

measured via Likert scale 2. Desire for additional coding and billing education during residency training as measured via Likert scale 3. Actual knowledge of Medicare billing as assessed by multiple choice questions

**Results or Clinical Course:** The e-mail was opened by 2,335 people and 214 people clicked on the survey link. 179 individuals started the survey and 148 completed the survey. Of the respondents, 41% were residents, 6% fellows, and 53% physicians. Of the physicians, 57% were in their first ten years of practice. Male and female respondents were represented at 49% and 51%, respectively. 55% of respondents reported any billing or coding training during residency and 98% agreed that billing education was an important aspect of residency training. 76% of all respondents and 79% of physicians reported they felt their billing education was inadequate. On the knowledge assessment portion of the survey, respondents correctly identified the answer 41% of the time. Residents correctly identified the answer 36% of the time as compared to physicians who identified the correct answer 51% of the time.

**Conclusions:** The AAPM&R members who responded to this survey felt they did not receive adequate coding and billing education during residency, and indicated their coding and billing knowledge was insufficient. These findings were reflected by their difficulty answering basic coding and billing questions. Our results suggest that physiatrists may require additional coding and billing education during residency.

#### Poster 501

##### **The Effect of a Wearable Visual Reminder on Patient Satisfaction Survey Scores in the Acute Inpatient Rehabilitation Setting.**

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**Disclosures:** A. J. Pellicane, No Disclosures: I Have Nothing To Disclose.

**Objective:** To determine if a wearable visual reminder prompting both the patient and physician to discuss patient treatment and progress alters Press Ganey patient satisfaction survey scores.

**Design:** Retrospective Cohort Study.

**Setting:** Freestanding acute inpatient rehabilitation facility.

**Participants:** All patients who completed a Press Ganey patient satisfaction survey after acute inpatient rehabilitation from 12/2011 to 10/2012.

**Interventions:** A square, blue button with white lettering that read, "Ask ME about your TREATMENT and PROGRESS!!!" was worn by one inpatient physiatrist on the right lapel of his white coat at all times. The button measured two inches per side.

**Main Outcome Measures:** Mean percent score on the physician-specific Press Ganey patient satisfaction survey question: "How well the rehabilitation doctor kept you informed about your treatment and progress?"

**Results or Clinical Course:** For the button-wearing physiatrist, mean percent score for the physician-specific Press Ganey patient satisfaction survey question for the five months before donning the button was  $88.1 \pm 11.5$ ; and, for the five months after donning the button was  $95.8 \pm 5.9$ . These scores were marginally statistically different ( $p = .07$ ). Note that the score for the month when the

button was first donned was not included to decrease confounding variables. For comparison, mean percent scores for two other inpatient physiatrists who did not wear the button were also calculated over the same time periods. The first non-button-wearing physiatrist's scores were  $79.9 \pm 13.1$  and  $80.0 \pm 11.2$  ( $p = .99$ ); and, the second's scores were  $95.0 \pm 8.1$  and  $82.8 \pm 21.0$  ( $p = .27$ ). All three physiatrists care for distinct patient populations; however, the button-wearing physiatrist and the first non-button-wearing physiatrist work in the same areas of the rehabilitation hospital.

**Conclusions:** A wearable visual reminder improved the Press Ganey patient satisfaction survey score specific to the question the wearable visual reminder addressed.

#### Poster 502

##### **Analysis of a Value-Based Design Benefit for Rehabilitation Therapies.**

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**Disclosures:** E. A. Hurvitz, No Disclosures: I Have Nothing To Disclose.

**Objective:** To describe the outcome of using a value-based design benefit for providing rehabilitation therapies in an insurance plan

**Design:** Observational

**Setting:** Mixed regional area with urban, suburban and rural settings

**Participants:** Collective, anonymous data collected on insurance plan participants

**Interventions:** A health insurance plan decided to move from a fixed rehabilitation services (physical, occupational and speech therapies) to a value based design. A committee of physicians and therapists identified several diagnoses ("Major") which were generally associated with a longer period of recovery, suggesting that patients would benefit from receiving the allowed 60 sessions of therapy over a longer period of time (one year versus 60 days). The other diagnoses ("Minor") were then allowed 15 sessions for 60 days, which was changed to one year. Data were collected for the years 2008-2011.

**Main Outcome Measures:** Utilization (number of visits per member per year, and length of treatment: costs (per member per year, and per visit); and complaints and grievances

**Results or Clinical Course:** Visits per patient decreased (8.3 to 7.8) as did cost per member per year (\$78.34 to \$69.92). Cost per visit was stable at about \$110.00. However, co-pay per visit increased during this time from \$15 to \$20, which may have affected these results. Despite that, there was an increased useage for major diagnoses, increasing from 8.6 visits per patient to 9.6. The cost per visit was stable. The duration of therapy increased only slightly, from 42.2 days to 49.7. The minor diagnoses accounted for the decrease in overall usage and costs. Patients with minor diagnoses represented 80 to 85% of those receiving therapies. In this group, visits per patient decreased from 7.0 to 6.3 visits given over 33 to 34 days. Greivances and complaints increased from about 3

per thousand members to 7 per thousand, but this change coincided with the increase in co-pay.

**Conclusions:** Application of a value-based benefit design to rehabilitation therapy benefits appeared to lead to utilization of benefits that more closely matched the patients' needs while remaining at least cost neutral. The benefit can have a simple design (e.g., two groups of diagnostic codes), minimizing additional administrative burden related to errors in coding and frequent review of requested exceptions.

### **Poster 503** **Feasibility and Development of a PM&R Resident** **EMG OSCE.**

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**Disclosures:** N. Ketchum, No Disclosures: I Have Nothing To Disclose.

**Objective:** To determine if an Objective Structured Clinical Exam (OSCE) is a feasible method of assessing PM&R resident competency in electrodiagnostic medicine (EMG) through review of the literature, and if yes, development of a proof of concept EMG station.

**Design:** Review of the literature and feasibility assessment

**Setting:** Physical Medicine and Rehabilitation Residency Training Program

**Participants:** The authors and faculty

**Interventions:** Literature review & faculty review of an EMG OSCE

**Main Outcome Measures:** Status of published EMG training curricula and associated OSCE use in PM&R training programs

**Results or Clinical Course:** Literature review revealed no electrodiagnostic medicine-specific OSCE use in PM&R. A single group (Garstang, DeLisa, Jain, and colleagues) has described the successful implementation of an annually administered OSCE covering the breadth of core PM&R competencies as a comprehensive assessment. Brown, et al. reported development of a structured evaluation tool to assess EMG resident competency utilizing observed clinical experience and chart simulated recall to assess medical knowledge and patient care competencies associated with a comprehensive curriculum for PM&R resident training in EMG. To address this gap we developed a proof of concept EMG OSCE which faculty and residency program leadership reviewed and endorsed as accurate and feasible for implementation with PM&R residents.

**Conclusions:** Currently published training and evaluation methods and a proof of concept EMG OSCE reveals is endorsed by faculty as an accurate and feasible standardized performance-based assessment method. Consistent with ACGME milestone standards, this assessment will provide evidence to support resident competence in EMG. In each station, the resident will be given a brief history and physical findings. From this information, residents will be asked to formulate a differential diagnosis, design an appropriate electrodiagnostic study, set up nerve conduction studies and identify correct needle electrode placement, interpret

results in real-time to guide further design of their study, and make a diagnosis.

### **Poster 504** **Using Multiple Leadership Roles in a Residency** **Training Program to Develop Future Leaders in** **Physiatry.**

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**Disclosures:** J. Liu, No Disclosures: I Have Nothing To Disclose.

**Objective:** Leadership development during residency training is a topic of high interest although no consensus exists on an ideal method. In the evolving field of physical medicine and rehabilitation (PMR) and the emerging medical atmosphere of value- and evidence-based medicine, the training of competent physiatrists who can rise to become future leaders is an important endeavor in facilitating growth. The purpose of this study was to examine how one residency training program's (RTP) structure of multiple leadership roles influenced the development of its alumni as future leaders and physiatrists.

**Design:** The RTP mentioned above compartmentalizes administrative and educational tasks into independent leadership roles on a global and local scale. These are then assigned to residents based on interest, merit, and seniority. Such a system allows more residents to experience leadership and gain the skills from leading. It also redistributes work across the entire residency class so that individual leaders can be more productive and effective. An internet-based survey was distributed to the alumni of this program from the inception of this model.

**Setting:** Residency Training Program

**Participants:** Alumni of a PMR RTP

**Results or Clinical Course:** A total of 50 alumni responded to the questionnaire. Of those, 86% had been in a leadership role during residency training and 44% were in a leadership role at the time of survey completion. Of those who did participate as a chief resident or in a leadership track, 74% felt it was either "very helpful" or "helpful" in adding value to their training as physiatrists. Finally, 72% felt that having residents fill leadership roles enabled the program to accomplish more of its goals.

**Conclusions:** The development of leaders in the field of PMR is crucial to its growth, longevity, and success in the current medical system. The strategy of one RTP was to create multiple leadership roles which led to alumni taking on future leadership positions, feeling that they had extra value in their training as physiatrists, and feeling that it enabled the program to achieve more of its goals. Further research is needed to study the effect of this construct on leadership development.

### **Poster 505** **Clinical Practice Modifications Resulting from** **Interdisciplinary VTE Task Force at a Large City** **Hospital: A Three-Year Experience.**

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