



National Commission on Orthotic and Prosthetic Education

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# **Report of the National Commission on Orthotic and Prosthetic Education Strategic Planning Meeting**

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An Investigation for Moving Primary Orthotic and  
Prosthetic Education to an Entry-Level Master's Program

February 11, 2006

Scottsdale, Arizona



**Strategic Planning Meeting Participants  
February 11, 2006  
Scottsdale, Arizona**



**Reported by the National Commission on Orthotic and Prosthetic Education**

## PREFACE

In April 2005, the National Commission on Orthotic and Prosthetic Education (NCOPE) and the American Academy of Orthotists and Prosthetists (AAOP) convened an Education Summit to examine the issue of entry-level degree requirements and educational philosophy. More than 30 content (education) experts representing different orthotic and prosthetic (O&P) communities of interest came together to discuss the subject and reach consensus.

Broad consensus was reached in the form of eight recommendations. Salient among these was the recommendation to move O&P education toward an entry-level master's program. This was deemed necessary for the delivery of quality patient care due to the dynamic base of knowledge and rapidly emerging processes and technologies in the O&P field. As a result of this and other recommendations, NCOPE was asked to evaluate these recommendations in order to determine an appropriate course of action.

The NCOPE Strategic Planning Meeting held in February 2006 was the logical next step in determining the appropriate course of action to transition primary O&P education from an entry-level bachelor's to an entry-level master's degree. The focus of the strategic planning meeting was to identify, categorize and harness the O&P environment for effective transition to the entry-level master's degree.

The conclusions from the strategic planning meeting should provide NCOPE with an overall blueprint that establishes an appropriate and informative pathway toward an entry-level master's program. This pathway is a designated timeline that should include a series of focused meetings to determine appropriate action and implementation, ultimately culminating in a transition to an entry-level master's program.

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## Overview of Findings/Recommendations

1. Development of master's-level standards should be one of NCOPE's top priorities. There is a sense of urgency, as programs looking to move toward entry-level master's degrees will need a master's curriculum as part of any proposals put forth to respective universities.
2. Should the research component of the master's curriculum be incorporated into the residency, it will be necessary to train resident directors to mentor research properly.
3. Some level of preparation toward research should be required for students.
4. There will be a need for more qualified faculty at both existing and future O&P programs.
5. CAAHEP standards (practitioner-level) should reflect the master's curriculum as well as identify qualifications for program personnel.
6. Effort should be made to establish a curriculum package/model that could be utilized by programs as a "how-to" guide model for implementation.
7. Programs should be surveyed to determine the following:
  - a. The estimated number of faculty/personnel needed for the program.
  - b. A reasonable timeline for implementation.
  - c. The needs of the institution/program to attain qualified personnel.
8. NCOPE should develop a white paper that program directors could provide to respective university officials with a rationale for the entry-level master's.
9. NCOPE should re-evaluate the current residency model as it relates to a transition toward entry-level master's education and develop a plan to address identified weaknesses or areas in need of revision.
10. Communities of interest should be made aware of ongoing changes regarding transition to master's-level training for O&P. A strategy calls for development and implementation of a marketing plan to keep communities of interest informed about the transition and eventual move to an entry-level master's degree.
11. NCOPE should meet with program leaders to outline strategy for implementation of entry-level master's education.
12. Identify resources for funding to facilitate transition for faculty and programs to master's-level education.

## DESCRIPTION OF THE STRATEGIC PLANNING MEETING FORMAT

The Strategic Planning Meeting was designed to help participants identify, categorize and harness the O&P environment for effective transition to the entry-level master's degree. Participants were welcomed by NCOPE Chair Bryan Malas, MHPE, CO, and asked to identify themselves and the group they represented. The facilitator, Harry Douglas, Ph.D., was introduced to the meeting participants and gave a brief description of the meeting format and expectations (*See Appendix III*).

To initiate the program, Dr. Douglas reviewed the findings of the pre-meeting questionnaire with the participants and concluded the initial session with a review of his personal responses to the questionnaire.

Following this brief review, perspectives were given by representatives from the physical therapy (PT) and physician assistant (PA) professions. Denise Chapman-Winn, Ph.D., PT, spoke from the PT perspective with a lecture titled, "Decision for Change." This presentation provided participants with a historical perspective of the PT's transition from an entry-level bachelor's degree to an entry-level master's, and the current drive toward doctorate-level training.

Peggy Valentine, Ed.D., PA, followed Dr. Chapman-Winn's presentation with a perspective from the PA profession: "Highlights of Graduate PA Education." This presentation provided participants with an overview of the PA profession and identified issues related to its transition from undergraduate to graduate-level education. This session was concluded with a question-and-answer period for both Dr. Chapman-Winn and Dr. Valentine.

### **Breakout Session I**

At this point, the meeting format shifted with a designated first group breakout session using a model of focused environment to help identify, categorize and harness the O&P environment for effective transition to the entry-level master's degree. This relevant environment included institutions, relationships, organizations, associations, groups, people and concepts that directly or indirectly influence the O&P education agenda. Participants were subdivided into four pre-assigned groups:

**Enablers** – The variety of institutions, relationships, associations, groups, organizations and people that have the resources, capacities, expertise and wherewithal to facilitate and support the development of the entry-level master's degree.

**Users** – The wide spectrum of organizations and people who could benefit personally or by encouraging participation of others in some form of an entry-level master's degree.

**Supporters** - Institutions, relationships, associations, groups, organizations, people, issues and concerns within the relevant environment that have expressed or implied values, norms, beliefs and customs that support the entry-level master's degree program for O&P. The supporters would have an abiding interest in the well-being of the profession for professional and personal reasons.

**Adversaries** – Institutions, relationships, associations, groups, organizations, people, issues and concerns that have expressed or implied values, norms, beliefs and customs that would not support the entry-level master's degree for O&P.

Each group was put to task to identify and list all institutions, relationships, associations, groups, organizations, governmental entities and foundations that could reasonably be considered an enabler, user, supporter or adversary to a move toward entry-level master's education for O&P. Once identified, these lists were organized into the following two clusters:

**Strategic Cluster** – Impact on the general field of O&P.

**Tactical/Operational Cluster** – Impact on the entities offering the program, such as schools, hospitals and residency sites.

After completing the tasks, all participants reconvened, and a representative from each group was identified and asked to present his or her group's findings. This was then opened up for a question-and-answer period for all participants. Included in the question-and-answer phase was the addition of a "devil's advocate panel." The role of this group was to offer a counter argument to each group's findings and have them respond in turn. The purpose for this panel was to anticipate future roadblocks that may arise as the O&P profession transitions to an entry-level master's degree.

The session concluded with a brief summation of the morning's events by Dr. Douglas regarding: the findings of each group; the results of the question-and-answer phase, including the devil's advocate panel; and a statement to all groups indicating a need for them to reconvene for the afternoon session in order to refine their original findings.

## **Breakout Session II**

The second group breakout session was designed as an opportunity for each group to revisit its findings based on the Q&A session and feedback from the devil's advocate panel and to complete the following:

- 1) Develop an action agenda designed to engender support from each environmental element and facilitate the transition to an entry-level master's degree.
- 2) Develop for each element within the strategic and tactical/operational clusters:
  - Detailed programs/strategies for operationalizing and/or supporting the master's degree.
  - Timelines and/or pertinent charts for completing and/or implementing the programs/strategies.
  - A listing of the organization(s) and individual(s) responsible for ensuring results regarding 1 and 2 above.

When the four groups completed these tasks, all participants reconvened, and a representative from each group reported their respective findings to the group at large. At the conclusion of each group report, discussion ensued among participants. Findings can be found in the next section.

The strategic planning meeting concluded with remarks from the strategic planning meeting facilitator (Douglas) and the chair of NCOPE (Malas). This included a summation of the day's findings and a description of the next steps involved in the overall process for transitioning to an entry-level master's program.

## Findings

The following represents each group's findings and what was reported as a result of the second breakout session. Included after each group report are the participant discussions that ensued at the conclusion of each group report.

### Enablers

#### Target

The target groups identified are: (1) existing programs and program directors; (2) residency sites; (3) scope of practice; and (4) environmental issues.

#### Existing Programs and Program Directors

Existing programs and program directors will need to know the following:

- 1) Proposed master's curriculum.
- 2) The feasibility of implementing the proposed curriculum in respective institutions
- 3) The process to implement the proposed curriculum.
- 4) The level(s) of approval to be attained to offer master's-level education
  - a. Within the institution
  - b. Outside the institution
  - c. Both
- 5) Assurance that the program can be offered at the Institutions.

#### Resident Sites

Residency sites were also identified as a target group, with a concern that if a research component of curriculum is to be completed at the resident site, resident directors would need adequate training in order to mentor research properly. While this concern is a possibility, the group is also aware that academic institutional requirements may dictate the prospect of university-based research being completed at the residency site.

#### Scope of Practice

The profession's scope of practice will need to be reviewed to assure it is up to date, including the practice analysis with the movement to the master's level.

### Environmental issues

There was consensus among this group that some level of preparation toward a directed study or research would be required for students once the master's level is in place. Additionally, there would be a need for more qualified faculty at both existing and future O&P programs.

### Conclusions

Curriculum content for the master's level *must* be clearly defined. This clarity will assist program directors as they determine how to incorporate and implement the curriculum into an entry-level master's program. Accordingly, the completion of a master's curriculum should be viewed with a sense of *urgency*.

Once completion of the master's curriculum has occurred, it should be reflected in the CAAHEP practitioner-level O&P *standards*.<sup>1</sup> Additionally, the standards should identify the qualifications for program personnel, such as faculty and staff. These standards should also be re-reviewed in 2010. In final, an effort should be made to establish a curriculum package/model that could be utilized by programs as a "how-to" guide or model for implementation.

### Timetable

- Curriculum Content: Although a proposed timetable for development of a master's curriculum guide is listed below, there is evidence<sup>2</sup> to suggest that the curriculum guide will be completed inside of the projected timeline.
  - Need to propose master's-level curriculum content and present to the community of interest by December 2007.
  - Finalize curriculum content by December 2008.
- Personnel Qualifications: Implementation of an entry-level master's program will require some existing faculty and future faculty to pursue advanced degrees to satisfy CAAHEP and/or university requirements.

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<sup>1</sup>With the move toward outcome-based standards, CAAHEP has recommended that standards reference a curriculum guide that can provide programs with greater detail. Therefore, a recommendation to change the standards based on the curricular change will need to occur within the curriculum guide.

<sup>2</sup>At the time of this report, the American Academy of Orthotists and Prosthetists (AAOP) has agreed to sponsor four curriculum development meetings with monies obtained through a grant from the U.S. Department of Education.

This will likely require a much longer transition and timetable of approximately seven years. Whether grandfathering is possible, it is assumed that faculty will need the minimum of a master's degree. To determine this timetable accurately, consideration should be made to survey the existing programs to determine the following:

- Estimated number of faculty/personnel needed
- Reasonable timeline
- Needs of institution/program to attain qualified personnel

2006	2007	2008	2009	2010
Finalize curriculum guide for bachelor's programs	Master's curriculum guides/standards developed	Present to profession	Feedback	Propose implementation
	Proposed 1st draft	Finalize standards and guidelines		

#### Large Group Discussion (Enablers)

- Schools may have an option of overseeing the residency program if it is integrated. NCOPE will still have administrative oversight of registration with an integrated model.
- NCOPE needs to look at the requirements, such as research, and upgrade accordingly.
- Who will teach the content? – program personnel qualifications.
- Timetable for content should be shorter because most O&P education programs are close to development.
- Bachelor's-level curriculum guide development and completion needs to occur prior to a curriculum guide for master's-level education.

#### **Users**

Three target groups or "users" have been identified: (1) universities, (2) residencies and (3) a collective group of communities of interest. For these target groups, specific strategies and designated timelines have been identified and are listed here. In all cases, NCOPE has been listed as the primary organization to implement these strategies.

## Universities

Fundamental to the transition toward an entry-level master's program is the university approval process for programmatic change. Because this process may ultimately decide the future training level for O&P programs, it is essential that program directors are equipped to present a plausible rationale for a master's-level program. Therefore, the strategy is a recommendation to develop a white paper that program directors could provide to university officials with a rationale for the entry-level master's. This rationale should, at a minimum, include the following:

- Rationale for change
  - Education Summit Report
- Change standards depth and breadth
- Plan for growth and sustainability (Budget)
- Impact on community
- Faculty (teaching infrastructure)
- Focus on qualified faculty (rather than specify degree)

The timeline for completion of this white paper is approximately six months, with NCOPE identified as the responsible organization.

## Residency

There should be a strategy to re-evaluate the current residency model as it relates to a transition toward entry-level master's education. This has not occurred on such a broad level since the inception of the residency. NCOPE should develop a plan to address weaknesses that are identified during the re-evaluation.<sup>3</sup>

## Communities of Interest

Collectively, there are communities of interest that should be made aware of on-going changes regarding this educational transition to master's-level training for O&P. A strategy calls for development and implementation of a marketing plan targeted at communities of interest with a specific intent to keep them informed. Brochures and Web site updates represent two ways in which NCOPE could provide routine updates regarding the progress toward an entry-level master's program. Because there are multiple communities of interest, NCOPE may want

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<sup>3</sup>On February 28, 2006, NCOPE initiated this re-evaluation with members from the Commission reviewing a number of processes related to residency. These updated processes are to be brought forward for the entire Commission to review for consideration and adoption in June 2006.

to consider using several brochures to target specific audiences. Communities of interest were identified and are as follows:

- Patient (consumer)
- Third-party payers
- ABC, AOPA, Academy
- Allied health professionals who pursue careers in O&P
- Engineers
- Ph.D.
- Outside health organizations, such as UCP and MDA
- Residency sites

The recommended timeline for development and implementation of this project is nine months and should be spearheaded by NCOPE.

### Large Group Discussion (Users)

- Should consider how outlining the standards might change in order to rationalize moving toward the master's degree (credit hours, moving to an academic degree that was appropriate anyway – change the depth and breadth of the curriculum).
  - There are differences between baccalaureate and post baccalaureate regarding the move toward a master's program.
  - Anticipate providing two different rationales for these two levels of programs.
- CAAHEP – sponsorship, resources, classroom size – mechanism of delivery for the enhanced content.
- Minimum standard right now – does this mean that we are raising the standard for EVERYONE now with the minimum of a master's degree?
- NCOPE needs information to take to the deans and administration for rationale to move to the master's level. Will NCOPE be the champion of this move?
- Top-down level of support from the college administration.
- Budget will change with the master's – funding for a master's is greater than that for a bachelor's degree program.
- Support for the faculty (increase the level of education).

### **Supporters**

A host of groups have been identified as “supporters” and are those groups that have some degree of vested interest in the professional development of O&P. Although groups have been identified and are listed here, it does not specify each supporter's level of interest regarding professional development of O&P. Schools remain the primary supporters, as they appear to have the most vested interest in professional development of O&P at the education level. In turn, funding to develop and sustain O&P programs becomes an important priority. While some funding sources have been listed, there remains the need for further investigation to determine which funding sources are actually plausible for

seeking monies. In this regard, it is important to look at similar professions that have been successful in securing funding for educational programs. Following is a list of current and/or future supporters of O&P education.

*Italics* = Strategic Cluster

**Bold** = Tactical/Operational cluster

- Associations and organizations
  - *Consumer Group examples:*
    - ACA
    - United Cerebral Palsy
    - PV of America
    - Disabled Veterans of America
  - *O&P Organization examples:*
    - ABC, AAOP, NAAOP
  - *Allied Health and Medical Group examples:*
    - Nursing
    - PT
    - OT
    - PM&R
  - *Institution examples:*
    - Universities (potential programs)
    - Current O&P programs
    - Third-party payers
    - *Governmental examples:*
      - NIH
      - U.S. Department of Education
      - HHS (whatever it is called now)
      - CMS
      - Student Loan Programs
  - Groups (Individuals) examples:
    - ***Practitioners***
    - ***Patients***
    - ***Employers***
    - *Students*
      - *Current*
      - *Future*
    - *Residency Sites*

## Adversaries

The overall message regarding adversary groups that we need to inform them routinely of ongoing changes in a clear and concise way. Two groups have been identified, along with specific strategies to facilitate the transition to an entry-level master's program. The groups are: (1) O&P leadership alliance and (2) O&P schools. Additionally, funding sources should be identified to facilitate the transition toward entry-level master's education.

- **Start with the leadership organizations with the same message to trickle down to individuals**
  - Create a panel (alliance of O&P leadership) to disseminate a single, consistent, concise message to each of the various constituencies.
    - Various forms of communications (multimedia)
    - Panel presentations
- **Timeline: Immediately**
  - NCOPE
    - Will need to craft the message
    - Begin to identify panel members
  - Develop collateral materials
  - Next available meeting (two national meetings)
- **O&P Schools**
  - Summit meeting with the leaders of the schools and NCOPE leadership to outline a strategy for implementation of master's-level training at the current institutions of higher learning.
- **Timeline: 6-12 months to meet with schools**
- **Funding Sources**
  - Identify resources for funding to transition faculty and programs to the master's level.
    - NCOPE
      - Clearinghouse of information
      - Grant funding to increase NCOPE's staff to facilitate this transition
  - Individual institutions (learning from others' experiences)
    - Academy
    - Individuals
- **Timeline: immediately**
  - Locating investigator and/or grant writer

### Large Group Discussion (Advisories)

- Bring a consensus group to one area and market the master's degree concept to them (i.e. feeder school program directors, etc.).
- G4 – ABC, AAOP, NAAOP, AOPA. We need to approach these groups for funding of these initiatives. (Listed in the "Adversaries" chart)

- Have to be careful on how you sell the master's program and upgrade of educational programs – need to be careful of the timetables, because if we promote the upgrade without clear rationale, then it could hurt the profession.
- Once the word is out to all sister organizations, NCOPE needs to solicit “buy-in.”
- What will be the impact to patient outcomes with the degree upgrade?
- It may take a fair amount of time and effort to show the cost savings of patient care if we upgrade to master's education. We can't say it unless we can back up the statement.
- Saving third-party payers money from master's-educated practitioners is not the issue at all – it is instead about providing more effective patient care with master's degree educated professionals. This will allow for provision of more outcomes-based research on patient care.
- Major issues related to the curriculum guide and upgrade of the residency.
- NCOPE has a lot of work ahead to tackle all of these issues.
- NCOPE will need to prioritize this information and then target items that need immediate attention.
- Resources – there is a sense of urgency. If Robin, and NCOPE can't do this, then we will need to find others to assist in this process.

## **Concluding Remarks**

Dr. Douglas started by asking participants if the mission of this meeting had been accomplished. He indicated that the group is on the right track to achieving this mission, but continued work is needed. Dr. Douglas reviewed the findings of the day's proceedings, highlighting major themes from each group:

- Supporters groups were identified (leadership, programs) with emphasis placed on funding strategies to assist these groups.
- Enablers group identified curriculum guide development and approval of the master's degree as essential. A recurring theme regarding the residency and how to integrate research needs to be investigated.
- Users group's major theme focused on marketing. Centers of excellence could be a theme for education programs and needs to be a result of a white paper. While identifying the depth and breadth of the curriculum is important, it does not change the scope of practice at this time. If a master's program is to start, the academic rigor must be clearly distinguishable from the current bachelor's-level curriculum.
- Adversary group has identified public relations as a key issue. In other words, how do we get constituents on the side of this transition? Additionally, how soon do we want to start a marketing campaign?
- There is an immediate need to evaluate the residency program.

Dr. Douglas concluded by saying this meeting is going to be a defining moment for where the profession will go. The trick now is for NCOPE to grab the ball and

run with this plan. We have four years to go and a lot of work to be done within the time parameters.

The concluding remarks from the chair of NCOPE described the most immediate issues confronting NCOPE to make this successful transition toward an entry-level master's program. First among these is to have a master's curriculum guide developed and completed in the immediate future. Essential to this process is to convene the educators to develop the curriculum guide. A hard look at the residency and how it will function with regard to an entry-level master's program will also need to be one of the immediate steps toward this transition. Throughout this process NCOPE will need to maintain dialogue with communities of interest such as AOPA, AAOP, ABC and NAAOP. All participants were thanked for their time, effort and frank and honest input.

## Appendix I

### STRATEGIC PLANNING COMMITTEE

The NCOPE planning committee began working on the Strategic Planning Meeting in November 2005. The planning committee convened via conference call over a period of approximately three months.

The goals for the committee were as follows:

1. Identify meeting participants
2. Select location, date and meeting site
3. Develop agenda and meeting format
4. Produce a final report from the strategic planning meeting

### PLANNING COMMITTEE MEMBERS

William J. Barringer, M.S., CO, FAAOP, *chairman of the planning committee*

Bryan S. Malas, MHPE, CO, *NCOPE chairman*

Harry Douglas, Ph.D., *meeting facilitator*

Robin C. Seabrook, *executive director, NCOPE*

## Appendix II

### STRATEGIC PLANNING MEETING PARTICIPANTS

William J. Barringer, M.S., CO, FAAOP – *past chair, NCOPE*

William D. Beiswenger, CPO, FAAOP - *NCOPE*

Gary M. Berke, M.S., CP, FAAOP - *AAOP*

Michael D. Brncick, M.Ed., CPO – *past chair, NCOPE*

Catherine A. Carter - *executive director, ABC*

Denise Chapman-Winn, Ph.D., PT - *NCOPE*

Alicia J. Davis, MPA, CPO, FAAOP - *NCOPE*

Jonathan D. Day, CPO - *NCOPE*

Harry Douglas, DPA – *meeting facilitator*

Stephen B. Fletcher, CPO - *ABC*

Gene Gary-Williams, Ph.D., PT - *At large*

Christopher F. Hovorka, M.S., CPO - *NCOPE*

Robert S. Lin, CPO, FAAOP – *past chair - NCOPE*

Bryan S. Malas, MHPE, CO - *NCOPE*

Dominique Mungo - *staff member, NCOPE*

Michael H. Oros, CPO - *NCOPE*

Marj Reif, M.Ed., PA - *NCOPE*

John Reynolds, CPO, FAAOP – *director, AOPA*

Peter Rosenstein - *executive director, AAOP*

Ted Snell, CPO – *president-elect, AOPA*

C. Michael Schuch, CPO, FAAOP - *NCOPE*

Donald G. Shurr, CPO, PT – *past chair, NCOPE*

Peggy Valentine, Ed.D., PA – *At large*

Steven R. Whiteside, CO, FAAOP - *NCOPE*

Ann Yamane, CO - *NCOPE*

## Appendix III

### NCOPE Strategic Session on Implementing Entry-level Master's 8:30 pm – 4:30 pm

Introductions and opening comments (10 minutes)	B. Malas H. Douglas
Survey Feedback (15 minutes)	H. Douglas
PT, PA Transition Models (20 minutes)	Denise Chapman-Winn (PT) Peggy Valentine (PA)
Focusing the Environment (45 minutes)	Breakout Session
Group 1 – Supporters Group 2 – Enablers Group 3 – Users Group 4 - Adversaries	
<i>Break</i>	
Report Back from Each Group Devil's Advocate Panel (20 minutes per group plus 15 minutes per group with devil's advocate panel)	Representative from Groups
<i>Lunch</i>	
Second Iteration for Group Discussion (45 to 60 minutes)	Breakout Session
Report Back from Each Group (30 – 45 minutes)	Representative from Groups
<i>Break</i>	
Summary of Days Conclusions Define Future Directions, Next steps	H. Douglas/B. Malas

## Appendix IV

### N C O P E P R E - C O N F E R E N C E Q U E S T I O N N A I R E

1. Have you the read the Summit report? Yes    No  
If no, we suggest you read it prior to the conference. You can access the report at [http://ncope.org/summit/pdf/EDSummit\\_final\\_report.pdf](http://ncope.org/summit/pdf/EDSummit_final_report.pdf)
  
2. What do you consider to be the most significant reason(s) to move to the master's level for entry-level education? Briefly explain.
  
3. What information do you consider most essential for transitioning to the master's level?
  
4. What is your level of optimism in moving entry-level education to the master's level? Briefly explain.
  
5. What do you consider to be the most important resources required to successfully implement a master's level program?
  
6. Have you had any of the following experiences with master's level education; a) teaching, b) curriculum development/planning, c) thesis and research supervision, d) clinical coordination/supervision, e) other-please describe.
  
7. What facilitative role should NCOPE assume (play) to assist institutions to conceptualize, plan and/or implement a master's degree program? Please be specific.

Additional comments if needed:

***Return no later than January 26, 2006 to [rseabrook@ncope.org](mailto:rseabrook@ncope.org) or fax to Robin Seabrook at 703-836-0838***

## Appendix V

### Pre-Conference Questionnaire Results

Results:

As of 1/30/06

Number returned = 17 out of 24 or 71%

1. Have you the read the Summit report? Yes\_\_17\_\_ No\_\_\_\_\_   
If no, we suggest you read it prior to the conference. You can access the report at [http://ncope.org/summit/pdf/EDSummit\\_final\\_report.pdf](http://ncope.org/summit/pdf/EDSummit_final_report.pdf)
  
2. What do you consider to be the most significant reason(s) to move to the master's level for entry-level education?
  - Advancing scope of practice.
  - Increasing and changing body of knowledge.
  - Elevation of the profession and professional understanding to a level commensurate with the type of work we do.
  - Improve the potential for research and evidence based practice.
  - Secure place in changing health care environment.
  - Outcomes and evidence based practice.
  - Current education already exceeds bachelor's level.
  - Need to stay competitive, keep pace with other health professions.
  - Better prepare future practitioners to treat comprehensive diseases.
  - Provide cohort of future academics for the teachers of the future.
  - Develop better and more efficient answers to patient problems.
  - To give practitioner enhanced ability to quantify/validate clinical outcomes.
  - Generate its own scientific literature.
  - Assess the benefits of its contribution to society by quantitative outcome measures.
  - Body of knowledge has expanded.
  - For new practitioners increase ability to read and evaluate research to make better clinical decisions.
  - Responsibility to ensure prescription is appropriate for patient, this requires better understanding of pathologies and clinical expression, which requires more comprehensive "clinical" education with a "scientific" foundation.
  - Ability to develop in U.S. a uniform educational standard for the practitioner level, hard to find equivalency in the current programs with such diverse content and lengths of programs.
  
3. What information do you consider most essential for transitioning to the master's level?
  - Determination of the requirements for a clinical/professional master's level education.
  - Determination of the requirements for an academic master's degree.
  - Development of the "curriculum guide" for in-depth, complete standards including guidance on essential information required for both a clinical/professional master's and an academic master's.
  - Potential applicant pool and their interest (2 identified).
  - Ability of current non-master's O&P education programs able to transition to a master's (not just willing).
  - Cost and realistic timeline.
  - Marketing and packaging – we have close to equivalent of a master's at this time with education and requirements of residency.

- Making sure that the existing members of profession are not compromised is important.
  - Doing a lot of work before it is announced, e.g., surveys and focus groups.
  - Support of the certification body requiring a master's-level practitioner.
  - Funding for university programs.
  - Level of support each school has from their institution for this transition.
  - What current programs and institutions will need to make this transition as smooth and seamless as possible.
  - Appropriately credentialed and knowledgeable faculty to teach basic and advance concepts of O&P design, biomechanics, kinesiology, research methodology and applying research as a teaching tool.
  - Basic science through outcomes.
  - Beef it up and broaden our base.
  - Information concerning:
    - i. Trends in higher education
    - ii. Where other allied health professionals are going
    - iii. Core competencies
  - Scope of practice.
  - Scope of practice analysis and current education standards.
  - Identifying basic science of the profession today and developing the science for the future.
  - Mechanics of how to move ahead and able to provide information on process so schools can implement.
  - Clear picture of how body of knowledge is different.
  - Identification and buy-in from key stakeholders (i.e., dean).
  - Identifiable strategies to move forward.
  - How will the residency programs run?
  - Will current members of profession (employers) actively embrace the new graduates with appropriate compensation and responsibilities?
4. What is your level of optimism in moving entry-level education to the master's level? Briefly explain.
- Doable in keeping with other professions in health sciences.
  - Very optimistic, I think the field is going to continue to mature and is ready for this next step up in professionalism.
  - Very high (4 stated).
  - Positive about the change. I am concerned there are two very different certification requirements that are considered equal and will the certification body require the master's degree? Can NCOPE mandate a master's degree without the support of the certification body?
  - This is going to happen. Question is how soon and how well coordinated the transition will occur.
  - Good, as I have an enthusiastic and positive outlook for it.
  - It has never been higher. The time is right to move. There has been an incredible amount of new information that is not currently being taught for many reasons. Time to stop the excuses about manpower needs and begin to focus on quality issues.
  - Very high – some programs moving in direction already. Has been discussed since the early '70s.
  - High – consensus conference went very well!!!
  - Optimistic – number of factors.

- i. Growing public awareness of O&P profession (unfortunately war is the catalyst, need to be able to take advantage of funding opportunities and exposure to the profession it has provided).
  - ii. People are living longer and require many forms of rehabilitative services – this should continue demand for orthotists and prosthetists for years to come.
  - iii. Consumers are more educated and knowledgeable about disease, treatment options and reimbursement. Hopefully will create demand for third party insurance companies to cover O&P services.
  - iv. Sister organizations seem to be working toward a consolidation of sorts. Awareness on Capitol Hill is increasing. This is essential to our growth as a profession. Perception of our field in Washington is one of “little shops” that we can go back and “tinker with legs and braces to make them fit”
  - v. AAOP has moved in right direction with part of Project Quantum Leap by focusing on public awareness and entry-level recruitment in high schools
  - Optimism is about “fair.” I think it is part of the answer of how to advance the profession, but I’m not sure the profession will see it that way. We need buy-in.
  - Fair to good. I believe this is a natural evolution for the field. I am unsure if the field is ready for the transition.
  - It takes an extremely long time to get this type of thing done. I do not see any major changes in O&P prior to accomplishing a master’s program. It is just too bad that it will take so long.
  - Moderately optimistic regarding the move.
    - i. Feel strongly it is of benefit to our profession and necessary to move in direction.
    - ii. Fully support the move, but have reservations that the overall transition will not be done with a logical and realistic plan, but rather by putting the cart before the horse.
    - iii. Our situation this move will be very time consuming and will need to be undertaken in addition to our current responsibilities.
    - iv. Situation at our university makes it imperative that the faculty have an understanding of the academic policies and procedures of the university in getting this new degree through appropriate levels of approval – not an easy process.
    - v. Long felt it was time to move toward master’s level, but our limiting factor is the lack of faculty with advanced degrees.
    - vi. Total number of years spent in obtaining degree, completing the master’s P&O program and completing the residencies in both disciplines is daunting – have reservations about how this will impact recruitment.
    - vii. Overall transition will impact the number of graduates in the early years due to the increase in time spent in the program.
5. What do you consider to be the most important resources required to successfully implement a master’s level program?
- Qualified faculty with experience in curriculum development.
  - Adequate faculty to instruct the additional coursework.
  - Faculty, faculty development and literature and high standards.
  - Support from certification body.
  - Funding for programs to implement the change.
  - Current instructors, institutions and the need for additional instructor research coordinators, etc.
  - Administrative support – president, provost, dean, chair, faculty of institutions.
  - Faculty with appropriate credentials and buy-in of the concept.

- Funding for facilities, faculty, staff salaries – not one-time support but a pool of hard funding for long term employment, etc.
  - Funding for student support through scholarships, grants, assistantships.
  - Support from the profession – local clinicians engaged in teaching student recruitment, AAOP and others for funding endowed chair positions.
  - Faculty, faculty, faculty. We need to get more fast.
  - Communication – between NCOPE – programs – the profession.
  - Academic justification.
  - University backing and industry understanding and buy-in.
  - An administration that supports the program both economically and philosophically.
  - A profession that requires a higher education level and is prepared to “pay” for it.
  - An environment that promotes learning, research and is able to provide students with the tools to develop independent study.
  - A student volume to support the program.
  - Dean that sees and supports the need to move forward with master’s-level training.
  - If you mean to implement master’s level as entry-level requirement, resources needed are:
    - i. More faculty
    - ii. Curriculum re-design
    - iii. Credentialing body buy-in
    - iv. Residency program re-design
    - v. Stakeholder buy-in
  - Sister organizations heartily support this endeavor.
  - Schools being given the resources (funding, education grants for current faculty to upgrade their education, etc.).
  - Long distance education and accessible clinical exposure. Comprehensive clinical exposure. The furniture just needs to be rearranged.
  - Faculty most important resource for our program. We need faculty with education and training in order to be able to offer the master’s level program. Our difficulty will be finding the funds and time to support the faculty in their education pursuits and cover their current teaching responsibilities.
  - Funds for scholarships and to assist recruitment.
6. Have you had any of the following experiences with master’s level education; a)teaching, b) curriculum development/planning, c) thesis and research supervision, d) clinical coordination/supervision, e) other-please describe?
- Taught graduate students enrolled in master of public health program.
  - Served on thesis committees for graduate students.
  - No (6 total).
  - Other than achieving a master’s degree myself, the only other experience has been clinical supervision of master’s students.
  - Yes
    - i. Teaching
    - ii. Curriculum – supervised initiation, enhancement and notification of the curriculum and in facilities design and construction
    - iii. Thesis and research supervision – currently supervise research for 5 graduate students
    - iv. Clinical coordination/supervision – yes, this is done for all courses/teach and supervise other faculty as well
    - v. Marketing, grant writing, research, host conferences, etc.
  - A. Currently adjunct faculty B. for past 25 years C. Several over the years. D. Residency supervisor since it started. E. Failed to start 1<sup>st</sup> master’s program at St. Ambrose.

- Teaching and going through master's program.
  - A. Yes B. Yes C. Yes D. Yes E. participation in research with other health professionals.
  - In process of developing a master's curriculum at Northwestern. My experience is limited however we have a number of faculty who have done research supervision.
  - Teaching.
  - I have a master's degree, so I am familiar with a student perspective of the academic and research portions of an academic degree.
  - Curriculum development/planning, teaching at EMU, clinical coordination and supervision.
  - Served on thesis committee for a PT whose project involved a single subject case study with orthoses.
7. What facilitative role should NCOPE assume (play) to assist institutions to conceptualize, plan and/or implement a master's degree program? Please be specific.
- NCOPE may want to identify the standards for graduate education to include key core areas for the program of study. It seems that there should be a research element where students and faculty are contributors to the growing body of knowledge in the field.
  - NCOPE needs to work with each of the O&P schools to determine how the residency portion of the training will fit/work with that particular program.
    - i. My thought is there may ultimately be 2 or 3 versions of a residency to complement the variety of masters programs offered. Once the details of each master's program design are constructed, NCOPE may need to draft a "flexible" residency that focus on competency in certain areas that ultimately lead to: professional master's with an emphasis in (pediatrics, practice management, diabetic care, general) Master of Science.
  - NCOPE should be involved with setting standards and evaluating programs to assure they are meeting the accreditation. The standards need to be in place as soon as the programs begin their development so they can have direction from the start. I think this will help the programs get a handle of potential faculty and expenses of the future. NCOPE should work very closely with the education programs to achieve this goal.
  - Ensure that the residency programs perform to the expectations of the master's candidates. Work with the certification board to transition the new standards
  - NCOPE should develop the standards for entry-level master's program and set the timeline/deadline for the transition to be completed. The timeline should permit the current institutions to transition without compromising compliance with the standards.
  - Development of a master's degree template for other schools to use as a guideline in their transition/development. Handbook with suggestions/guidelines for funding, marketing, student recruitment, faculty credentialing and development, curriculum development, facility development, plans for future evolution, plans for visioning, etc.
  - To actively work with program directors in providing support through formulation of grant proposals for training and education, i.e., NIH training grants for programs closely linked to those that conduct research and collaborate with Ph.D. programs.
  - Role and effort played out by NCOPE so far have been appreciated. There has been a positive and constructive leadership role NCOPE has played so far and it should continue.
  - Our role will no doubt be broad. There will be institutions which will require little or no help. There will be other who will need to be led, pulled along or drug. I hope we

can get a date with which all can comply. We don't want to make the same mistakes as the nurses. We are small enough, this should succeed.

- Create timeline.
- Create white paper to justify this more.
- Communicate and work with each program.
- Discuss and develop scope to practice and core competencies to go with this expansion.
- Accreditation issues.
- Research the different master's level model to assist the schools in choosing one or deciding on one mode that will follow.
- Re-evaluate the role of residency training and how it can or cannot interfere with master's program.
- Develop a role for NAPOE to help with the transition.
- Begin to discuss transition to the next level – don't wait another 14 years.
- Provide template for curriculum development.
- Examples: develop PowerPoint presentation for marketing purposes; internal/external.
- Information AAOP is gathering on consensus conference is crucial to our profession. NCOPE needs to act on this information by developing a "basic standard of care" that all schools should use as their basic core curriculum. This should be an initiative that NCOPE needs to act upon by giving direction to NAPOE. It is essential that direction is given to the schools by describing the "essentials of a master's education." How the schools provide the curriculum and ways in which they supplement the curriculum can be up to them.
- NCOPE should assist the schools by keeping them informed of standards movement as well as any curriculum increase, specifically in the realm of how the body of knowledge has increased and where the changes will be needed in a higher degree.
- Provide resources (i.e. curriculum) and strategies (i.e., buy-in from dean) on how to implement master's. Strategies would not be mandated by NCOPE, but are optional and can be used as needed by the individual programs.
- I'm less concerned about what NCOPE does to help the schools implement a program (other than setting standards for accreditation) and more concerned about NCOPE's role in advancing the concept to the profession and working with the residency program.
- NCOPE should facilitate the move to master's-level programs by setting clear objectives and goals for the educational outcomes of such a program. For instance, what will the clinical master's look like verses academic master's?
- I feel NCOPE's role should be in the area of formalizing the residency as part of the master's program. One idea is creating a "matching system" similar to the medical schools.
- Our obligation is to ensure educational and residency programs meet the minimum standards of quality to prepare individuals to enter the O&P profession. Framing this in a master's program will be our responsibility.
- There would need to be a transition plan from NCOPE with dates and deadlines for specific changes.
- The accrediting agencies such as NCOPE carry the power to implement changes in institutions by their very nature. Our institution has historically demonstrated the importance it places on the recommendations received by the accrediting body via site visits, reports and possible loss of accreditation of a program. Once the decision is made to change the NCOPE standards, the schools will be forced to implement the changes.

## Appendix VI

# Focusing the Environment

National Commission on Orthotic and Prosthetic Education (NCOPE)  
Strategic Session on Implementing Entry-Level Master's Degree

Scottsdale, Arizona  
Presented by Harry E. Douglas, III, DPA  
February 11, 2006

### **Focusing the Environment to Implement the Entry-Level Master's Degree**

-The purpose of this model is to help identify, categorize and harness the O&P environment for effective transition to the entry-level master's degree.

#### **Definitions**

-Relevant Environment – Institutions, relationships, organizations, associations, groups, people and concepts that directly or indirectly influence the O&P education agenda.

#### **Definitions**

**Enablers** – The variety of institutions, relationships, associations, groups, organizations and people that have resources, capacities, expertise and wherewithal to facilitate and support the development of the entry-level master's degree.

**Users** – The wide spectrum of organizations and people who could benefit personally or by encouraging participation of others in some form of an entry-level master's degree.

**Supporters** - Institutions, relationships, associations, groups, organizations, people, issues and concerns within the relevant environment that have expressed or implied values, norms, beliefs and customs that support the entry-level master's degree program for O&P. The supporters would have an abiding interest in the well-being of the profession for professional and personal reasons.

**Adversaries** – Institutions, relationships, associations, groups, organizations, people, issues and concerns that have expressed or implied values, norms, beliefs and customs that would not support the entry-level master's degree for O&P.

### **Breakout Session I**

- Each group should identify all the institutions, relationships, associations, groups, organizations, governmental entities, foundations, etc. that could reasonably be considered an enabler, user, supporter or adversary.
- The list should be organized into two clusters:
  - Strategic Cluster – Impact on the general field of O&P.
  - Tactical/Operational Cluster – Impact on the entities offering the program, i.e., schools, hospitals, residency sites, etc.

### **Breakout Session II**

- The groups will develop an action agenda designed to engender support from each environmental element and facilitate the transition to an entry-level master's degree.
- The groups will develop for each element within the Strategic and Tactical/Operational Clusters:
  - Detailed programs/strategies for operationalizing and/or supporting the master's degree.
  - Timelines/Pert Chart for completing/implementing the programs/strategies.
  - A listing of the organization and individual responsible for ensuring results regarding 1 and 2 above.

## Appendix VII

### **A DECISION FOR CHANGE** **Denise Chapman-Winn PT, Ph.D.** **February 11, 2006**

#### **A DECISION FOR CHANGE**

Degrees  
-Certificate  
-Baccalaureate  
Credit hours

#### **A DECISION FOR CHANGE**

1976-1998

#### **A DECISION FOR CHANGE**

Case Western  
First graduate in 1962  
Granted master's degree

#### **A DECISION FOR CHANGE**

First master's programs were in private institutions  
Stanford, Duke, University of Southern California, Baylor

#### **A DECISION FOR CHANGE**

1976 the board of directors created a Task Force on Evaluation of Education for Entry Level for Physical Therapists  
-1977  
-1978

#### **A DECISION FOR CHANGE**

1978-BOD Panel on Education and APTA's department of education were charged with developing a position paper in support of physical therapist entry-level at the post-baccalaureate degree level

#### **A DECISION FOR CHANGE**

1979  
Annual Report of BOD  
-Preliminary plan to enhance implementation of RC 14-79 (resolution)  
-Resolution adopted to raise entry-level education

## **A DECISION FOR CHANGE**

1980

Task force RC 14-79 was charged with

- Coordinating plan to implement RC 14-79
- Review preliminary plan to enhance implementation of RC 14-79
- Analyze various post-baccalaureate entry-level programs

## **A DECISION FOR CHANGE**

Identify task/data collection

Develop plan for transition

## **A DECISION FOR CHANGE**

Monitor projections related to changes in entry-level education

Develop and share material related to post-baccalaureate entry-level education

Distribute BOD report regarding implementation of RC 14-79

Develop and distribute brochure describing rationale for raising the entry-level degree

## **A DECISION FOR CHANGE**

Develop strategies for involving individuals and organizations whose contributions and support would benefit the process and outcome of the transition

Develop and implement a plan for public relations

Increase member awareness of educational policies and activities

## **A DECISION FOR CHANGE**

Prepare and distribute guidelines for developing proposals for a post-baccalaureate entry-level degree program

Distribute a brochure that describes the need rationale and positive impact of raising the entry-level degree

Conduct workshops for administrators and faculty on planning PB education for PT

## **A DECISION FOR CHANGE**

Plan and implement an invitational conference for deans and PT administrators to address problems and solutions in the transition to PB degree and make recommendations that can be used by the association (APTA)

## **A DECISION FOR CHANGE**

Develop plan for phasing out the BD and phasing in PB

Establish Presidents Commission on University Relations to promote physical therapy education in higher education

Develop and implement mechanisms to provide special assistance to those educational programs who reported that they were unsure of making the transition to PB degrees

### **A DECISION FOR CHANGE**

Most important people in the transition process

- PT academic administrators
- Deans
- Employers
- AHA

### **A DECISION FOR CHANGE**

Southern Deans

### **A DECISION FOR CHANGE**

1998 Standards

- Outcomes based
- Evidence-based practice
- Cultural competency
- Differential diagnosis
- Depth and breath of curriculum
- Strong liberal arts foundation

### **A DECISION FOR CHANGE**

Why?

- Demands being placed on physical therapists
- Clinical decision making, clinical observations
- Ability to defend judgments with scientific evidence

### **A DECISION FOR CHANGE**

Degree nomenclature

- Determined by each institution

Acknowledgements

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## Appendix VIII

# Highlights of Graduate PA Education Peggy Valentine

### Objectives

- To provide an overview of the PA profession
- To discuss the concerns of moving from undergraduate to graduate education
- To give an overview of where we are today

### What is a PA?

Physician assistants are health professionals licensed to practice medicine with physician supervision. They are graduates from an accredited program and certified by the National Commission on Certification of PAs.

### Historical Information

- Concept began in 1965 in response to physician shortage
- Many of the first enrollees were medical corpsmen
- One of the fastest-growing health professions. Federal Bureau of Labor Statistics projects a 49 percent increase in jobs through 2012. Third fastest-growing profession in the U.S.

### Role

- Autonomy in decision-making
- Provide a broad range of diagnostic and therapeutic services
- Involved in education, research and administrative services
- Prescriptive privileges in 48 states, D.C. and Guam
- Work in hospitals, physician offices, HMOs, corrections, military, VA, nursing homes, public health, etc.

### PA Programs and Degrees Awarded Historically

- From 1965-1992, only 9.1 percent of the 55 PA programs offered a master's degree. The majority of programs offered a bachelor's degree.
- Between 1993-1997, 45 new PA programs were added, and of these, 13 offered the master's degree. AAPA advocated a bachelor's degree minimum.
- The debate began concerning degree requirements. The Association of PA programs (APAP) and the AAPA began a study.

### **Research Question 1**

Is there a relationship between academic degree awarded and applicant diversity?

**Findings:** Master's degree applicant pool had more women, slight increase in age, higher foreign student enrollment and a deficit of minority applicants. More research needed to study the implications.

### **Research Question 2**

Is there a relationship between academic credentials and PA employment opportunities?

**Findings:** Data revealed no significant difference in the number of job opportunities available to new graduates. Associate/certificate programs reported 6.3 job opportunities, bachelor programs reported 6.4 and master's programs reported 5.6 job opportunities.

### **Research question 3**

Is there a relationship between academic degree credential and PA practice?

**Findings:** No. PAs with graduate degrees took similar jobs as PAs with undergraduate degrees. However, Maryland did require PAs to have bachelors to prescribe after 2003. Slight increase of more graduates with master's degree who worked in rural settings.

### **Question 4**

Is there a relationship between PA salaries and academic credentials?

**Findings:** No. Educational status had no significant impact on income. Further, there was no correlation between educational status and professional satisfaction.

### **Outcomes**

- Most PA programs now offer the master's degree, but not all
- Decision made to not mandate a degree, although the AAPA recommended a bachelor's degree
- 70% now offer a master's degree
- Other programs have found creative ways to meet the growing demand by students through other institutions

### **Peggy's thought on the real reasons**

- Since most entering students already had an undergraduate degree, it was difficult to get more financial aid for another undergraduate degree
- Most students with an undergraduate degree wanted a graduate degree
- PA programs wanted to remain competitive and attractive to potential students. They were not to be outdone by new Programs offering graduate degrees. Even programs at community colleges teamed up with universities to offer graduate degrees.

## **Challenges**

- Institutional prerogative
- CASPA (online centralized applicant pool)
- Most incoming students already have a bachelor's degree and are applying to graduate programs only
- Post-graduate programs

## **New Enrollees of the 21<sup>st</sup> Century**

- 67 percent female
- Mean age of 28.7 years
- Average GPA is 3.4
- 12 percent have some military experience
- 79 percent white
- 70 percent have a bachelor's degree
- 70 percent of PA programs now award a master's degree

## **Current Characteristics of the Profession**

- 62 percent female
- 88 percent white
- 30 percent hold a master's degree
- Most graduated from PA program at age 31 years
- Average age – 42 years
- 89 percent in clinical practice, and 41 percent of them work in primary care settings

## **Other Factors Influencing Graduate and Post-Graduate Education**

- Dramatic changes in medical practice as a result of advances in technology and communication
- The standard of care has advanced due to sophisticated diagnostic procedures and complex patient management strategies
- Growing geriatric population, increase in chronic diseases, infectious diseases, drug resistance

## **PA Program Response**

- Adjustments to keep pace with advances in medicine
- Curriculum adjustments to include greater emphasis on analytical and problem-solving skills for PAs to function in changing health care environment

## **Curricular Changes**

- Varied. Many require a bachelor's degree and certain prerequisites
- PA curriculum basically includes the didactic phase (1 year) and clinical phase (1 year) and a capstone project – usually research in nature, i.e. publishable paper

**Summary**

PA education has changed dramatically during its 30-year history and mostly in response to advances in clinical practice and to the needs of incoming students who already have a degree. The graduate degree has increased the body of knowledge in the profession, although the value in clinical practice has not been well documented. There remains flexibility on the type of degree to be awarded by institutions.