Definition of “collaborative practice”:

- **Collaborative practice** is an approach that enables health care providers to deliver high-quality, safe person-centered services to achieve the best possible individual health outcomes for a diverse population.

- **Collaborative practice** happens when multiple health workers from different professional backgrounds work together with patients, families, care (givers) and communities to deliver the highest quality of care across settings.

- **Collaborative practice**: communication, sharing and problem solving between all pertinent health care professionals; this pattern of practice also implies a shared responsibility and accountability for patient care.

Problem Statement:
There are several trends that will impact the future of collaborative practice. Dental education will have to anticipate these trends in order to educate and train the diverse dentists, residents, allied and expanded oral health care workforce to work in collaborative care environments (interprofessional practice).

The trends that could impact collaborative practice include:

i. Changing demographics of the practitioner and the population
   a. Dentists are getting younger.
   b. More likely to be female (50:50 by 2040)
   c. More likely to be non-white (the “face” of practitioners however does not represent the population).
   d. Fewer dentists will own their practices.
   e. Sharp generational divide: larger number of young dentists in workforce and a large number of retirement age dentists.

ii. Changing models of care and practice environments
   a. Access to care for many “populations” remains a challenge.
   b. Solo practice is disappearing.
   c. Integration of services and practice is likely in some settings.
   d. Reimbursement models will change (e.g., diagnostic codes, national/state models of reimbursement).

iii. Changes in chair-side delivery of care
   a. Technology will continue to advance in the biological, pharmacological and technical areas.
   b. Artificial intelligence and data sciences will drive efficiencies.
Preparing Students for the Future of Collaborative

How will dental education adapt to these trends?

1. In order to meet these challenges, dental education will need to develop guidelines, competencies and practice environments that the oral health care providers of the future will need in several different domains:
   a. Knowledge,
   b. Skills and
   c. Attitudes.

2. In order to meet these challenges, dental education will need to adapt and adopt new methods of:
   a. Admissions,
   b. Curriculum design (e.g. decompression/new science) and
   c. IPE/IPP models.

3. In order to meet these challenges, dental education will need to develop practice environments that the oral health care providers of the future will need to facilitate patient centered interprofessional practice collaborative care:
   a. Clinics,
   b. Clinic systems and
   c. Externship/community health models.

4. In order to meet these challenges, dental education will need to better incorporate PGY-1 general dentistry programs into the education model:
   a. Emphasizing importance at the pre-doc level and
   b. Lobbying for a mandatory PGY-1.

Recommendations From SBAR

- All predental discipline students should be taught teamwork and improved communication between health care professionals. (Brame, 2015)
- Dental curriculum should promote a team mindset to understand roles and responsibilities, improve mutual respect, and support teamwork for enhanced patient-centered care. (Jones, 2017) (Ephrem, 2018)
- Collaborative practice skills should be incorporated into curricula and clinical experiences. (Barker, 2018)
- Dental schools need to create formal partnerships between dental professional programs to improve attitudes in clinical settings. (Satter, 2019). Physical plant and department structures will need to be changed.
- Dental education should provide opportunities for predoctoral dental students to be educated by allied dental professional (i.e. dental hygienists) to expand respect for knowledge, roles and responsibilities. (Owens, 2019)
- Communication between dental schools and advanced dental education programs must increase/improve to facilitate better education and patient safety.
- Dental schools should collaborate with community and university resources to provide dental students at least one rotation, clerkship or equivalent experience in relevant areas of health care and offer opportunities for additional elective experience in hospitals, nursing homes, ambulatory care clinics and other settings. (Donoff, 2022)
• In addition to technical skills, dental education should also emphasize scientific, social and structural competencies within health care. It is critical that curricular developments in dental humanities, structural competency and health policy are treated with the same level of rigor as basic science or technical education. (Donoff, 2022)
• Early training and experience of IPE have the potential to lead to improved leadership, collaboration and communication between health care teams, ultimately improving patient outcomes and safety. (van Diggele et al., 2020)
• Provide educators with a structural framework and building blocks for the development of IPE activities. (Burning et al., 2009)
• Provide faculty development necessary for successful implementation of IPE activities.
• Implementation of core competencies: (Burning et al., 2009)
  ➢ Roles and responsibilities
  ➢ Ethical practice
  ➢ Conflict resolution
  ➢ Communication
  ➢ Collaboration and teamwork (van Diggele et al., 2020)

One or more of these themes should be considered as an outcome when designing an interprofessional activity and where possible matched to an assessment task.

• Role modeling of “interprofessional leadership” by facilitators allows students to witness the collaborative nature of joint leadership, promoting trust and acceptance of interprofessional practice. Development of “leadership teams” for IPE instruction and experience. (van Diggele et al., 2020)
• Dental institutions should continue to educate and emphasize the need for policy making and organized dentistry in furthering the value of dental profession as health care providers.
• Accreditation, licensure, board of registration, scope of practice and billing/reimbursement practices are a barrier to collaborative care. ADEA and partners should work to advocate and influence for changes that would lower these barriers.

Based on the Above Principles/Recommendations, ADEA Will Act on the Following:

1. ADEA will hold yearly workshops as designated at ADEA Meetings for IPP and IPE around the following topics:
   • Curriculum development
   • Competencies
   • Assessment
   • Faculty Development
   • Best practices/working models

   Note: These topics should include both inter- and intraprofessional education/collaboration/practice.

2. ADEA will identify and fund “super-users” (at least 10 with representatives for allied dental and diversity, equity and inclusion) that are ADEA ambassadors for IPE/IPP who
can attend other health professional events/meetings. (e.g. Interprofessional Leadership Development [ipecollaborative.org]) that have the responsibility of collating and developing tools that can disseminate information to dental/allied leaders through ADEA platforms and at ADEA meetings. These ambassadors should share how oral health needs to be integrated in the other health professions and share models/host workshops at other health professions meetings (e.g. AAMC, AACN, AACP, ASPPH).

3. ADEA will identify one IPE/IPP director/responsible person per school that can be taught the requisite skills, resources, tools needed to implement curriculum and assessments (e.g., ADEA CCI representative model). Diversity should be considered. Core Competencies for Interprofessional Collaborative Practice: 2016 Update (memberclicks.net).

4. ADEA will host and showcase partners that can facilitate IPE/IPP in dental and medical clinics (e.g., integrated health record companies, telehealth companies, etc.).

5. ADEA will lead the effort with other organizations (e.g., ADA and ADHA) to lobby on the behalf of schools and professions for changes in licensure/scope of practice/accreditation/billing that allows for more IPP in clinics.

6. ADEA must be the organization that facilitates the incorporation of PGY-1 general dental programs into the education model
   a. Different from periodontics (AAP), endodontics (AAE) oral surgery and maxillofacial surgery (AAOMS) and other specialties, there is no “parent” organization for general dentistry.
      i. ADEA must take a leadership role in being that “parent” organization for general dentistry educational programs.

7. ADEA will need to ensure that the themes of diversity, equity, inclusion and belonging (DEIB) are included in all aspects. There must be recognition that many issues concerning DEIB are institutional—a key emphasis has to be on dealing with the barriers and how to list them (i.e., cultural barrier as one example).
Aiming to assist the implementation group, here are the subcommittee’s responses to the feedback received.

Q12—What suggestions do you have to further strengthen, operationalize or implement the proposed solution?

**Feedback:**
Need to better understand what level of learning actually occurs in a single rotation versus spending time providing care for underserved patient populations in their own communities. The idea that building a dental clinic for these patients will allow them to get care has been proven to not work. Underserved populations are often not able to access care simply because they can’t get to the dental clinic. Teaching students how to find ways to get to these patients to deliver that care is an untouched skillset.

**Response:** This concern applies to item 1. This will be added to an appendix for implementation groups to consider.

Feedback:
Clinical training in FQHC’s could enable an IPP experience

**Response:** This concern applies to item 1 and 5. This will be added to an appendix for implementation groups to consider

**Feedback:**
Has there been an assessment to show that ADEA is not currently holding yearly workshops on topics such as curriculum development, competencies, assessment, faculty development etc.? These are great session topics that ADEA members can and should submit proposals for Annual Session.

**Response:** We will ask ADEA to do the assessment—to this point relevant sessions should be identified/marked as being relevant to IPP/IPE.

**Feedback:**
offer specific ADCFP track at the annual meeting with workshops and sessions on preparing for an academic career

**Response:** This concern applies to item 1. This will be added to an appendix for implementation groups to consider
Feedback:
With changing demographics, I do not understand how these broad suggestions do not reflect the challenges of health inquiries or global oral health issues to better prepare our students. These solutions are not innovative and business as usual.

Response: Our charge was to identify action items-the groups that are implementing will have to take this into consideration-it will be identified as an appendix item for consideration.

Feedback:
Include community outreach to train current practitioners as the graduates will need continued role models.

Response: This will be included in an appendix for consideration for implementation teams.

Q13—What, if any, critical issues are missing from the proposed solution?

Feedback:
How to incorporate and the importance of dental diagnosis codes (SNODENT). Having all schools implement these will assist in billing as medical billing requires a diagnostic code.

Response: This will be included in an appendix for consideration for implementation teams.

Feedback:
Health equity, preparing students to lead and work in a globally diverse society, structural competence.

Response: This will be included in an appendix for consideration for implantation teams.

Feedback:
DSOs like PDS should be considered a possible resource. We are leading in collaborative practice - the use of advances in technology, including EHR (medical & dental), CBCT, and screenings (HbA1c, etc.), comprehensive integrated care, and co-located medical and dental practices.

Response: This will be included in an appendix for consideration for implantation teams.

Feedback:
developing business skills in students to make appropriate financial decisions.

Response: This will be included in an appendix for consideration for implantation teams.
Preparing Students for the Future of Collaborative Care
Appendix 1

Q14—What, if any, issues would prevent ADEA or your institution from being able to implement the proposed solution?

Feedback:
Human resources - faculty and staff limitations. Remuneration models for faculty of other professions/disciplines and clinic payment models. 
Time---for more practice management topics since our curriculum is heavily centered around CODA (as all are) and what would we cut to add more practice management/financial management topics, plus challenge of faculty to teach those topics.
The critical issue remains - funding, human and material resources, and institutional buy-in. This also sounds like a request for everyone to do more with less time, energy and resources.

Accreditation
This statement coming from ADEA is frightening beyond belief: "Dental education must deemphasize technical skills..."

Finances
Possible pushback from the current status quo seen within the industry and large number of older clinicians yet to adopt, let alone implement, collaborative care.

Time and Money, a lot of the solutions depend on ADEA to implement

Q15—Please share any examples your institution is currently implementing that relate to these proposed solutions.

Feedback:
We already have a multi-institutional, multi-campus statewide IPE / IPP curriculum that our students engage in. We also are developing and implementing some RELEVANT IPP clinical experiences for our students.
I am an IPE facilitator this semester and host a group of 12 students from a variety of healthcare fields, our school requires IPE participation for both dental and dental hygiene students, we added IPE topics to our curriculum in most classes, Our dental and dental hygiene students do a 6 week rural rotation. Collaboration with the hospital since we are housed on the same campus--through oral surgery, ped dentistry, GPR, oral care for cancer patients pilot service, etc.
We have a strong community based dental practice program that collaborate with FQHC community clinics to enhance IPP
Our Curriculum is reviewed annually, but I know these topics are not included.
PDS is collaborating with a couple universities to help implement and / or optimize Epic. We’re participating in experiments around HbA1c, aMMP-8, etc. We support several PAs / NPs in the medical practices co-located to dental practices. We’re supporting multiple school clinics. We offer dental students and schools participation in several of our Boot Camps. PDS also attends, supports, sponsors, exhibits and speaks at various trade shows and industry events.