American Association of Dental Examiners
Position Statement

POST GRADUATE YEAR 1

A FLAWED ALTERNATIVE PATHWAY TO LICENSURE

The dental licensure process in the United States consists of graduation from a dental school accredited by the Commission on Dental Accreditation of the American Dental Association, successful completion of Parts I and II of the National Board Examinations and successful clinical demonstration of critical clinical skills to independent third parties representing the public. For decades the concept of training after completion of the traditional dental school curriculum has been used as a method of providing an additional educational and clinical experience. This additional training, characterized as Post Graduate 1 (PGY-1) has recently surfaced as a mechanism which would entirely replace the traditional clinical demonstrations assessed by third parties as part of the licensure process. The American Association of Dental Examiners believes this proposed alternative pathway to licensure is an inadequate method of assessment for competence, that it is politically motivated and that it fails to assure protection for the dental consumer from any incompetent dental school graduates.

Currently, state and/or regional testing agencies composed of individuals devoid of any testing outcome conflicts of interest, solely representing the public. They administer clinical assessments of competence which have been repeatedly upheld to be psychometrically valid and reliable testing instruments and their charge is to protect the dental consumer . Elimination of this independent, third party assessment by replacement with other unproven mechanisms of evaluation, especially methodologies which have not demonstrated their effectiveness in assuring public protection, is unwise. The concept of implementing new licensure pathways and then retrospectively conducting studies to evaluate the legitimacy of that pathway, could leave substantial numbers of the public exposed to incompetent care. By allowing practice without valid, reliable, defensible, psychometrically sound skill measurements, a new pathway for potentially sub-standard, second class care will be established.

What has not been well formulated is how the PGY-1 programs would certify their graduates, how these programs and the curriculums and training processes would be accredited, what governing body would oversee the accreditation process, how many residency positions are needed versus how many are in existence, and how the public will be protected by the establishment of PGY-1 programs as an alternative to the demonstration of clinical skills to an impartial body. The first and foremost concern which continues to necessitate independent third party assessments is the observation that dental and dental hygiene schools are graduating some individuals who do not possess the necessary skills to begin safe unsupervised practice of dentistry and dental hygiene.

Dental schools are not infallible in the execution of their charge which underscores the importance of independent competency assessments. Assessments, to be meaningful, need to be conducted by agencies which are not part of the educational system. Do we want the licensure process to be in the hands of those individuals who have a vested interest in whether a person passes or fails or under the auspices of an independent and impartial assessment outside of the process of education?

One of the rationales for the use of the PGY-1 concept is that it would more closely parallel the medical model for licensure. This specious argument neglects the fact that the one year medical residency is not an end point, but that the applicant will continue postgraduate training to a higher level. The number of supervising attending physicians is significantly higher in proportion to the number of residents than one typically finds in dental residencies. Dental students in the dental model cannot be supervised under the rigors present in the medical model. Indeed, supervision in most dental postgraduate programs is ill defined. There is already a published nationwide shortage of approximately 400 qualified dental educators. Where will residency faculty requirements be gleaned during an obvious serious shortfall of available teachers. Present postgraduate dental programs choose from the top of their classes. Supervision and program assessment of these individuals will vary significantly from the supervision required if and when all dental students, including the least qualified in the class, are enrolled in postgraduate programs. In that instance, supervision assumes a new role, one of public protection as skill sets are monitored and hopefully improved to minimum competency levels. However, present dental residency programs are not constructed to make competency assessments but rather to mentor and guide advanced study. Without competency oriented guidance the student of questionable competency progresses to become the incompetent postgraduate resident, and the protection of the public is the ultimate victim in the process.

Postgraduate training has become a needed reality for the education of many dental students. It is also a potentially fruitful mechanism by which residents in training can be utilized to provide dental treatment to the underserved. It is not a process through which dental licensure should occur.

The needed number of postgraduate program openings do not exist to accommodate all the dental students graduating from United States dental schools. Present financial restraints may result in the loss of existing dental residencies, which only serves to broaden the disparity between the number of residency program places needed and those that can be funded. Of concern to many is the prospect that corporate entities may attempt to fund these programs in the future as a means to create solvent dental educational programs, thus creating a potential corporate obligation, creation of potential illegal and unethical intrusion of non-professional corporations into direct influence of the practice of dentistry, in addition to creating increased financial indebtedness for the next generation of dental service providers. Supervision and construction of dental residencies is not consistent with the medical model, and to raise the dental residency program concept (PGY-1) to some semblance of what exists in the medical model would

be a time intensive and expensive proposition, which if it is to occur, the creation of such a parallel should be done prior to any further PGY-1 implementation mandates.

Assessment of students for licensure should be conducted by independent third parties whose sole responsibility is in protecting the health, safety and welfare of the public. It assures the public trust and the right of dental and dental hygiene students to receive quality education and the preservation of their hard earned credentials. To do otherwise facilitates the undermining of valid and reliable assessments and thus erodes the assurance of the public trust. Our students deserve an excellent basic education and an opportunity to grow their skills in the profession of dentistry. Additional training and education beyond the dental school environment is part of the opportunity to grow. Our public deserves the assurance that only qualified and competent individuals are allowed to enter the practice of dentistry. The PGY-1 concept, as an alternative pathway to licensure, does not offer that assurance, nor should it be used to circumvent the important independent quality assurance mechanisms.

Enc. – Post Graduate Year 1: A Flawed Alternative Pathway to Licensure by
Delma H. Kinlaw, D.D.S., Joseph W. Rossa, M.S., D.D.S., J.D., and Guy Shampaine, D.D.S.

Approved by the General Assembly at the American Association of Dental Examiners Annual Meeting, October 23, 2003.

Post Graduate Year 1:
A Flawed Alternative Pathway to Licensure

Delma H. Kinlaw, D.D.S.
Joseph W. Rossa, M.S., D.D.S., J.D.
Guy Shampaine, D.D.S.

Abstract: The dental licensure process in the United States for the most part consists of graduation from a dental school accredited by the Commission on Dental Accreditation of the American Dental Association, successful completion of Parts I and II of the National Board examinations and successful clinical demonstrations of critical clinical skills to independent third parties representing the public. For decades the concept of an additional course of study or training for dental students after completion of the traditional dental school curriculum has been used as a method of providing an additional educational and clinical experience which would serve as a transition between dental school and private practice environments. This additional training, characterized as a Post Graduate 1 (PGY-1) has recently resurfaced as a topic of discussion as a mechanism which would either entirely replace the traditional clinical demonstrations assessed by independent third parties as part of the licensure process, or serve as an alternative course to the traditional clinical demonstrations assessed by independent third parties for licensure of recent graduates. This article will explore the historical discussions of the PGY-1 concept, the funding of graduate residency programs and will develop the concerns as to the appropriateness of PGY-1 programs as an alternatives to, or replacement of, the traditional clinical demonstrations assessed by independent third parties representing the public as part of the total licensure process.

History

The concept of a post graduate year of training (PGY-1) for dental students in addition to the existing curriculums of dental schools in the United States has been the subject of discussion among various components of the dental community for some years. Within recent years the discussion has evolved that due to the advances in basic clinical sciences, as well as advances in clinical techniques, the curriculum of dental schools has become overloaded. The result being that the ability of the educational community to adequately address these advances within the traditional four year curriculum has been compromised. In some instances, clinical experience has suffered due to the volume of didactic information that must be taught. Adding one additional year, at a minimum, to the training of dental students has been theorized as a possible mechanism to provide the dental student with the breadth of didactic education and clinical experience minimally necessary to make the transition from the dental school environment to the unsupervised practice of dentistry. One of the most notable explorations of the attributes of PGY-1 programs appeared as a Special Section in the Journal of Dental Education Vol. 68/No. 8, 1999. Various authors, with varying backgrounds, submitted articles which advanced the virtues of PGY-1 programs as not only beneficial to the evolution of the students' education and preparedness, but a possible mechanism to provide dental services to a population which has been defined as under-served.

Allan J. Formicola, Dean of Columbia University School of Dentistry, frames the discussion in his article Progress Toward a Mandatory Post Graduate Year for Dentistry, in the Journal of

Dental Education stating, "Today's more complicated and diverse society requires practitioners who can give a greater voice in treatment choices and give a greater voice in treatment decisions not only to individual patients but to society at large." Dr. Formicola further advances the need for the post graduate year of training as he writes " Those outside the profession recognize that, in the next century, graduates of dental schools must assume increased responsibility for offering safe and effective treatment to all segments of society, particularly the medically compromised, the elderly and the poor. Those within the profession recognize the necessity of taking logical steps to prepare our graduates for the new realities of practice. Continuing to improve the Predoctoral curriculum and bringing about an educational transition in which all D.D.S./D.M.D. graduates complete their preparation for independent practice with a PGY-1 year are the two mechanisms that the profession has recognized for meeting its responsibility of educating the next generation of practitioners." [1]

As the discussion and need for competency based education has progressed, there has been the acknowledgement that student preparedness for private practice is central to the educational system's task of public protection through assuring competent and practice ready graduates. For many, PGY-1 programs are seen as part of the formula by which that objective can be met. The attention to assessing the quality of the educational experience has in part resulted in greater scrutiny of educational systems and the quality of the system itself as well as the product produced.

The theme of educating a more practice ready student is reiterated by Dr. Ben Barker in his article, The Post Graduate Year: Lineages, Opportunities, Dilemmas, and Public Priorities, with an additional perspective that there is work which could be done in reformatting existing dental school curriculums to address the preparedness of students entering practice. However, Dr. Barker interjects that the need for a PGY-1 year is enforced by a perception that the current dental school curriculums may not be receptive to addressing greater student preparedness. "For nearly one hundred years the pre-doctoral curriculum has evolved to its present entrenched and intractable state. Many of us do not believe that it can be fixed in terms of preparation for entry level practice." [2]

The need for a adequately educated dental student has been central to the evolution of the PGY-1 concept. That student preparedness is central to the theme of public protection, is not unique to the dental educational process. Indeed, it has long been the mandate of the state's licensing authority to assure the public that only competent and qualified individuals are allowed to practice dentistry in their jurisdictions.

Various iterations of how PGY-1 programs could be interwoven into state licensing processes have been proposed. One concept advanced by Dr. Alan Formicola, in his article, A National System to Support a Mandated PGY-1, Journal of Dental Education, August 1999, would be that state licensing agencies would add one year of postgraduate training to existing licensure requirements. States would then issue dental licenses " after candidates satisfactorily meet state licensing examination requirements and the required one year of experience". [3]

Present

Over the past several years the urgency surrounding postgraduate training has taken a new turn as it has moved into the debate over the validity and reliability of the examination process administered by independent third parties. The impetus for change in the licensure process has been propelled by a number of issues, among them, initiatives aimed at freedom of movement for recent graduates, increasing the supply of dental services and access to care for the under-served.

Recently, representatives of the American Dental Association (ADA), the American Dental Education Association, (ADEA), the American Student Dental Association (ASDA), and the American Association of Dental Examiners (AADE) have participated in discussions related to the clinical demonstration requirement for licensure. From those discussions various proposals have surfaced as possible alternative mechanisms to the traditional clinical demonstration requirement for licensure presently conducted by state and/or regional testing agencies. These testing agencies are composed of individuals devoid of any testing outcome conflicts of interest which is a concern perceptually embodied within the educational system. Additionally, the service provided by these examiners helps to insure the educational quality of the program provided to the students. One of the most recent forums for this discussion was the Innovative Testing and Educational Methodologies (ITEM) committee meeting. The ITEM group, initially consisting of representatives of the AADE and the ADEA, met on numerous occasions to articulate and investigate possible innovative approaches to dental licensure. Several licensure concepts were explored during these meetings, one being a portfolio model, and another being PGY-1 training. A nationally renowned expert on the use of portfolios in the educational venue, Dr. Steven Klein, a Senior Research Scientist for RAND in Santa Monica, California, made a presentation identifying the compelling weaknesses in the portfolio model. While vigorous discussion and investigation was being engaged along this front, other initiatives were being advanced in state legislatures to open an alternative mechanism to the clinical demonstration requirement for dental licensure, either as an alternative to or an absolute requirement, through the completion of a postgraduate year of training. While the logistics and feasibility of a PGY-1 program as a pathway to licensure has not been clearly delineated, several states have already begun a process moving in that direction. Most notable is current legislation before the State of New York legislature which would amend the existing law which allows a PGY-1 program as an alternative to the traditional clinical demonstration requirement to the licensure process. This new legislation mandates that a PGY-1 program together with graduation from a dental school accredited by the ADA Commission on Dental Accreditation and passage of Parts I and II of the ADA Joint Commission on National Dental Examinations would be the <u>sole</u> pathway to licensure in that state. [4]

To date, what has not been well formulated is how the programs would certify their graduates, how these programs and the curriculums and training processes would be accredited, what governing body would oversee the accreditation process, how many residency positions are needed versus how many are in existence, and how the public will be protected by the establishment of PGY-1 programs as an alternative to the demonstration of clinical skills to an impartial body.

Competency and Public Protection

The task of ensuring that only qualified and competent individuals are allowed to practice dentistry is the central focus of the dental board of each state. Protection of the public, as mandated by state legislatures, has in part been accomplished by conducting independent third party assessments of the recent graduate as well as those already in practice in another state who may be seeking licensure within a state's jurisdiction. This duty and responsibility has resided within the individual state boards and the licensure community for years. Elimination of the independent, third party assessment by replacement with other mechanisms of evaluation, especially methodologies which have not demonstrated their effectiveness in assuring public protection, is unwise. The impetus for changing from the direct observation of clinical skills requirement for licensure by individuals solely responsible to the public and devoid of the

potential conflicts of interest potentially residing within the educational community, has not been adequately studied to evaluate the potential impact that new licensure pathways may have on public protection. The thought of implementing new licensure pathways and then retrospectively conducting studies to evaluate the legitimacy of that pathway, could leave substantial numbers of the public exposed to incompetent care. Dr. Ronald Maitland, President of the American Association of Dental Examiners, expresses the point embraced by many in the examination community, including informed public members, in his paper The New York State Postgraduate Fifth Year Dental Residency as a New Licensure Path: Concerns for Public Protection as he writes "By allowing practice without valid, reliable, defensible, psychometrically sound skill measurements, a new pathway for potentially sub-standard second class care will be established." [5]

The first and foremost concern which continues to necessitate independent third party assessments is the observation that dental and dental hygiene schools are graduating individuals who do not possess the necessary skills to begin the safe unsupervised practice of dentistry and dental hygiene. [6] While it is readily acknowledged by the examination community that the vast majority of recent graduates do possess the necessary skill sets required to transition into competent unsupervised practice, nevertheless, the impact on the public from even a small percentage of unprepared individuals practicing incompetently could be devastating and should not be minimized. While the demonstration of the clinical skills requirement for licensure may be considered an unnecessary inconvenience to the competent recent graduate, any inconvenience pales in relation to the potential harm to the public which might occur by allowing incompetent graduates into the private practice of dentistry. Also, it is not in the best interest of the public to allow unprepared graduates into residency programs where supervision is less structured and more limited than in traditional dental school settings. In many instances, these unprepared young dentists are enrolled in programs which provide marginal additional potential for structured and documented learning assessment, and subsequent remediation.

It is important to realize that the effort of training students to become capable and qualified practitioners occurs over a continuum beginning with the first day of their educational process. Learning and training proceed at different rates for each individual and it is the educational institution's obligation to bring each student as far along in the educational process as possible during the dental school experience. For most, the experience is satisfactory for public assurance that the quality of care they receive will meet a minimum acceptable standard. For some, additional educational and clinical contact time and oversight is required before that satisfactory level of preparedness can be achieved. Dental schools are not infallible in the execution of their charge, and that is a fact not intended as an indictment of the dental educational process but rather an acknowledgement that underscores the importance of independent unbiased third party assessments. Dr. David Chambers' straightforwardness in his comments to the ITEM committee is noteworthy as he opined, "Educators make mistakes. That's the reason why there are boards" [7]

Assessments, to be meaningful, need to be conducted by agencies which are not part of the educational process. Dr. Steven Klein offered his insight and opinion at an ITEM committee meeting, "Do you want the licensing process to be in the hands of the individuals who have a vested interest, clearly a vested interest in whether that person passes or fails? Or do you want it to be somebody independent, impartial from the process of education?" [8]

Outcome assessment is not intended to denigrate the educational process, but to enhance the educational process by affording critical input into the quality of the educational process and serving as a mechanism for program and curriculum improvement. Through the interaction of the educators and the examining community the student is better trained, and better prepared to enter

unsupervised practice. In addition, the public is better protected and assured that beginning practitioners are "qualified and competent" to practice dentistry. Educators and examiners must work together to uphold the standards of the profession, but must also respect the difference of each other's fundamental purpose. As Dr. Ronald Maitland, president of the American Association of Dental Examiners so succinctly states, "They also should not do each other's job." [9]

PGY-1 Programs

But the initiatives to circumvent the independent third party assessment of recent graduates continues. While some suggested alternatives, such as the portfolio model, seek to change the traditional licensure pathway by reduction of the direct observation of clinical skills by professionals solely representing the public, other recent initiatives have sought to eliminate the third party assessment process completely. As noted, another change in competency assurance has taken form in the PGY-1 concept or pathway to licensure. As concerns over access to care have become more pervasive to the political landscape, those concerns have inevitably worked their way into the licensure process and presently fuel the momentum to explore all methodologies which might afford better access to the under-served population. While few argue the appropriateness of improving access to care, as it is truly a foremost challenge to the dental profession at present, it is still prudent to evaluate the relationship that access and licensure share and whether licensure issues should serve as a vehicle to address access problems. There is literature that discusses the potential to utilize postgraduate programs as a mechanism to address access to care issues, [10] however; the notion of replacing the direct observation of clinical skills by independent third parties in the licensure process with a postgraduate year of training, ending in licensure one year later, adds a new dimension to the discussion of the relationship that licensure and access may share. This discussion becomes more compelling when viewed from other perspectives in that some research into this relationship does not appear to support the conclusion that factors such as increased mobility, or increased numbers of practitioners, has a high correlation to increased access to care. [11, 12, 13, 14] But the debate continues. As the debate continues, certainly a note of caution, and a time for study is indicated if attempts at improved access by liberalizing licensure results in diminished competency of practitioners and a diminution of public protection.

There is no doubt as to the value of postgraduate education. [15, 16] But the question of how competency assessment will take place, should be thoroughly considered before methodologies are implemented to replace the protection afforded though independent third party assessment by utilization and implementation of a mandatory PGY-1 concept. Postgraduate education will help to create better-trained, more seasoned practitioners, but is it economically feasible as a mandate for licensure in the present landscape of diminished funding and escalating student indebtedness? Should PGY-1 programs with questionable assessment assurances be a replacement for the traditional demonstration of clinical skills to independent third party examiners, or does it better serve the public to incorporate independent third party assessments together with postgraduate training so that the public may be potentially afforded increased access without the risk of diminished competency?

Statistics

The discussion of the feasibility of broad- based institution of a PGY-1 program for licensure must begin with an overview of the number of dental school graduates and the current availability of programs which might serve to fulfill the requirements of the PGY-1 concept. According to ADA sources, there were approximately 4349 dental school graduates in 2002. Statistics reveal for the year 2003 there may be 4,448 dental school students enrolled in the fourth year of dental

school. [17] After many years of declining numbers of dental school graduates, the formation of additional dental schools in Nevada, first class to graduate in 2006, and Arizona, first class to graduate in 2007, the number of dental school graduates will slowly begin a positive trend increasing the number of graduating dentists from dental schools accredited by the ADA Commission on Dental Education.

The number of Accredited Advanced Education Programs in August 2003, as reported by the American Dental Association's Survey Center, 2001/02, Survey of Advanced Dental Education (pg 21) and revised in August 2003 by the ADA Council on Dental Education and Licensure is presented in Table 1. While the accreditation status of the programs listed varies, as a general overview, it appears that there may be potentially, (assuming eventual full accreditation status) 430 total specialty programs, and 294 General Practice advanced education programs (general practice and advanced general dentistry), for a total of 724 Advanced Education Programs accredited in the United States as of August 2003. [18]

As a first point in the discussion of the feasibility of broad implementation of a mandatory PGY-1 program, it begs the question as to whether 4,448 dental school graduates can be accommodated by the current 294 General Practice Residencies (GPR) and Advanced Education in General Dentistry (AEGD) programs available as of August 2003. Enrollment in advanced dental education programs vary considerably by type of program and sponsoring institution. Statistics presented by the American Dental Association, Survey Center, 2001/2002 Survey of Advanced Dental Education indicate that 158 individuals were enrolled in accredited first-year General Practice Residency (GPR) programs and 301 individuals were enrolled in accredited first-year Advanced Education in General Dentistry (AEGD) programs in dental schools, resulting in the availability of 459 first-year positions. The survey also indicates that 796 individuals were enrolled in accredited first-year GPR programs and 320 individuals were enrolled in accredited first-year AEGD programs in non dental school environments, resulting in the availability of 1116 first-year positions. The first year opportunities in GPR and AEGD programs total 1575. The discrepancy between the number of dental school graduates and first-year opportunities in either GPR or AEGD programs is 2873, the number of GPR and/or AEGD programs that would need to be developed and accredited to accommodate the annual graduates from dental schools in the United States.[19] In the event that only the opportunities available in dental school environments were considered appropriate to assure consistency in curricular and clinical content, then 3989 additional residencies in dental school environments would have to be developed and accredited. It is important to remember that in the true "medical model" the curriculum content and program structure of the residency requirement for licensure is common to the general practice of medicine, and all medical students must successfully complete this one-year residency for purposes of licensure and to proceed with specialty training.

Graduate Program Funding

One of the traditional sources of funding for existing graduate programs has been through graduate medical education (GME). GME programs have received funding through the Health Resources and Services Administration (HRSA). HRSA, through its Medicaid subsidiary the Centers for Medicare and Medicaid Services, has traditionally provided health training funding, primarily to compensate teaching hospitals for tertiary care and unpaid services. Part of this program provided funding for the teaching of medical residents in hospitals and non hospital settings.

Not only did funding provide for the training of medical residents within the confines of the hospital, but it allowed for training of graduate students enrolled in non hospital locations. The

provision for training in non hospital locations opened the door for GME funding to find its way into the educational process of training dental residents and it has indeed become a significant source of funding for the graduate programs in the dental schools of this nation.

As the funding for graduate residency positions was primarily structured toward medical residency positions, it would not be surprising to realize that the dynamics of the medical profession would play a key role in the ongoing federal and state support for graduate training. While the dynamics and specifics of the administration of these programs is beyond the scope of this discussion, what has become apparent is that the medical community has perceived that a significant surplus exists in physicians trained and needed in the United States. Some studies would suggest that presently there are 100,000 more physicians than needed to meet the nation's needs.[20] The issue was studied by six major national organizations involved in medical education and the result of the deliberations was a consensus statement that the number of physicians being trained each year was "clearly excessive" and concluded that the consequences of the serious oversupply would be underemployment and unemployment of physicians, " an outcome that is undesirable from the perspective of the individual physician and society at large".[21]

Another observation being made by those advancing this discussion is that internationally trained students were filling a significant percentage of the residency positions in the US medical graduate residency programs, and then upon completion of their training, chose to remain in the United States to practice, rather than returning to their native country to provide health care to that population. This influx, they argue is part of the problem, and must be part of any solution generated to address the over abundance of physicians in the United States.[22] While these internationally trained interns may provide service to the under-served during the graduate training periods, they were not apparently choosing to continue to provide those same levels of services to under-served populations once provided the opportunity of entering private practice. It was reasoned that significant economic resources were in fact being spent to train internationally-trained students, who theoretically at least were to return to their countries of origin, but instead chose to remain in the US upon graduation, adding to the over-abundance dilemma.

The scope of the issue from a financial perspective is well stated by Dr. Joseph Bernstein writing in the Spring 1999 issue of the Orthopaedic Journal, "In 1997, the Medicare GME allocations totaled about 7 billion dollars. Let's put this amount in perspective: It is enough to cover the tuition and living expenses of every medical student in the United States, with enough left over to send them all to business school as well"[23]

On May 19, 2003, subsequent to many similar publications and organizational meetings, not only by members of the profession, but governmental and public advocacy groups such as the Pew Commission, the Centers for Medicare and Medicaid Services issued a proposed rule (CMS 1470-P) with regard to GME-funded residency training programs in non-hospital settings. The impact on the various dental schools appears to vary, but common dental school responses to the reduction in GME funding would suggest that multiple current dental residency programs in each dental school would be severely curtailed or discontinued.[24] The ADA has proposed that as many as 500 dental students in residency programs at dental school clinics, rural health clinics, community centers and federally qualified health centers would be affected.[25]

While efforts by the ADEA and the ADA to maintain GME funding as it is applicable to dental schools continues, what is apparent is that economic pressures on funding available to existing dental graduate programs will likely continue in the future. These economic pressures will be exacerbated if an already tenuous system is called upon to provide the additional graduate programs necessary to afford all currently graduating dental students equal opportunity to achieve

licensure through a PGY-1 concept. The prospect of a mandatory fifth year (PGY-1) outsteps the ability of resources and programs to comply.

The utilization of postgraduate training as a methodology of licensure is problematic in several areas. Bringing licensure and postgraduate training together creates an inextricable linkage that mandates that there always be adequate residency programs to accommodate the numbers of dental student graduates seeking entry into practice. While the present ability to develop and fund the necessary numbers of postgraduate programs to accommodate existing dental school graduates is suspect, one must evolve this debate to consider the numerical ramifications of the accreditation of non United States based dental schools and the impact that development could have on this equation. Already the trend is in motion with California seeking recognition of Mexican dental schools and ADA resolutions calling for the ADA to begin the investigatory process of the accreditation of international dental programs. Can the accreditation of international dental schools be far behind? If licensure is tied to PGY-1 programs, and if indeed it holds true that non United States based dental schools are granted accreditation status, then it would be reasonable to assume that these internationally-trained graduates might require access to United States PGY-1 programs as well to gain licensure in the United States. The numbers and economic burdens would now change significantly, assuming that these graduate training programs would exist with any semblance of credibility and public protection. It is also well known that severe shortages in faculty exists at dental schools across the nation. The ADEA has cited that perhaps as many as 400 faculty positions are presently unfilled. If a policy of mandatory PGY-1 programs are implemented, where will the faculty be obtained to provide quality instruction and supervision required by these programs?

Additionally, if licensure is linked to graduate programs then licensure becomes hostage to funding, for without adequate funding, programs cannot be maintained, and then the residency-based licensure pathway becomes extinct. Or stated another way, if PGY-1 programs become the favored pathway to licensure, as proposed in New York, then it becomes mandatory that the federal and state governments find the economic resources to continuously fund those programs or the pathway to licensure must be removed, and graduation from dental school becomes the sole parameter to licensure. However, what has become increasingly apparent is that economic restraints are increasing, causing state and federal governments to restrict spending. Thus, many programs under the auspices of Medicare and Medicaid are being curtailed in the light of budgetary concerns.

Another funding source must be considered other than from the governmental arena and that is from the corporate world. We are beginning to see this trend in Orthodontics at the University of Colorado and Jacksonville University in Florida. This leads one to consider the possibility of funding of residency programs by corporate entities seeking to fulfill corporate interests, rather than the public interest. Perhaps we should look to the leadership of the American Dental Association and its component state associations for their guidance in this regard.

The Medical Model

In 2002 New York State passed legislation to allow an alternative pathway for initial licensure in dentistry. According to that legislation which amended section 6604 of the education law for the State of New York, a postgraduate year of training would in essence be accepted for licensure in lieu of the demonstration of clinical skills to independent third-parties solely representing the public in the licensure process. The background information offered by the sponsors prior to passage of the bill claimed among other things that this would conform to the pathway physicians take for licensure. The alternative pathway to the demonstration of clinical skills to independent

third-parties solely representing the public requirement for licensure in New York consisted of one postgraduate residency year in an American Dental Association Commission on Dental Accreditation (CODA) approved residency program. During final development of the bill, language was added to require some type of outcome assessment, which was not specifically defined in the final bill itself. The "medical model" became embraced by its proponents as the new proposed standard for dental licensure. In the 2003-2004 New York legislative session, Senate Bill 5386 has been introduced which would further amend the education law by eliminating the requirement of a clinical examination for dental licensure and provide that a postdoctoral general practice residency or specialty dental residency of at least one years duration is the only pathway for licensure.

At first glance the PGY-1 pathway does seem to resemble the pathway for licensure required by most states for physicians. However, upon close examination there's actually very little in common with the pathway for medical licensure. One cannot separate statutory requirements in most states to obtain a medical license from the overall environment of medical education, postgraduate medical education, and the clinical practice environment in which physicians must practice. In other words one cannot look at the pathway alone isolated from the other factors. In developing licensing requirements for physicians, state medical boards have integrated licensing educational requirements and examination requirements to create a coordinated assessment process which has multiple points of assessment. Medical licensing requirements vary by state and they are not uniform as is widely assumed by many in dentistry, therefore it is appropriate to take a closer look at the similarities and differences of the medical model and what is being proposed as the "dental model" for licensure.

The requirements for medical licensure in most states generally follow a similar scheme. Although some states have additional examination and testing requirements, the present discussion will confine itself to the generally accepted requirements that are common to most states. It is also recognized that there exists a "Fifth Pathway" for internationally trained medical graduates seeking licensure, however; for the moment, this discussion will be confined to initial licensure for graduates of accredited medical and osteopathic schools in the United States for initial general medical licensure. Among other things most states require that a candidate for licensure meet the following requirements:

1. Hold a degree of doctor of medicine from accredited medical school (for the purposes of this paper accredited osteopathic schools are interchangeable with medical schools),
2. Submit evidence of successful completion of at least one year of training in a postgraduate medical training program that is accredited by the Accreditation Council for Graduate Medical Education (ACGME), and
3. Successfully complete all parts of the United States Medical Licensing Examination (USMLE). States can and do have additional training and examination requirements to the above.

Most state medical boards define successful completion of this postgraduate residency-training year as:

1. Twelve months of accredited postgraduate training in an integrated program in which the applicant completes all the requirements of the program,
2. The program director rates the applicant's performance as satisfactory,
3. The applicant's performance was such that the applicant would qualify for advancement without academic or clinical probationary conditions to the

next year and next progressive level of responsibility in a designated specialty program.

The integrated program in which the first residency year is contained must fulfill the common program requirements published by the ACGME, which can be found in their 2002 11-page document entitled "Common Program Requirements". These requirements are comprehensive and cover requirements of the sponsoring institutions, qualifications and responsibilities of the program director, resident selection, the educational program itself, resident evaluation requirements which are written and must be maintained, faculty evaluation, and specific competency evaluation and certification requirements in six specific clinical practice areas for each resident.[26]

The United States Medical Licensing Examination is currently delivered in three parts. Step one assesses the understanding and application of important concepts of the sciences basic to the practice of medicine and are similar to Parts I and II of the examinations in dental theory administered by the American Dental Association Joint Commission on National Dental Examinations. Step two assesses the application of medical knowledge and understanding of clinical signs to patient care under supervision. Steps 1 and 2 are completed during the four years of medical school usually years 2 and 4. Step 3 assesses the application of medical knowledge and understanding of biomedical and clinical sciences to the unsupervised practice of medicine. To be eligible for step 3 the applicant must meet the licensing requirements set by the state licensing board, hold an M.D. degree or its equivalent, and must have attained passing scores in step 1 and step 2. The USMLE has remediation and retake timing requirements to address failures.[27]

The USMLE is in the process of adding an additional examination called the Clinical Skills Examination. The Clinical Skills Examination is a live patient-based examination to be implemented for assessment of the 2005 graduating class. The recommendation for implementation was made due to superior performance in these areas by international medical graduates who are already required to complete this exam prior to entrance to residency.

The educational preparedness of the dental student is assessed by Part I and Part II of the American Dental Association Joint Commission on National Dental Examinations (National Dental Boards). The USMLE is administered by a professionally independent organization whereas The National Dental Boards are administered by an agency of the American Dental Association, typically in the sophomore and junior years of dental schools. In contrast to the USMLE, the National Dental Boards are not a requirement for graduating and advancement in most dental schools. In essence, students can successfully complete their dental school educational process without having demonstrated competency in didactic areas of dentistry as evidenced by successful completion of the dental National Boards. Part II of the USMLE is a requirement for graduation from medical schools as well as a requirement that must be successfully completed prior to taking Part III. The only uniform requirement for passage of the National Dental Boards Parts I and Part II currently resides in the traditional clinical licensure process and the licensure requirements of individual state boards of dentistry. Currently all states require graduation from an accredited school and passage of the dental national boards. This is either part of the criteria for application for the examination licensure pathway or part of the licensure process, in addition to demonstrating competency in clinical skills. In the medical model, demonstration of competency (USMLE Part 1- comparable to Parts I and II of the dental National Boards Part 2, - consisting of the application of medical theory in clinical situations, and a clinical skills examination as of 2005) is required prior to graduation from medical school

and advancement to the next step in training (residency). This would not be true in the proposed dental model utilizing a PGY-1 scenario as advanced by the State of New York.

Integral to the medical licensing and examination scheme is the understanding of the postgraduate medical educational process, hospital credentialing process, and the medical peer review system. The physician-licensing requirement for completion of at least one year of postgraduate residency training is based on two important principles. First, because all states require this year and successful completion of the USMLE step 3 as a minimal requirement for licensure, the first year integrated residency has been tailored to fit that need. In other words, the first year residency was developed with licensure and the USMLE step 3 examinations in mind. There are two major pathways of postgraduate medical training which can be followed, a surgical and a non-surgical pathway. The first year of either the general surgery residency or internal medicine residency is an integrated resident year in which the training experience conforms to the ACGME common requirements. In this way all applicants for step 3 of the USMLE will all receive the required core experiences and training. This is a process, which has been developed over many years in which the residency training is specifically accomplished to in part satisfy the requirements for the USMLE step 3, and thus the licensing requirement. In addition, the understanding that there is no one-year postgraduate residency training programs in medicine is implicit in the definition of successful completion of one year. In other words, it is understood that one year is not the end point but that the applicant will continue on his/her postgraduate training to his/her specialty end point. Furthermore, many residency programs in medicine are a "pyramid" process in which not all starting residents will complete the program and it is understood that program directors and faculty will eliminate and redirect residents based on their clinical and academic capabilities. This point of assessment serves to safeguard the public from individuals who do not demonstrate the competencies required for advancement in that area of study.

A second safeguard for the public is the hospital credentialing process. Because the overwhelming majority of physicians hold hospital appointments as part of their practice, the hospital credentialing process for privileges safeguards that a physician will only be allowed to practice in those areas in which he/she received satisfactory training and experience and in which he/she are competent. Many credentialing processes require proctoring for some procedures before they can be done without supervision. Finally, all procedures and admissions in the hospital are reviewed and as a result individual physician's credentials can be altered and practice limited based on outcomes of treatment observed by his/her peers in that respective physician's patients.

Board certification is an additional safeguard and is integrated into the medical scheme. In the current criteria for credentialing in the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accredited hospitals, board certification is a requirement for continued hospital privileges. An applicant for privileges must be board- eligible at the time of application and must attain board certification within five years of admission to the hospital staff. Board certification in medicine requires recertification on a periodic timetable thereafter ensuring continued competence when combined with the peer review and quality assurance programs in place in hospitals.

Dentistry's current pathway to licensure also varies by state however most contain core requirements. Among other things most states require that applicants for initial licensure:

1. Hold a DDS or DMD. degree from an accredited dental school in the United States or Canada,

2. Pass Parts I and II of the American Dental Association Joint Commission on National Board Examinations in Dentistry,
3. Complete a demonstration of critical clinical skills to an independent third party solely representing the public, prescribed by the state and designed to measure minimal level of clinical competency, i.e. the critical skill only has to be successfully demonstrated once.

Currently in most all states, with New York being a notable exception, the demonstration of critical clinical skills to an independent third-party solely representing the public is a requirement, and there are no alternative pathways to licensure.

New York's alternative of completing one postgraduate year in an American Dental Association CODA approved residency falls far short of the medical model described above. First, postgraduate dental residencies were not designed to satisfy licensing requirements. Dental residencies do not contain a unified integrated curriculum prescribed by an independent agency such as the ACGME in medicine, ensuring that there is a uniform core experience and educational process leading to an additional independent examination for licensure. There are many dental residencies, which have only a twelve-month duration, and therefore the assumption of continued training implicit in the medical model does not exist. The evaluation examination in medicine, the USMLE step 3, has been developed by an independent examination board and was in existence prior to the postgraduate training requirement developed many years ago. There is no examination or assessment process present in dentistry, which is based on sound psychometric principles, to evaluate the outcome and the applicant's ability to integrate the clinical knowledge obtained from the postgraduate year to clinical practice, as stipulated in New York's scenario. The only psychometrically evaluated and tested process today, free from potential conflict of interest, is the traditional demonstration of clinical skills to independent third-parties representing the public, conducted by independent state and regional clinical testing agencies.

Because the dental residencies were not developed to meet the requirements of a uniform licensing examination process it is unknown whether the faculty's and institution's outcome assessments and residency evaluations conform with established standards as is required in the first residency year in medicine. In addition, the number of attending physicians are significantly higher in proportion to the number of residents than one typically finds in dental residencies. This assures that the teaching and evaluation process for medical residents is broader-based. Resident clinical and didactic responsibilities are therefore not subject to the parochial interests of only one or two attending staff. Finally the general and specialty residencies which exist in dentistry do not have an integrated first year in which all include a common core curricula and clinical experience. Therefore, the first year residency experiences are quite different across the general and specialty practice area residencies. This is a perfectly acceptable situation if the goal of the postgraduate education is the training in the specified area described in that residency. However, this is an unacceptable situation if one of the goals of the first year of residency training is to obtain licensure.

Finally, the peer review process and credentialing process, which exist in medicine, does not exist for dentistry except for those dentists who also hold hospital privileges. What is commonly referred to as peer review in dentistry, in effect functions as a patient mediation process or complaint bureau. It is not the mandatory peer review process that exists in hospitals in which outcomes and morbidity are evaluated and steps taken when required. If one eliminates the only independent postgraduate peer review clinical evaluation, the demonstration of clinical skills to independent third-parties representing the public without a conflict in interest, no real competency review process will exist in dentistry.

Supervision and Residency Programs

As discussed medical residency programs have been constructed as part of the pathway to licensure for physicians in this country. Multiple point assessments, which require successful demonstration of competency at each step, provide feedback for the student as to how well they are performing. It also serves as a foundation upon which future evaluations and assessments are generated concerning a student's or resident's capabilities. Lastly, it provides an assurance to the public that only qualified individuals are allowed to enter the practice of medicine.

Students in the medical model are required to successfully complete each step and while there is one year of additional training after graduation from medical school, the reality is that there may be several years of additional training, even as many as seven in some areas of medicine.

Supervision in the medical model is oriented toward evaluation of the individual's capabilities and continuance in the program, and those evaluations contain some semblance of recognized conformity.

Dental students in the dental model will not be supervised under the rigors present in the medical model. Indeed, supervision in most dental postgraduate year programs is ill-defined. Even at best, the present dental postgraduate dental programs have chosen from the top of their classes, and if class rank does indeed have any significance to an individual's competency, one might erroneously assume that presently most individuals in dental postgraduate programs represent the more competent if not most competent, individuals in their class. Supervision and program assessment of these individuals will potentially vary significantly from the supervision required if and when all dental students, including the least qualified in the class, are enrolled in post graduate programs. In that instance, the residency supervision assumes a new role, one of public protection as skill sets are monitored and hopefully improved to minimal competency levels. However, present dental residency programs are not constructed to make competency assessments but rather to mentor and guide to advanced study. Without competency oriented guidance the incompetent student progresses to become the incompetent postgraduate resident, and public protection is the ultimate victim in the process. Indeed it is often seen that dental students fulfill residency programs only to demonstrate a lack of competency upon taking or retaking dental clinical licensure examinations administered by independent third-parties solely responsible to the public.

Conclusion

Postgraduate training has become a needed reality for the education of the dental student. It is also potentially a fruitful mechanism by which residents in training can be utilized to provide dental treatment to the under-served. It is not a process through which dental licensure should occur.

The needed postgraduate programs do not exist to accommodate all the dental students graduating from United States Dental Schools. Present financial restraints may result in the loss of existing dental residencies, which only serves to broaden the disparity between the number of residency programs needed, and those that can be funded. Of concern to many is the prospect that corporate entities may attempt to fund these programs in the future as a means to create solvent dental educational programs, thus creating a potential corporate obligation, in addition to present financial indebtedness, for the next generation of dental service providers.

Supervision and construction of dental residencies is not consistent with the medical model, and to raise the dental residency program concept (PGY-1) to some semblance of what exist in the medical model would be a time intensive and expensive proposition, which if it is to be done, should be done prior to further PGY-1 mandate.

Assessments of students for licensure should be conducted by independent third parties whose sole mandate is in protecting the health, safety and welfare of the public. It assures the public trust and the right of dental and dental hygiene students to receive a quality education and the preservation of their hard-earned credentials.

To do otherwise facilitates the undermining of valid and reliable assessments and thus erodes the assurance of the public trust. Our students deserve an excellent education and an opportunity to grow in the profession of dentistry. Our public deserves the assurance that only qualified and competent individuals are allowed to enter the practice of dentistry. The PGY-1 concept is a good idea for further training and preparedness of the profession's dental students prior to entry into the unsupervised provision of dental services; it is a bad idea for licensure.

References:

1) Formicola, A, Progress Toward a Mandatory Post-Graduate Year for Dentistry, Journal of Dental Education, Special Section, Progress Toward a Mandatory Post-Graduate Year for Dentistry, August 1999, Vo. 63/No.8, Pg. 609

2) Barker, Ben, The Post Graduate Year: lineages, Opportunities, Dilemmas, and Public Priorities, Journal of Dental Education, Special Section, Progress Toward a Mandatory Post-Graduate Year for Dentistry, August 1999, Vo. 63/No.8, Pg. 613

3) Formicola, Allan J, A National System to Support a Mandates PGY-1 Year: How to Get There from Here, Journal of Dental Education, Special Section, Progress Toward a Mandatory Post-Graduate Year for Dentistry, August 1999, Vo. 63/No.8, Pg. 640

4) New York Senate Bill A5386, An ACT to amend the education law, in relation to requiring the completion of an accredited dental residency program and eliminating the requirement of a clinical examination for dental licensure, June 5, 2003, Lavalle

5) Maitland, Ronald I., The New York State Postgraduate Fifth Year Dental Residency as a New Licensure Path: Concerns for Public Protection, Journal of Dental Education, March 2003, pg. 308

6) Chambers, Dr. David, Report to the Innovative Testing and Educational Methodologies Meeting, September 2002, transcript of proceedings, pg. 43

7) Ibid

8) Klein, Dr. Steven, Report to the Innovative Testing and Educational Methodologies Meeting, September 2003, transcript of proceedings, pg. 58

9) Maitland, Ronald I., The New York State Postgraduate Fifth Year Dental Residency as a New Licensure Path: Concerns for Public Protection, Journal of Dental Education, March 2003, pg. 309

10) Kinlaw, Delma H. DDS, Access to Dental Care: A Historical Review of Medicaid Eligibility Growth and Dental Productivity Decline, Journal of Dental Education, Sept 2001

11) Jacott, William E., The Future of graduate medical education, An issue that will affect us all, Postgraduate Medicine, Vol. 102/No. 6/ December 1997

12) Kinlaw, Delma H. DDS, Access to Dental Care: A Historical Review of Medicaid Eligibility Growth and Dental Productivity Decline, Journal of Dental Education, Sept 2001

13) Consensus Statement on the Physician Workforce, Physician Oversupply, CSA Bulletin, Sep-Oct 1998

14) Berstein, Joseph, Physician Surplus and Its Remedies, Orthopaedic Journal, Vol. 12 Spring 1999, pages 90,91

15) Formicola, A, Progress Toward a Mandatory Post-Graduate Year for Dentistry, Journal of Dental Education, Special Section, Progress Toward a Mandatory Post-Graduate Year for Dentistry, August 1999, Vo. 63/No.8, Pg. 609

16) Barker, Ben, The Post Graduate Year: lineages, Opportunities, Dilemmas, and Public Priorities, Journal of Dental Education, Special Section, Progress Toward a Mandatory Post-Graduate Year for Dentistry, August 1999, Vo. 63/No.8, Pg. 613

17) ADA, Division of Education, Total US School Graduates by Ethnic/Race and Gender, 2002

18) Accredited Advanced Educations Programs, Council on Dental Education and Licensure, revised 08/05/2003

19) American Dental Association, Survey Center, 2001/2002 Survey of Advanced Dental Education

20) Setness, Peter A., The doctor glut revisited, Postgraduate Medicine, Vol. 109/No. 2/ February 2001

21) Jacott, William E., The future of graduate medical education, An issue that will affect all of us, PostGraduate Education, Vol. 102/No.6, December 1997

22) Setness, Peter A., The doctor glut revisited, Postgraduate Medicine, Vol. 109/No. 2/ February 2001

23) Berstein, Joseph, Physician Surplus and Its Remedies, Orthopaedic Journal, Vol. 12 Spring 1999, page 89

24) Report of the AADE survey on "Impact of CMS Proposed Rule"

25) Furlong, Arlene, Residencies in Peril, ADA fights CMS proposal to cut dental funding, ADA News, August 4, 2003, Vol. 34, No.14

26) Common Program Requirements, Accreditation Council for Graduate Medical Education, 2002

27) United States Medical Licensing Examination Web Site