

ANALYSIS OF THE DEVELOPMENT OF MS-RELATED COMPETENCIES AMONG PHYSICAL THERAPY STUDENTS

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INTRODUCTION

- Multiple Sclerosis Standardized Training and education Program with University Partners (MS STEP UP) is a specialized 2-year educational track for DPT students, sponsored by UNC PT and NMSS Greater Carolinas Chapter
- MS STEP UP improves clinical knowledge and skills of PT students, as assessed using the MS Competencies Rating Scale (MSCRS)^{1,2}
- It is not known how these specialized competencies develop over the 2-year program

OBJECTIVES

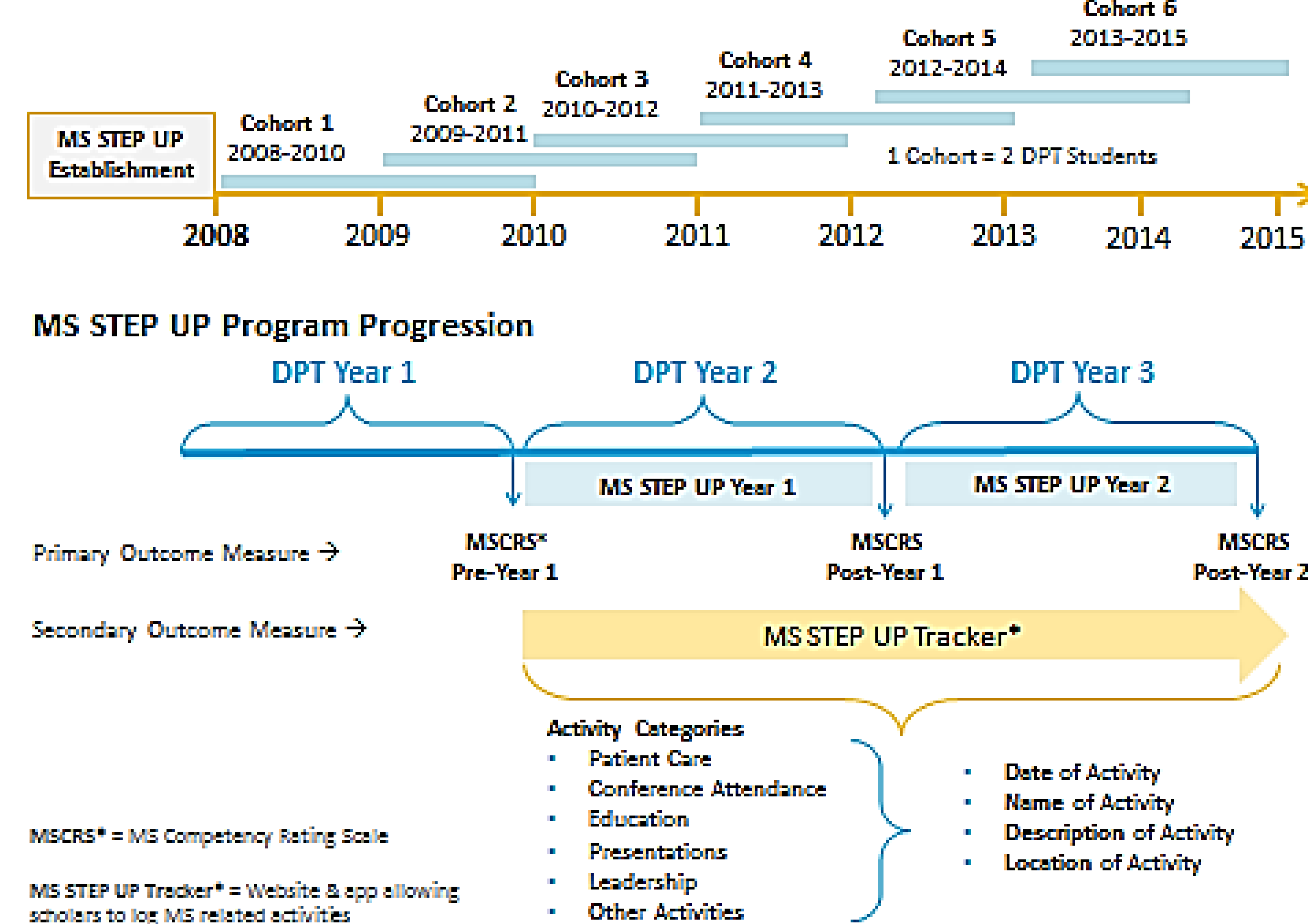
To evaluate the development of competencies across 4 domains of the MSCRS throughout the MS STEP UP program: (1) knowledge, (2) advanced knowledge, (3) assessment and outcomes, and (4) implementation of treatment plans and services.

METHODS

- Program timeline, activities, and outcome measures are illustrated in **Figure 1** and **Figure 2**
- Data from 10 scholars (5 cohorts) who have completed the 2-year program were analyzed
- We analyzed the percentage of items in each of the 4 domains on which the scholars rated their knowledge as “above average” or “excellent” (as compared to entry-level DPTs) using a Domain x Time repeated measures ANOVA

Figure 1: MS STEP UP program overview

Methods overview



RESULTS AND OUTCOMES

Figure 2: MSCRS and associated activities

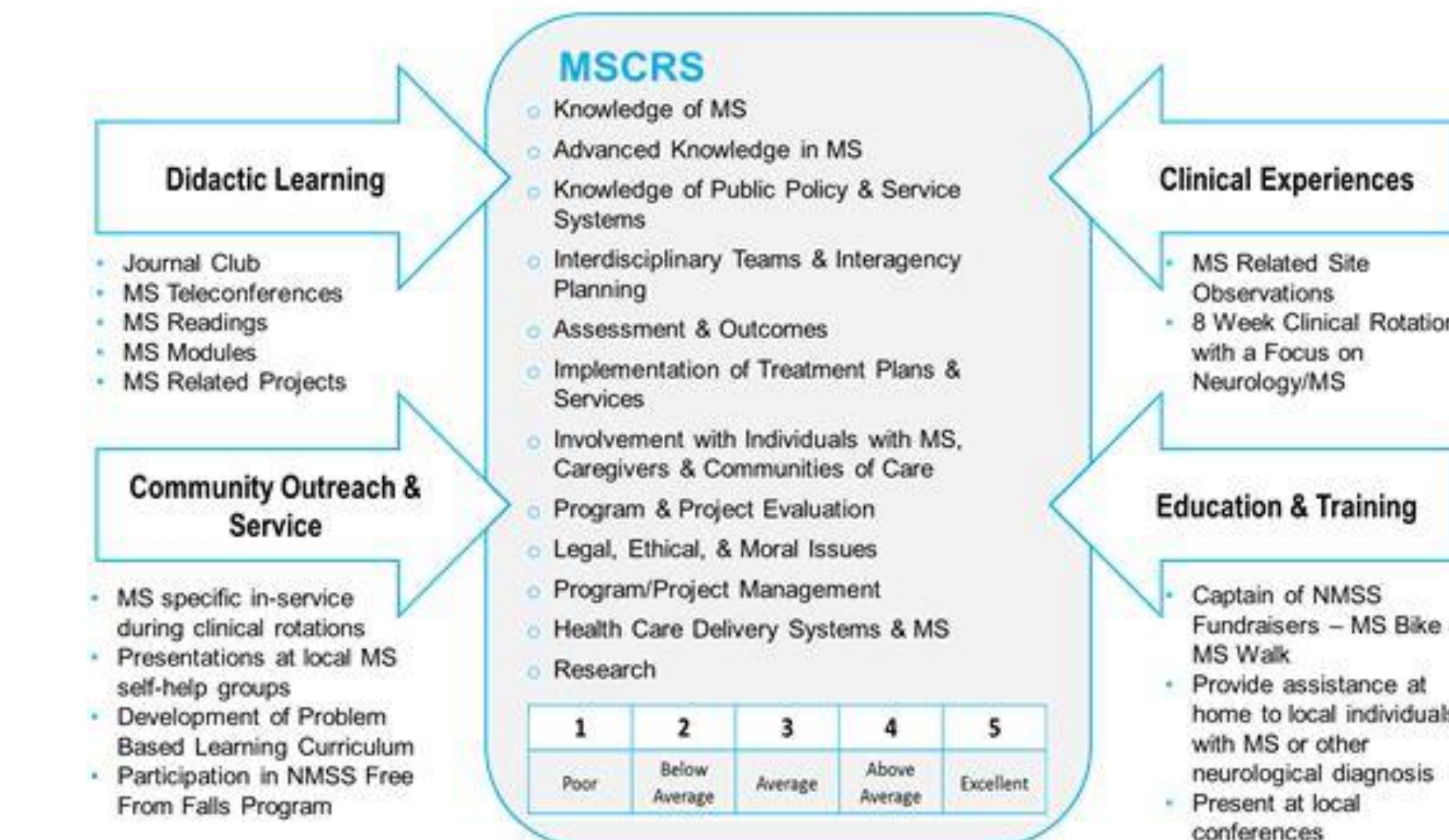


Figure 4: Location of program activities



- Cohorts have varied in the types of activities they have recorded since 2009 (**Figure 3**)
- MS STEP UP scholars have impacted the Greater Carolinas National MS Society Region in addition to several locations throughout the United States and Canada (**Figure 4**)



Figure 5: Percentage of MSCRS items in each of the 4 domain categories rated as “above average” or “excellent” at each time point

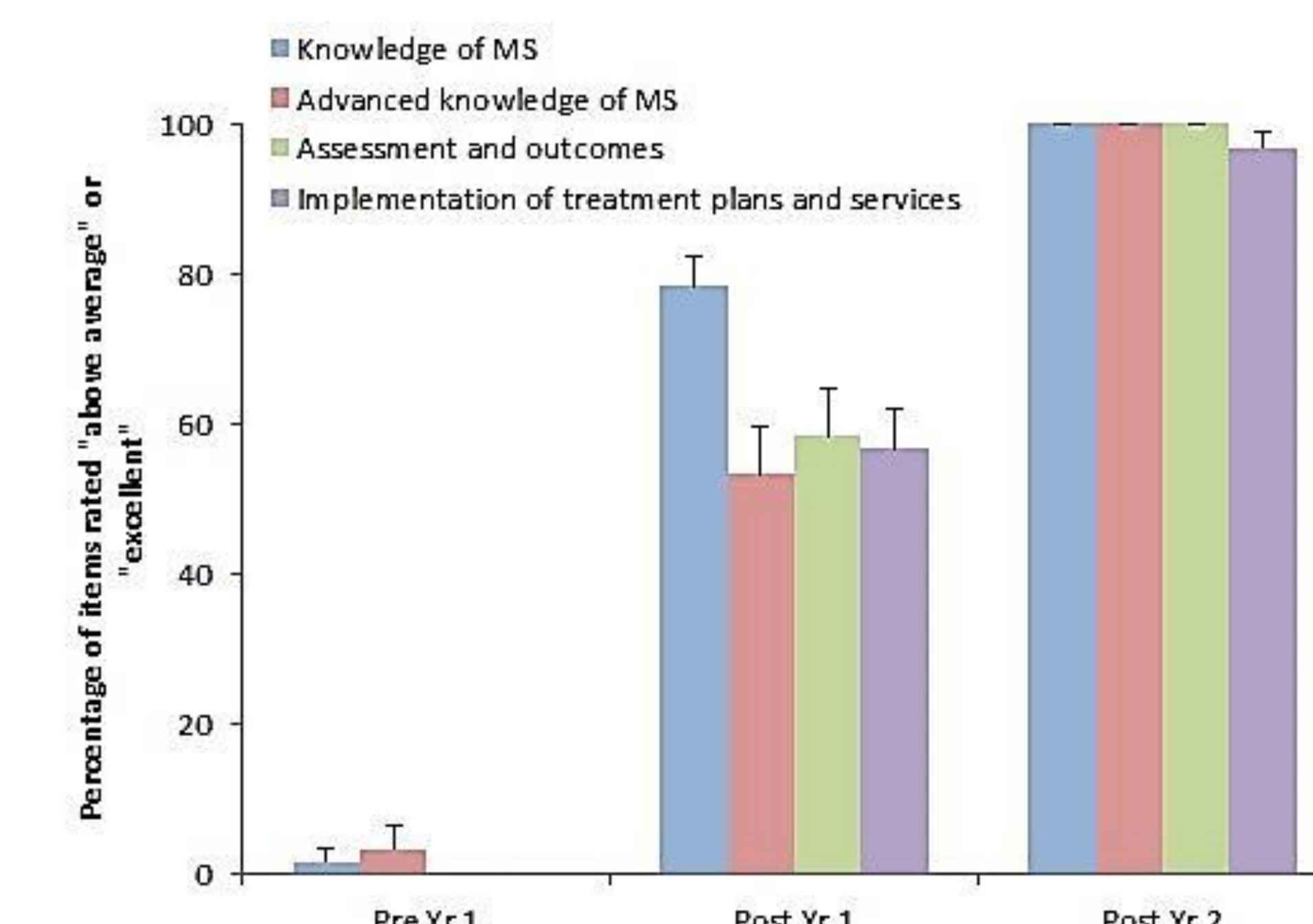
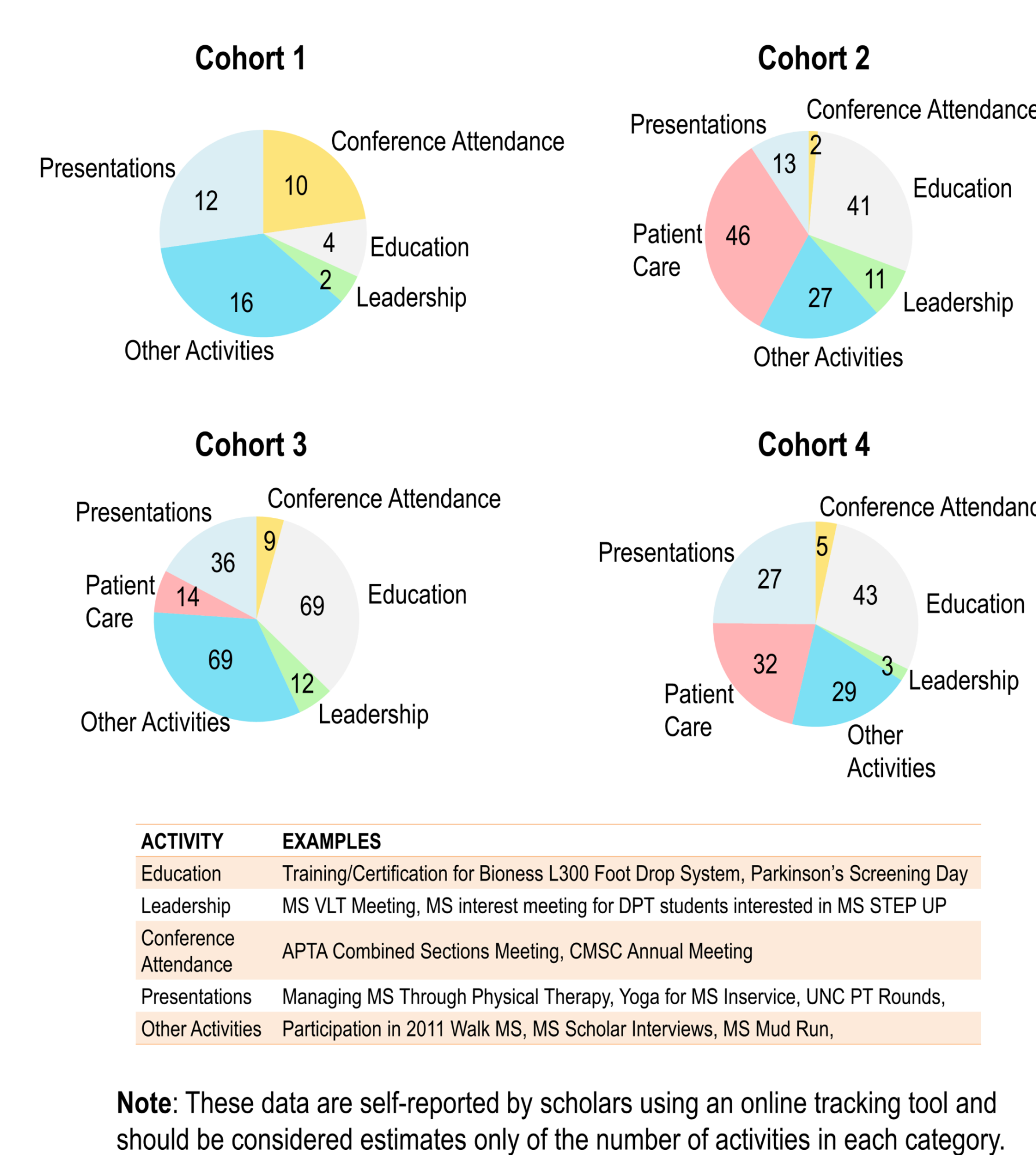


Figure 3: Distribution of activities by cohort



Note: These data are self-reported by scholars using an online tracking tool and should be considered estimates only of the number of activities in each category.

- Domain x Time interaction, $F(6, 66)=4.47, p=0.001, \eta_p^2=0.29$
- Percentage of items rated “above average” or “excellent” was higher at the end of the first year for general knowledge (78%) than for advanced knowledge (54%), assessment and outcomes (55%), and implementation of treatment plans and services (56%; $p<0.01$) (**Figure 5**)
- At the end of Year 2, scholars rated their knowledge as above average or excellent relative to entry-level DPTs on 96-100% of the items, with no differences between domains

SUMMARY

- First-year scholars rated highest in general knowledge, as compared to the other 3 domains of the MSCRS
- MS STEP UP improves the clinical skills and knowledge of DPT students, as demonstrated by self-related competencies
- Basic knowledge is primarily acquired in the first year of MS STEP UP, whereas advanced knowledge and practice-related competencies develop over the two years
- MS patient care will most likely benefit from the national expansion of MS STEP UP among DPT programs



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