay for necessary living expenses.

Despite the apparent advantages, there can also be distinct challenges in choosing a loan repayment or forgiveness program. The PA must work for a qualifying employer/entity, and their position may not be solely based on a provider role. Many of these positions exist in entities that have limited funding that disallows upfront repayment, leaving the PA to endure high loan payments until the waiting period is over. Additionally, payments are income-driven, and sometimes the loan balance remaining after the 10-year waiting period is minimal. Lastly, qualifying factors must be updated annually, and there are often many requirements for repayments to be qualified through the forgiving entity.[36,37]

Proposed Solutions:

- *Inform students about these programs before they decide to enroll in PA programs, so they may curtail education due to the risk of substantial debt. Also, the qualification requirements for some programs are too limiting and may depend on undesirable relocation for service. Generally, the worksites that qualify usually involve lower salaries and the process for qualification too complex.*
- *Establish a more comprehensive source of information and assistance on AAPA's website.*
- *Require PA programs to present all options to students before matriculation and prior to graduation.*
- *Lobby for increased federal and state monies for programs specifically for PAs in primary care.*
- *Investigate programs that would provide tuition reimbursement, tax breaks, or debt forgiveness for PAs working in primary care.*

CHARGE TO THE COMMITTEE:

Determine if the 2019 AAPA Model State Legislation corresponds with the practice of primary care medicine.

The Committee reviewed the Model State Legislation (log-in required) and found it to be excellent but lacking in discussion regarding issues surrounding PA practice ownership. The Committee calls for a paragraph specifying that PAs can:

- be named as partners in medical corporations;
- be able to form corporations;
- be included in profit sharing;
- have the ability to hold equity positions in medical corporations.

Conclusion

PAs are clearly able to provide high-quality medical care and are well-suited to function as primary care clinicians. Current and future shortages of frontline family practice/primary care providers create a vital urgency that PAs recommit the profession to the practice and advancement of primary care. There is

great opportunity for the PA profession to lead restructuring of primary care models of care. The Committee strongly suggests that the profession act promptly to promote and implement the changes and suggestions offered in the Primary Care Ad Hoc Committee report.

The first and most important element to implement is the "full practice" component of OTP. AAPA and state chapters must commit themselves to achieve this goal as soon as is allowable in order to remove the critical barrier PAs face in family practice – namely, legislated supervision or collaboration. The second major issue is the PA title. The Committee feels it is important to communicate that the word 'assistant' continues to be a major detriment to PAs being viewed as a viable, knowledgeable primary care provider. The PA profession's third issue of importance is the lack of direct reimbursement. PAs are revenue-generating clinicians, yet our production is largely hidden in various reimbursement mechanisms, including *incident-to* billing and physician billing of PA services required by some insurance companies. Achieving direct reimbursement will enable PAs to understand the revenue they generate, know their worth, and eliminate the "hidden PA" phenomenon that presently occurs with both CMS and the insurance industry.

The Committee is also greatly concerned about how pre-PA and current PA students view primary care. PA education is uniquely geared towards producing excellent primary care clinicians. However, lack of primary care role models, lack of positive primary care identity, and a lack of visible PA-led practices all threaten the integrity of the specialty. Further, these things prevent students from viewing primary care specialties as viable practice options upon graduation. Additionally, rising education costs, lower primary care salaries, and lack of tuition reimbursement all serve to disincentivize students from choosing primary care specialties as their life's work. AAPA, as well as PAEA, should investigate ways to reinvigorate the primary care narrative for students. Lastly, the Committee calls for AAPA and PAEA to investigate and develop new tuition reimbursement models and options for loan forgiveness that are primary care specialty focused.

Primary care is a large part of what gives the PA profession legitimacy. PAs are traditionally trained as generalist clinicians. The Committee firmly believes that there is no better opportunity than now, during what is perhaps the most tumultuous time of change in modern medical history, for the PA profession to return to its roots with a primary care focus. As healthcare transforms at an exuberant pace, primary care medicine will, perhaps, undergo the most dramatic transformation of all. There is no better time for the PA profession to position itself as ready and willing to take on the challenges ahead. PAs have always been able to treat the entire patient, and with removal of the aforementioned barriers, PAs' ability to assume the primary care role will only expand. The profession must assume that role eagerly and move forward with enthusiastic willingness to claim primary care as a PA stronghold. PAs need this for the profession. Patients need this for access to quality health care. The healthcare system needs this to soften the existing and predicted clinician shortages that will persist in coming generations.

This Committee report was completed during the COVID-19 pandemic. The Committee sees several early changes that will affect the PA profession and medical care delivery coming from COVID-19. As a profession, PAs were able to shift into various needed specialties. Our ability to pivot and work in areas in which we were not typically familiar was universal. Unfortunately, we found our position in family practice and primary care was tenuous. When practices experienced low patient census, PAs were among the first to experience reductions in pay, furloughs, or dismissals. Obviously, this will be helped with OTP and equity/partnerships, as well as an ability to have our contribution to the practice documented and measured. Many family practices closed with no input from the PAs employed there. Patients were then left without primary care providers, and thus urgent care, retail clinics, and

telemedicine filled the gap. We believe there will be less allegiance to individual providers and move to wherever the patient feels they can receive high-quality care. This will be positive for PAs.

Nine state Governors waived supervision/collaboration of PAs during COVID-19, allowing PAs to practice without restrictive barriers in their states. The Committee asks that AAPA partner with these states as they would be most ready for permanent legislative change.

While we do not yet know how this pandemic will end, we can only presume that some areas of medicine will change and that an increased number of PAs in primary care will augment the ability of Americans to receive high quality care from thousands of clinicians who are currently denied this opportunity because of barriers and restrictions imposed upon the profession.

The Committee sincerely thanks you, the reader. We encourage you to review the report in its entirety and take action to advocate for PAs assuming a central role in transforming primary care medicine. The committee members are listed below. All members welcome interactive conversation about the information recommended in the committee report.

Committee Members

David E. Mittman, PA, DFAAPA
Nichole Bateman, MPAS, MEHP, PA-C
Ben Taylor, PhD, PA-C, DFAAPA
Kris Pyles-Sweet, MS, PA-C
Dana Motika
Joanne Rolls, MPAS, MEHP, PA-C

References:

1. American Academy of PAs. History of the PA Profession. Last updated 2020. Retrieved from https://www.aapa.org/about/history/ on January 31, 2010.

2. MEDEX Northwest, University of Washington. MEDEX Historical. Last updated May 14, 2019. Retrieved from https://depts.washington.edu/medex/category/medex-historical/ on January, 31, 2020.

3. Copelan, B. Cawley, J. Stoehr, J. 2013. *Physician Assistants in Primary Care: Trends and Characteristics*. Ann Fam Med: 11(1), 75-79.

4. National Commission on Certification of Physician Assistants. 2018 Statistical Profile of Certified Physician Assistants. NCCPA.net. http://prodcmsstoragesa.blob.core.windows.net/uploads/files/2018StatisticalProfileofCertifiedPhysiciaAssistants.pdf. Published April 2019. Accessed January 31, 2020.

5. AAPA. Salary Report Archives. Last updated 2020. Retrieved from https://www.aapa.org/topic/about-aapa/publications/salary-report/ On January 31, 2020

6. Morgan, P. Everett, C. Humeniuk, K. Valentin, V. (2016) *Physician Assistant Specialty Choice: Distribution, salaries and comparison with physicians.* Journal of the American Academy of Physician Assistants. 29(7): 46-52.

7. Morgan P, Himmerick KA, Leach A. (2016). *Scarcity of Primary Care Positions May Divert Physician Assistants Into Specialty Practice.* Medical Care Research and Review. 74: 109-122.

8. Essary, A. Bernard, K. Coplan, B. Dehn, R. Forister, G. Smith, Noel. Valentin, V. (2018). *Burnout and Job and Career Satisfaction in the Physician Assistant Profession: A Review of the Literature.* NAM Perspectives. Discussion Paper. National Academy of Medicine, Washington, DC. https: //doi.org/10.31478/201812b.

9. Hamann, R. A., Jeffery, C., & Miller, A. A. (2016). Physician assistant educational debt. Journal of the American Academy of Physician Assistants, 29(10), 1-2. doi:10.1097/01.jaa.0000490099.68228.95

10. Moore, M. A., Coffman, M., Cawley, J. F., Crowley, D., Miller, A., & Klink, K. (2017). Analysis of 2011 physician assistant education debt load. Journal of the American Academy of Physician Assistants, 30(3), 37-43. doi:10.1097/01.jaa.0000512239.76797.c8

11. Value Equation. University of Utah. https://uofuhealth.utah.edu/value/value-equation.phpAccessed February 21, 2020

12. Value-Based Care. Cleveland Clinic. https://my.clevelandclinic.org/health/articles/15938-value-based-care. Last updated 2015. Accessed February 21, 2020.

13. Hanson, S. (2018, March 23). PAs Deserve Direct Reimbursement for their Services. Retrieved May 31, 2020, from https://www.physicianspractice.com/staff/pas-deserve-direct-reimbursement-their-services

14. Direct Payment for Pas. Retrieved May 31, 2020 from https://www.aapa.org/wp-content/uploads/2019/03/Issue-Brief_Direct-Payment-for-PAs-FINAL-021219.pdf

15. Boyd Davis, K. (2019, January 23). Healthcare's Underutilized Workforce: Deploy Physician Assistants + Nurse Practitioners to Improve Productivity + Quality. Retrieved May 31, 2020, from https://www.cardiovascularbusiness.com/topics/healthcare-economics/healthcares-underutilized-workforce-deploy-physician-assistants-nurse

16. Morgan, P., Anderson, Lehnert, Starfield, Wagner, Nolte, . . . Smith VA. (2019, June 01). Impact Of Physicians, Nurse Practitioners, And Physician Assistants On Utilization And Costs For Complex Patients. Retrieved May 31, 2020, from https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2019.00014

17. Palma, G. (n.d.). Electronic Health Records: The Good, the Bad and the Ugly. George Palma, MD, Medical Director, of Simpler Consulting, discusses benefits and draw backs for electronic medical records. Retrieved May 31, 2020, from https://www.beckershospitalreview.com/healthcare-information-technology/electronic-health-records-the-good-the-bad-and-the-ugly.html

18. Danielsen, R. D. (2019, March 28). Are We Overproducing NPs and PAs? Retrieved May 5, 2020, from https://www.mdedge.com/clinicianreviews/article/189902/practice-management/are-we-overproducing-nps-and-pas/page/0/1

19. Cheney, C. (2019, May 1). More States Pushing for Autonomy in Scope-of-Practice Battle. Retrieved May 31, 2020, from https://www.healthleadersmedia.com/clinical-care/more-states-pushing-autonomy-scope-practice-battle

20. Smith, N. (2019, November 19). Are PAs Burned Out? Retrieved May 6, 2020, from https://www.aapa.org/news-central/2018/05/pas-report-low-burnout/

21. Pohlig, C. (2019, March 27). Medicare Billing Regulations for Nonphysician Providers Vary by State, Facility. Retrieved May 31, 2020, from https://www.the-hospitalist.org/hospitalist/article/125958/health-policy/medicare-billing-regulations-nonphysician-providers-vary

22. Dornstauder, A. (2019, July 02). AAPA HOD Responds to Preceptor Shortage with Increased CME. Retrieved May 31, 2020, from https://www.aapa.org/news-central/2019/07/aapa-hod-responds-to-preceptor-shortage-with-increased-cme/

23. Sims, G. (2018, May 03). Employee on-boarding vs. orientation: Why you need both. Retrieved May 31, 2020, from https://www.insperity.com/blog/employee-onboarding-vs-orientation-need/

24. The Patient Centered Medical Home. (2018, March 01). Retrieved May 31, 2020, from https://www.aafp.org/practice-management/transformation/pcmh.html

25. Barriers to Providing Care Improving, But More Work Remains [Editorial]. (2018, July 16). AAPA.

26. Heath, S. (2018, November 15). Physician Primary Care Visits Make Way for Visits with PAs, NPs. Retrieved May 31, 2020, from https://patientengagementhit.com/news/physician-primary-care-visits-make-way-for-visits-with-pas-nps

27. Bannow, T. (2019, June 04). CVS to aggressively expand healthcare services in stores. Retrieved May 31, 2020, from https://www.modernhealthcare.com/patient-care/cvs-aggressively-expand-healthcare-services-stores

28. Admin, U. (2019, March 19). The urgent care industry trends looking to fulfill the demand of a growing segment in the healthcare market. Retrieved May 31, 2020, from https://www.ucaoa.org/About-UCA/Industry-News/ArtMID/10309/ArticleID/950/The-urgent-care-industry-trends-looking-to-fulfill-the-demand-of-a-growing-segment-in-the-healthcare-market

29. Yu. S., et al. The scope and impact of mobile health clinics in the United States: a literature review. International Journal for Equity in Health (2017) 16:178

30. Mahar, J. H., Rosencrance, J. G., & Rasmussen, P. A. (2019, February 28). The Future of Telemedicine (and What's in the Way). Retrieved May 31, 2020, from https://consultqd.clevelandclinic.org/the-future-of-telemedicine-and-whats-in-the-way/

31. Telemedicine Benefits and Disadvantages, Telemedicine Pros and Cons. (2018, May 25). Retrieved May 31, 2020, from https://evisit.com/resources/10-pros-and-cons-of-telemedicine/

32. Behavioral Health in Primary Care. (n.d.). Retrieved May 31, 2020, from https://www.integration.samhsa.gov/integrated-care-models/behavioral-health-in-primary-care

33. Flynn, M. (2017, December 20). Physician Assistants Could Be Untapped Resource in Home Care. Retrieved May 31, 2020, from https://homehealthcarenews.com/2017/12/physician-assistants-could-be-untapped-resource-in-home-care/

34. Donlan, A. (2020, March 27). [Updated] House Passes CARES Act, Fast Forwarding Home Health Care Innovation Beyond COVID-19. Retrieved May 31, 2020, from https://homehealthcarenews.com/2020/03/house-passes-cares-act-fast-forwarding-home-health-care-innovation-beyond-covid-19/

35. Morr, M. (2020, April 02). PAs and NPs Celebrate Home Health Care Planning Improvement Act in COVID-19 Legislation. Retrieved May 31, 2020, from https://www.clinicaladvisor.com/home/topics/practice-management-information-center/pas-and-nps-celebrates-home-health-care-planning-improvement-act-in-covid-19-legislation/

36. Zinn, D. (2019, August 08). The Complete List of Student Loan Forgiveness Programs and Options. Retrieved May 31, 2020, from https://studentloanhero.com/featured/the-complete-list-of-student-loan-forgiveness-programs/

37. State and Federal Loan Forgiveness Programs. (2019, May 3). Retrieved May 31, 2020, from https://www.adea.org/advocacy/state/loan-forgiveness-programs.aspx