



EVALUATION OF A MULTIPLE SCLEROSIS EDUCATIONAL TRACK FOR PHYSICAL THERAPY STUDENTS

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INTRODUCTION

Multiple Sclerosis Standardized Training Education Program with University Partners (MS STEP UP) is a unique collaboration between the University of North Carolina, Division of Physical Therapy and National MS Society, Greater Carolinas Chapter. The curriculum was created in response to a need for physical therapists with expertise in providing care for people living with MS.

OBJECTIVES

The desired outcome of the program is to graduate Doctor of Physical Therapy (DPT) students with an MS specific competency base who will continue to impact the MS community beyond graduation. Specific competencies include:

- Didactic Learning
- Clinical Experience
- Community Outreach and Service
- Education and Training

METHODS

Students and graduates are evaluated biannually through quantitative measures including: *MS Competencies Rating Scale*, *MS Activity Tracking Form*, and *Graduate Scholar Survey*. Competencies are student-evaluated in twelve areas:

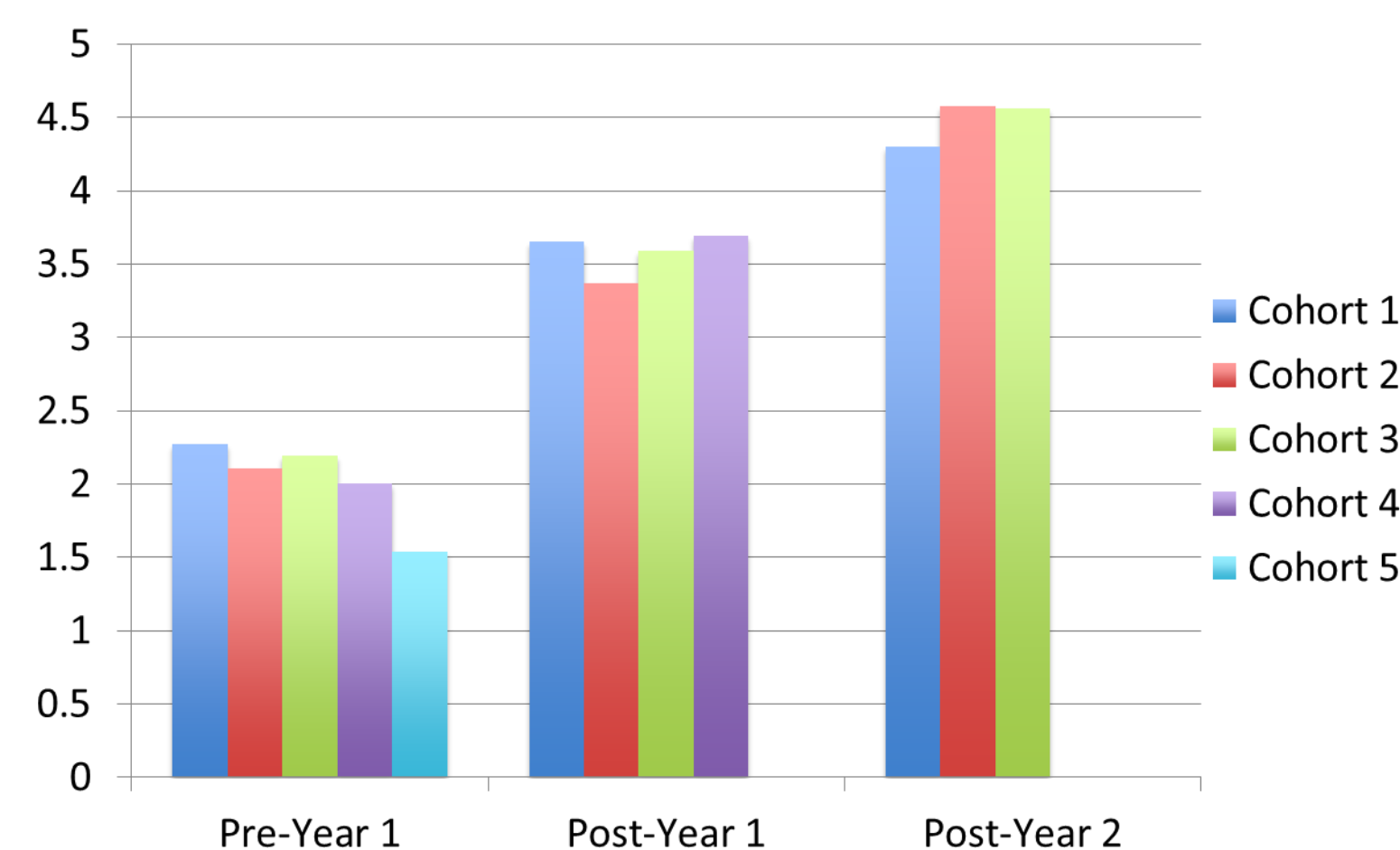
- Knowledge of MS
- Advanced knowledge of MS
- Knowledge of public policy and service systems
- Interdisciplinary teams and interagency planning
- Assessment and outcomes
- Implementation of treatment plans and services
- Involvement with individuals with MS, caregivers, and communities of care
- Program and project evaluation
- Legal, ethical and moral issues
- Program/project management
- Health care delivery systems and MS
- Research

Additional data are gathered about the number of people reached through various scholar activities.

RESULTS AND OUTCOMES

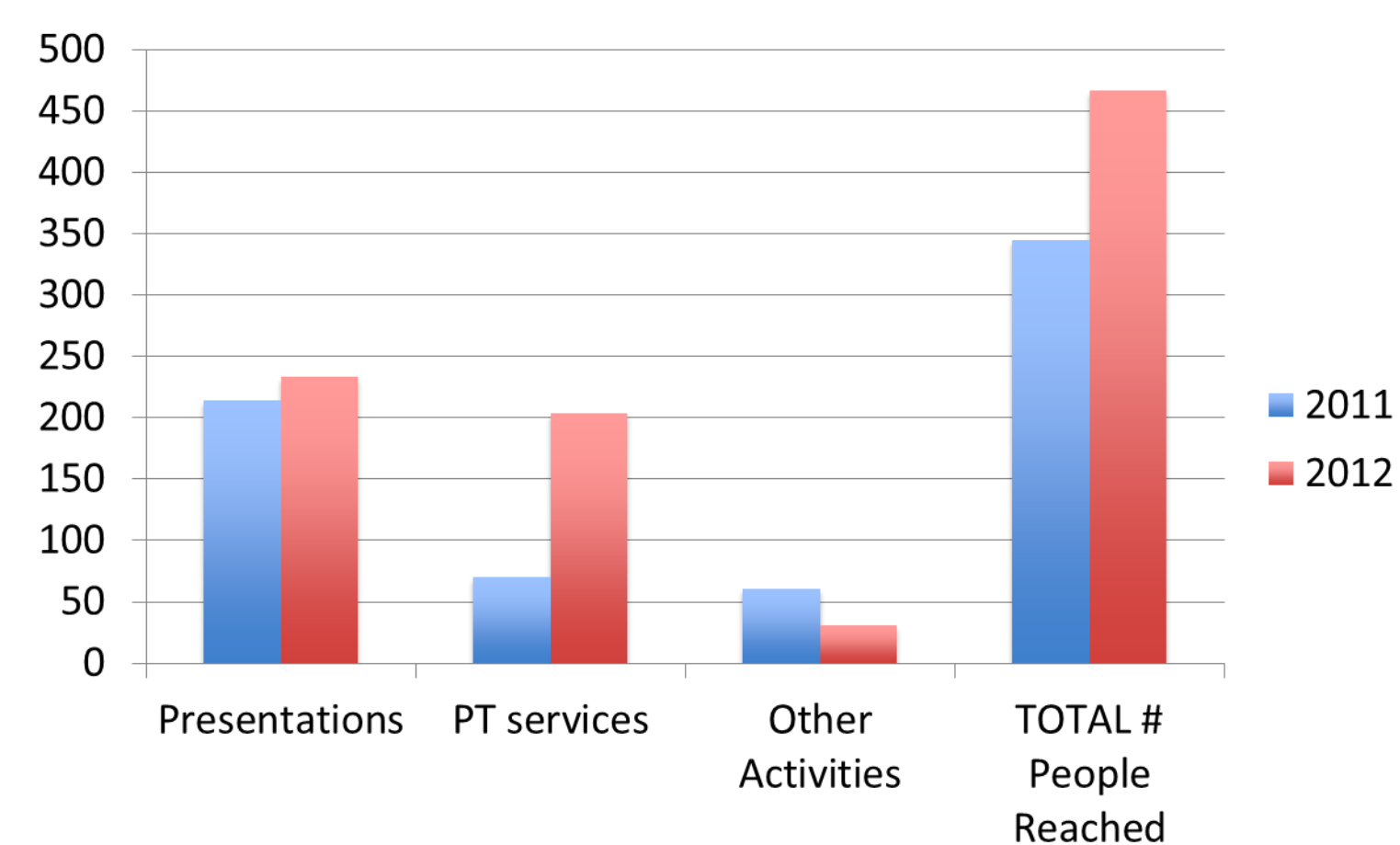
The student mean (n= 10) across the 12 competencies prior to the MS track (pre-year 1) was below average (mean = 2.02). Following the first year of the MS track (post-year 1) competencies (n=8) were rated as average/above average (mean= 3.58). The student mean (n=6) at the end of the 2-year MS track (post-year 2) were consistently rated as above average/excellent (4.48). See Figure 1.

Figure 1: Mean values from MS Competencies*



*MS Competencies Rating Scale- 5 item self-rated Likert scale: 1=Poor, 2=Below Average, 3=Average, 4=Above Average, 5=Excellent.

Figure 2: Impact of 4 MS Scholar graduates



All six graduated scholars are currently working with neurological patients, including patients with Multiple Sclerosis. Two of these graduates are MS Certified Specialists.

Figure 3: Student Competencies and Related Activities*

| Competency Area | Related Activities | Frequency |
|--------------------------------|---|----------------|
| Didactic Learning | Journal Club | Quarterly |
| | MS Teleconferences | 1x/month |
| | MS Readings | 2x/month |
| | MS Modules | 5x/year |
| | MS related Projects (class projects on exercise, MS and older adults, yoga, etc; capstone projects) | 3-5x/year |
| Clinical Experience | MS related site observations (infusions, neurology, PT, etc.) | 2-6x/ semester |
| | 8 week clinical rotation with focus on Neurology/MS | 8wks/year |
| Community Outreach and Service | Captain of NMSS Fundraisers- MS Bike and MS Walk | 1-2x/year |
| | Provide assistance at home to local individuals with MS or other neurological diagnoses | 1-4x/month |
| | Present at local conferences | 1-2x/year |
| Education and Training | MS specific in-services during clinical rotations | 1-2x/year |
| | Presentations at local MS self-help groups | 1-2x/ semester |
| | Development of Problem Based Learning Curriculum | 1x/year |
| | Participation in NMSS Free From Falls Program | 8wks/year |

*Scholar hours vary and are individually determined based on student goals and mentor determination of competency strengths and needs.

DISCUSSION

The goal of this study was to evaluate the efficacy of the MS educational track in improving student competencies over the two year program and to evaluate the impact the graduates of the program have on the MS community. Based on evaluation findings, student-rated MS competencies significantly increase across all competency categories. In addition, participation in activities shown in Figure 3 contributed to an overall enhancement of competencies in targeted areas. Results from the *Graduate Scholar Survey* demonstrated increased scholar involvement beyond graduation with the MS population regarding job placement, scholarship, and leadership.

CONCLUSIONS

Based on evaluations, MS STEP UP provides appropriate curriculum-based specialty training to selected students interested in working with the MS patient population. Post-Year 2 evaluation outcomes were used to continue to enhance scholarship opportunities. The *Graduate Scholar Survey* analysis show increased involvement in MS experiences beyond graduation. Future evaluation measures will be expanded to track outcomes of students at other MS STEP UP programs.

SUMMARY OF USE

This unique program addresses the challenges of people living with MS through specialized training for DPT students at UNC-Chapel Hill. It is our goal that this curriculum will serve as a collaborative educational model for other universities and organizations to meet the needs of students interested in a particular patient population, as well as increase access for populations in need of specialized physical therapy care.

ACKNOWLEDGEMENTS

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