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# Analysis of Practice for the Physical Therapy Profession: Report Memo 2018

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# Analysis of Practice for the Physical Therapy Profession: Report Memo 2018

## Executive Summary

This memo documents the process and results of the analysis of the practice of physical therapy conducted in 2018 by the Federation of State Boards of Physical Therapy (FSBPT) in partnership with the Human Resources Research Organization (HumRRO) and FSBPT's Exam Committee Chairs. Because the practice of physical therapy is always evolving, it is important that the content of the licensure examinations be updated on an ongoing basis. FSBPT has been conducting a new practice analysis based on the profession's rate of change approximately every 5 years. In 2018, FSBPT initiated a new, multi-year survey methodology to collect and analyze practice analysis data annually for four consecutive years. This approach will enable FSBPT to (a) monitor on-going and emerging trends in entry-level requirements, (b) respond quickly to changes in the profession that necessitate adjustments to the licensure examinations (e.g., removing test questions that assess skill areas of decreasing importance; increasing the numbers of test questions that address skill areas of increasing importance), and (c) enhance awareness among current and prospective PTs and PTAs of what FSBPT is and the services it provides (beyond management of the NPTE).

The study was conducted between January and August 2018 and represents the first data collection cycle in the multi-year practice analysis methodology extending to 2021. The approach to conduct the analysis of physical therapy practice in 2018 was similar to that taken in prior years (Caramagno, Cogswell, & Waugh, 2018a; Caramagno, Cogswell, & Waugh, 2018b; Bradley, Caramagno, Waters, & Koch, 2011a; Bradley, Caramagno, Waters, & Koch, 2011b; Knapp, Russell, Bynum, & Waters, 2007a; Knapp, Russell, Bynum, & Waters, 2007b).

- The project team examined background information, such as prior practice analysis reports and the existing examination blueprints, and used this information to prepare lists of work activities (WAs) and knowledge and skill requirements (KSRs).
- FSBPT collected input from subject matter experts (SMEs) to identify changes to the lists including adding, removing, and editing the WAs and KSRs.
- HumRRO prepared an electronic survey to gather ratings of the WAs and KSRs from a large sample of PTs and PTAs across North America. The survey had two sections: a set of questions about the demographic characteristics of the sample and a set of WAs or KSRs that respondents evaluated using a five-point Likert-type rating scale.<sup>1</sup>
- HumRRO analyzed the response data and compiled the results in summary tables.
- FSBPT convened a one-day, in-person meeting on July 13, 2018 with the Exam Committee Chairs to review the results and obtain recommendations for the remaining cycles of the multi-year methodology. HumRRO attended the meeting to answer questions about the 2018 survey.

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<sup>1</sup> Respondents were assigned to complete either the WA or KSR survey based on their years of professional experience: individuals with two or fewer years of experience were assigned to the WA survey; individuals with three or more years of experience completed the KSR survey. The PT KSR survey also incorporated branching logic to redirect respondents who indicated that they routinely supervise PTAs and have a good understanding of the knowledge and skills PTAs need to provide safe and effective care.

## Summary of Practice Analysis Survey Changes

### *Landing Pages*

- Revised the Background Questionnaire landing page messaging to clarify purpose, level of effort, and incentives, and to decrease the total word count.
- Revised the WA and KSR survey landing pages to clarify the purpose of the rating task and convey the format of the revised rating scales (see below for changes to rating scales).

### *Background Questionnaire*

- Added a gated-entry item to confirm respondents' motivation to provide thoughtful responses (question must be answered to complete the rest of the survey).
  - Please acknowledge the importance of this survey to the profession by entering your initials next to the statement below. A response is required to continue.
- Added a question to assess number of jobs/positions held in the past 12 months.
  - How many physical therapist (physical therapist assistant) positions/jobs have you held in the past 12 months?
    - 1
    - 2 to 3
    - 4 to 5
    - 6 to 7
    - More than 7
- Re-sorted the responses for question 12 regarding time in each facility to group similar facilities together instead of grouping alphabetically.
- Revised question 17 to clarify quality of experience supervising PTAs over the past 12 months.
  - 2016 version: On average, do you supervise the work of PTAs more than PTs?
    - Yes
    - No
  - 2018 version: Which of these statements is true regarding your experience supervising PTAs over the past 12 months?
    - I routinely supervise PTAs and have a good understanding of the knowledge and skills they need to provide safe and effective care.
    - I do NOT routinely supervise PTAs and/or I do NOT have a good understanding of the knowledge and skills they need to provide safe and effective care.

### **Work Activity and Knowledge and Skill Requirements**

- Implemented editorial revisions to correct grammar, punctuation, style, and flow.
- Implemented substantive revisions to improve technical accuracy and relevance to current practice.
- Revised, added, or removed examples provided in parentheses after WA and KSR statements.

### **WA and KSR Rating Scales**

- Removed WA frequency scale – provides limited additional information beyond that obtained from the importance ratings and increases burden on respondents.
- Added a frequency scale point to the WA importance scale (i.e., *I have not performed this WA*).
- Removed scale point 0 *Knowledge is not needed* from the KSR importance scale because it provides redundant information with scale point 1 *Not important*.
- Revised KSR importance stem to emphasize to the respondents that they should provide an assessment of the importance to effective care rather than the importance to the job in general.

### **Sample Selection and Administration**

- FSBPT selected participant samples from a list of licensure candidates who had passed the NPTE stratified by exam, year of licensure, and jurisdiction.
- FSBPT sent a pre-invitation notification describing the purpose of the survey approximately one week prior to the launch on May 10, 2018.
- HumRRO sent email invitations starting on May 10. Reminder emails were sent at approximately two-week intervals on May 24, June 12, and June 28.

### **Data Cleaning and Screening**

- Examined the raw data to identify outliers and unexpected responses.
- Constructed data filters to screen out careless responder data based on psychometric, structural, and substantive considerations including flat, hasty, and missing response patterns, and ineligible employment status.

**Table 1. Data Quality Screens**

| Data Screen   | PT KSR    |           | PTA KSR    |            | PT WA     |           | PTA WA    |           |
|---|-----------|-----------|------------|------------|-----------|-----------|-----------|-----------|
|   | A         | B         | A          | B          | A         | B         | A         | B         |
| Flat Responding   | 4         | 2         | 25         | 37         | 26        | 11        | 26        | 8         |
| Hasty Responding  | 0         | 0         | 2          | 3          | 4         | 3         | 1         | 1         |
| Missing >90% of responses                                 | 24        | 10        | 63         | 53         | 56        | 43        | 33        | 22        |
| <b>Employment Status</b>                                  |           |           |            |            |           |           |           |           |
| Retired   | 1         | 1         | 4          | 4          | 0         | 0         | 0         | 0         |
| Unemployed and <i>not</i> looking for work as a PT or PTA | 10        | 11        | 36         | 37         | 6         | 6         | 9         | 4         |
| <b>Total</b>  | <b>37</b> | <b>23</b> | <b>122</b> | <b>125</b> | <b>88</b> | <b>60</b> | <b>64</b> | <b>34</b> |

*Note.* Flat Responding includes individuals who selected the same response value an unreasonably-high number of times in a row. Hasty Responding includes individuals who completed the survey too quickly to have been paying much attention to the survey questions. The values in the “Total” row account for overlap across the data screens and identify the absolute number of cases that were excluded (i.e., no double-counting).

### Response Rates and Final Analysis Sample

- Table 2 summarizes the response rates for the 2018 practice analysis surveys.
- The “Responded” count is the number of individuals who started the survey and completed at least the background questions.
- The “Usable” count reflects the number of respondents who provided response data of acceptable quality based on the data screens noted above.
- The final analysis sample included data from 3,480 respondents across all survey forms.

**Table 2. Survey Distribution and Response Rates**

| Sample  | Invited | Responded |      | Usable |      |
|---------|---------|-----------|------|--------|------|
|         | n       | n         | %    | n      | %    |
| PT KSR  | 20,064  | 624       | 3.1  | 564    | 2.8  |
| PTA KSR | 10,187  | 1,519     | 14.9 | 1,272  | 12.5 |
| PT WA   | 10,968  | 1,137     | 10.4 | 989    | 9.0  |
| PTA WA  | 7,047   | 655       | 9.3  | 655    | 9.3  |

*Note.* 742 PT KSR respondents were reassigned to the PTA KSR survey based on responses to the background question regarding supervision of PTAs. Including these respondents in the PT KSR sample returns a Usable response rate of 6.5% for that group and reduces the Usable response rate for PTA KSR to 5.2%.

## Data Analysis

### Sample Description and Representativeness

HumRRO computed descriptive statistics for the background questionnaire response data to summarize and examine the representativeness of the sample. Below is a summary of the 2018 practice analysis sample on several key variables. The complete set of results of the background questionnaire are presented in Appendix A.

- Respondents tended to be female (67-72%), White (70-77%), and employed full time (73-92%).
- PT KSR (65%) and PT WA (83%) respondents were more likely to possess a Doctor of Physical Therapy (DPT) than the other samples.
- A majority of the PTA WA survey respondents (76%) reported their highest academic degree related to physical therapy as an Associate's degree.
- A larger portion of PTAs reported that they spend at least 50% of their time working in Outpatient health system or hospital-based facilities (43-47%) compared to PTs (30-38%).
- A larger portion of PTAs reported that they spend at least 50% of their time working in skilled nursing facilities (24-31%) compared to PTs (8-13%).
- A third of the Entry-level PTs and PTAs reported spending at least 50% of their time in health and wellness facilities and private outpatient facilities compared to between 20 and 28% of their more experienced counterparts.

### Work Activity and Knowledge and Skill Requirements Survey Results

Analysis of the WA and KSR survey data involved computing descriptive statistics to examine the distribution and magnitude of respondents' ratings and interrater agreement indices to evaluate the degree of agreement and consistency in the response sets. The full results of these analyses are presented in Appendix B. Below is a summary of the analysis approach.

- For each WA statement, HumRRO computed:
  - Sample size: number of valid responses.
  - Percent Perform (%<sub>Perf</sub>): Sum of responses for scale points 1 through 5, divided by the total number of usable respondents.<sup>2</sup>
  - Percent Important (%<sub>Imp</sub>): Sum of responses for scale points 2 through 5, divided by the total number of usable respondents.
  - Mean Importance (M): Based on responses for scale points 1 through 5. Mean WA importance ratings exclude respondents who selected the option *I have not performed this WA*.
  - Standard Deviation of Importance (SD): Based on responses for scale points 1 through 5.

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<sup>2</sup> The calculation of %<sub>Perf</sub> in 2018 is different from the 2016 calculation to such an extent that these statistics are incomparable. The statistics are presented in the results tables, but caution is advised in making any generalizations or conclusions about the samples, items, or profession.

- For each KSR statement, HumRRO computed:
  - Sample size: number of valid responses.
  - Percent Important (%<sub>Imp</sub>): Sum of responses for scale points 2 through 5, divided by the total number of usable respondents.
  - Mean Importance (M): Based on responses for scale points 1 through 5.
  - Standard Deviation of Importance (SD): Based on responses for scale points 1 through 5.
- HumRRO computed criticality indices for WAs and KSRs and highlighted statements that received mean importance ratings at, near, or below the indices. The criticality indices for WAs and KSRs were set at 2.50, halfway between scale point 2 (Minimally Important) and 3 (Important).
  - The Exam Committee Chairs reviewed the highlighted statements and discussed professional and methodological issues that could increase or decrease the means relative to the 2016 practice analysis survey results.
- Two types of intraclass correlation coefficients (ICCs; McGraw & Wong, 1996; Shrout & Fleiss, 1979) were computed to estimate the degree of consistency and agreement among the survey respondents.
  - The single rater estimates can be interpreted as the level of consistency (or agreement) to be expected between the ratings provided by any single rater with any other randomly selected single rater.
  - The Observed estimates indicate the degree of consistency (or agreement) to be expected between the average among the sample of survey participants and the average that would be obtained if another random sample were to be drawn from the population.

**Table 3. Estimates of Inter-rater Reliability and Agreement**

| Survey         | Number of Items | Type of ICC |          |           |          |
|----------------|-----------------|-------------|----------|-----------|----------|
|                |                 | Consistency |          | Agreement |          |
|                |                 | 1-Rater     | Observed | 1-Rater   | Observed |
| <b>PT KSR</b>  |                 |             |          |           |          |
| Form A         | 75              | 0.379       | 0.994    | 0.275     | 0.990    |
| Form B         | 76              | 0.559       | 0.997    | 0.359     | 0.993    |
| <b>PTA KSR</b> |                 |             |          |           |          |
| Form A         | 66              | 0.337       | 0.997    | 0.252     | 0.995    |
| Form B         | 68              | 0.491       | 0.998    | 0.329     | 0.997    |
| <b>PT WA</b>   |                 |             |          |           |          |
| Form A         | 120             | 0.387       | 0.996    | 0.279     | 0.994    |
| Form B         | 120             | 0.483       | 0.998    | 0.326     | 0.996    |
| <b>PTA WA</b>  |                 |             |          |           |          |
| Form A         | 99              | 0.272       | 0.989    | 0.214     | 0.985    |
| Form B         | 98              | 0.461       | 0.996    | 0.316     | 0.992    |

*Note.* Consistency and agreement ICCs estimated for a single rater (1-Rater) and for the total number of raters (Observed).



## Recommendations for Future Practice Analysis Survey Cycles

- Present results of the criticality comparison using bar charts that depict means and standard deviations to allow visual comparisons of trends and changes in the importance of WAs and KSRs.
- Compute mean difference indices for WAs and KSRs and highlight statistically significant results.
- Evaluate subgroup differences by primary practice setting and primary population of care.

## References

- Caramagno, J. P., Cogswell, S., & Waugh, G. (2016a). *Analysis of practice for the physical therapy profession: Entry-level physical therapists* (FR16-83). Alexandria, VA: Human Resources Research Organization.
- Caramagno, J. P., Cogswell, S., & Waugh, G. (2016b). *Analysis of practice for the physical therapy profession: Entry-level physical therapist assistants* (FR16-84). Alexandria, VA: Human Resources Research Organization.
- Bradley, K. M., Caramagno, J. P., Waters, S., & Koch, A. (2011a). *Analysis of practice for the physical therapy profession: Entry-level physical therapists* (FR11-70). Alexandria, VA: Human Resources Research Organization.
- Bradley, K. M., Caramagno, J. P., Waters, S., & Koch, A. (2011b). *Analysis of practice for the physical therapy profession: Entry-level physical therapist assistants* (FR11-71). Alexandria, VA: Human Resources Research Organization.
- Knapp, D. J., Russell, T. L., Byrum, C., & Waters, S. (2007a). *Practice analysis update for physical therapist assistant licensure examinations offered by the Federation of State Boards of Physical Therapy* (FR-07-09). Alexandria, VA: Human Resources Research Organization.
- Knapp, D. J., Russell, T. L., Byrum, C., & Waters, S. (2007b). *Practice analysis update for physical therapist licensure examinations offered by the Federation of State Boards of Physical Therapy* (FR-07-08). Alexandria, VA: Human Resources Research Organization.
- McGraw, K. O., & Wong, S. P. (1996). Forming inferences about some intraclass correlation coefficients. *Psychological Methods*, 1, 30-46.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: uses in assessing rater reliability. *Psychological Bulletin*, 86, 420-428.

## Appendix A. Summary of Background Questionnaire Responses

**Table A1. Descriptive Statistics for the 2018 Background Questionnaire**

| Question  | Count     |            |          |           | Percent   |            |          |           |
|---|-----------|------------|----------|-----------|-----------|------------|----------|-----------|
|   | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA |
| <b>Q1 What is your gender?</b>  |           |            |          |           |           |            |          |           |
| I prefer not to respond   | 11        | 24         | 7        | 8         | 2.0       | 1.9        | 0.7      | 1.4       |
| Female  | 403       | 904        | 665      | 398       | 71.5      | 71.1       | 67.2     | 71.5      |
| Male  | 136       | 306        | 293      | 138       | 24.1      | 24.1       | 29.6     | 24.8      |
| [other]   | 0         | 0          | 0        | 0         | 0.0       | 0.0        | 0.0      | 0.0       |
| <b>Q2 Are you Hispanic or Latino?</b>   |           |            |          |           |           |            |          |           |
| I prefer not to respond   | 21        | 50         | 19       | 10        | 3.7       | 3.9        | 1.9      | 1.8       |
| Yes   | 21        | 52         | 39       | 51        | 3.7       | 4.1        | 3.9      | 9.2       |
| No  | 517       | 1149       | 917      | 487       | 91.7      | 90.3       | 92.7     | 87.4      |
| <b>Q3 What is your race?</b>  |           |            |          |           |           |            |          |           |
| I prefer not to respond   | 33        | 84         | 32       | 23        | 5.9       | 6.6        | 3.2      | 4.1       |
| American Indian or Alaska Native  | 2         | 7          | 5        | 7         | 0.4       | 0.6        | 0.5      | 1.3       |
| Asian   | 89        | 150        | 209      | 55        | 15.8      | 11.8       | 21.1     | 9.9       |
| Black or African American   | 10        | 34         | 25       | 25        | 1.8       | 2.7        | 2.5      | 4.5       |
| Native Hawaiian or Other Pacific Islander   | 3         | 2          | 8        | 2         | 0.5       | 0.2        | 0.8      | 0.4       |
| White   | 419       | 971        | 695      | 428       | 74.3      | 76.3       | 70.3     | 76.8      |
| [other]   | 10        | 26         | 21       | 23        | 1.8       | 2.0        | 2.1      | 4.1       |
| <b>Q4 What is the highest academic degree related to physical therapy that you have earned?</b> |           |            |          |           |           |            |          |           |
| Certificate   | 0         | 0          | 0        | 0         | 0.0       | 0.0        | 0.0      | 0.0       |
| Associate's   | 0         | 438        | 0        | 422       | 0.0       | 34.4       | 0.0      | 75.8      |
| Bachelor's  | 57        | 143        | 96       | 111       | 10.1      | 11.2       | 9.7      | 19.9      |
| Master's  | 119       | 156        | 50       | 14        | 21.1      | 12.3       | 5.1      | 2.5       |
| Doctor of Physical Therapy (DPT)  | 369       | 501        | 823      | 7         | 65.4      | 39.4       | 83.2     | 1.3       |
| Doctoral degree (PhD, EdD, clinical doctorate, or other)  | 11        | 18         | 8        | 0         | 2.0       | 1.4        | 0.8      | 0.0       |
| [other]   | 4         | 8          | 5        | 1         | 0.7       | 0.6        | 0.5      | 0.2       |
| <b>Q5 Where did you complete your entry-level physical therapy education?</b>                   |           |            |          |           |           |            |          |           |
| United States   | 489       | 1106       | 811      | 517       | 86.7      | 86.9       | 82.0     | 92.8      |
| Canada  | 1         | 1          | 5        | 0         | 0.2       | 0.1        | 0.5      | 0.0       |
| Egypt   | 1         | 4          | 5        | 2         | 0.2       | 0.3        | 0.5      | 0.4       |
| India   | 16        | 40         | 40       | 15        | 2.8       | 3.1        | 4.0      | 2.7       |
| Philippines   | 47        | 86         | 101      | 13        | 8.3       | 6.8        | 10.2     | 2.3       |
| South Korea   | 1         | 0          | 8        | 2         | 0.2       | 0.0        | 0.8      | 0.4       |
| United Kingdom  | 0         | 1          | 2        | 0         | 0.0       | 0.1        | 0.2      | 0.0       |
| [other]   | 7         | 18         | 7        | 3         | 1.2       | 1.4        | 0.7      | 0.5       |

(continued)

**Table A1. Descriptive Statistics for the 2018 Background Questionnaire (continued)**

| Question  | Count     |            |          |           | Percent   |            |          |           |
|---|-----------|------------|----------|-----------|-----------|------------|----------|-----------|
|   | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA |
| <b>Q6 In what year were you FIRST licensed as a physical therapist in the United States, the District of Columbia, U.S. Virgin Islands, or Puerto Rico?</b> |           |            |          |           |           |            |          |           |
| Not selected  | 1         | 0          | 1        | 0         | 0.2       | 0.0        | 0.1      | 0.0       |
| 1955-1959   | 0         | 0          | 0        | 0         | 0.0       | 0.0        | 0.0      | 0.0       |
| 1960-1969   | 0         | 0          | 0        | 1         | 0.0       | 0.0        | 0.0      | 0.2       |
| 1970-1979   | 0         | 1          | 0        | 0         | 0.0       | 0.1        | 0.0      | 0.0       |
| 1980-1989   | 1         | 3          | 1        | 0         | 0.2       | 0.2        | 0.1      | 0.0       |
| 1990-1999   | 85        | 179        | 0        | 5         | 15.1      | 14.1       | 0.0      | 0.9       |
| 2000-2009   | 249       | 527        | 0        | 3         | 44.1      | 41.4       | 0.0      | 0.5       |
| 2010-2018   | 228       | 562        | 987      | 548       | 40.4      | 44.2       | 99.8     | 98.4      |
| <b>Q7 In which one of the following United States physical therapy jurisdictions do you currently have your PRIMARY clinical work setting?</b>              |           |            |          |           |           |            |          |           |
| Not selected  | 3         | 3          | 21       | 4         | 0.5       | 0.2        | 2.1      | 0.7       |
| Alabama   | 3         | 15         | 10       | 11        | 0.5       | 1.2        | 1.0      | 2.0       |
| Alaska  | 4         | 1          | 4        | 0         | 0.7       | 0.1        | 0.4      | 0.0       |
| Arizona   | 8         | 29         | 24       | 12        | 1.4       | 2.3        | 2.4      | 2.2       |
| Arkansas  | 7         | 16         | 8        | 5         | 1.2       | 1.3        | 0.8      | 0.9       |
| California  | 39        | 86         | 74       | 41        | 6.9       | 6.8        | 7.5      | 7.4       |
| Colorado  | 11        | 21         | 20       | 5         | 2.0       | 1.7        | 2.0      | 0.9       |
| Connecticut   | 7         | 9          | 21       | 9         | 1.2       | 0.7        | 2.1      | 1.6       |
| District of Columbia (Washington)   | 6         | 0          | 5        | 2         | 1.1       | 0.0        | 0.5      | 0.4       |
| Delaware  | 4         | 4          | 9        | 4         | 0.7       | 0.3        | 0.9      | 0.7       |
| Florida   | 14        | 67         | 34       | 49        | 2.5       | 5.3        | 3.4      | 8.8       |
| Georgia   | 20        | 38         | 29       | 11        | 3.5       | 3.0        | 2.9      | 2.0       |
| Guam  | 1         | 0          | 0        | 0         | 0.2       | 0.0        | 0.0      | 0.0       |
| Hawaii  | 4         | 2          | 2        | 4         | 0.7       | 0.2        | 0.2      | 0.7       |
| Idaho   | 6         | 6          | 6        | 9         | 1.1       | 0.5        | 0.6      | 1.6       |
| Illinois  | 29        | 43         | 42       | 23        | 5.1       | 3.4        | 4.2      | 4.1       |
| Indiana   | 9         | 47         | 20       | 16        | 1.6       | 3.7        | 2.0      | 2.9       |
| Iowa  | 3         | 17         | 11       | 14        | 0.5       | 1.3        | 1.1      | 2.5       |
| Kansas  | 4         | 10         | 15       | 7         | 0.7       | 0.8        | 1.5      | 1.3       |
| Kentucky  | 3         | 26         | 11       | 6         | 0.5       | 2.0        | 1.1      | 1.1       |
| Louisiana   | 6         | 21         | 7        | 4         | 1.1       | 1.7        | 0.7      | 0.7       |
| Maine   | 5         | 8          | 2        | 3         | 0.9       | 0.6        | 0.2      | 0.5       |
| Maryland  | 16        | 21         | 25       | 10        | 2.8       | 1.7        | 2.5      | 1.8       |
| Massachusetts   | 14        | 30         | 38       | 10        | 2.5       | 2.4        | 3.8      | 1.8       |
| Michigan  | 19        | 39         | 14       | 22        | 3.4       | 3.1        | 1.4      | 3.9       |
| Minnesota   | 6         | 20         | 34       | 6         | 1.1       | 1.6        | 3.4      | 1.1       |

(continued)

**Table A1. Descriptive Statistics for the 2018 Background Questionnaire (continued)**

| Question   | Count     |            |          |           | Percent   |            |          |           |
|--|-----------|------------|----------|-----------|-----------|------------|----------|-----------|
|  | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA |
| <b>Q7 (continued) In which one of the following United States physical therapy jurisdictions do you currently have your PRIMARY clinical work setting?</b> |           |            |          |           |           |            |          |           |
| Mississippi  | 4         | 15         | 3        | 5         | 0.7       | 1.2        | 0.3      | 0.9       |
| Missouri   | 6         | 18         | 21       | 19        | 1.1       | 1.4        | 2.1      | 3.4       |
| Montana  | 6         | 3          | 4        | 5         | 1.1       | 0.2        | 0.4      | 0.9       |
| Nebraska   | 4         | 5          | 7        | 8         | 0.7       | 0.4        | 0.7      | 1.4       |
| Nevada   | 3         | 8          | 4        | 10        | 0.5       | 0.6        | 0.4      | 1.8       |
| New Hampshire  | 8         | 18         | 4        | 6         | 1.4       | 1.4        | 0.4      | 1.1       |
| New Jersey   | 53        | 49         | 42       | 4         | 9.4       | 3.9        | 4.2      | 0.7       |
| New Mexico   | 3         | 13         | 9        | 10        | 0.5       | 1.0        | 0.9      | 1.8       |
| New York   | 43        | 73         | 92       | 35        | 7.6       | 5.7        | 9.3      | 6.3       |
| North Carolina   | 14        | 43         | 24       | 7         | 2.5       | 3.4        | 2.4      | 1.3       |
| North Dakota   | 4         | 3          | 4        | 3         | 0.7       | 0.2        | 0.4      | 0.5       |
| Northern Mariana Islands   | 0         | 0          | 1        | 0         | 0.0       | 0.0        | 0.1      | 0.0       |
| Ohio   | 5         | 36         | 20       | 21        | 0.9       | 2.8        | 2.0      | 3.8       |
| Oklahoma   | 1         | 7          | 4        | 3         | 0.2       | 0.6        | 0.4      | 0.5       |
| Oregon   | 10        | 17         | 14       | 10        | 1.8       | 1.3        | 1.4      | 1.8       |
| Pennsylvania   | 21        | 55         | 42       | 24        | 3.7       | 4.3        | 4.2      | 4.3       |
| Puerto Rico  | 0         | 2          | 0        | 0         | 0.0       | 0.2        | 0.0      | 0.0       |
| Rhode Island   | 2         | 10         | 4        | 1         | 0.4       | 0.8        | 0.4      | 0.2       |
| South Carolina   | 7         | 36         | 18       | 8         | 1.2       | 2.8        | 1.8      | 1.4       |
| South Dakota   | 1         | 0          | 3        | 0         | 0.2       | 0.0        | 0.3      | 0.0       |
| Tennessee  | 7         | 23         | 18       | 8         | 1.2       | 1.8        | 1.8      | 1.4       |
| Texas  | 50        | 119        | 67       | 33        | 8.9       | 9.4        | 6.8      | 5.9       |
| U.S. Virgin Islands  | 0         | 0          | 1        | 0         | 0.0       | 0.0        | 0.1      | 0.0       |
| Utah   | 1         | 10         | 9        | 5         | 0.2       | 0.8        | 0.9      | 0.9       |
| Vermont  | 2         | 3          | 1        | 0         | 0.4       | 0.2        | 0.1      | 0.0       |
| Virginia   | 18        | 48         | 31       | 15        | 3.2       | 3.8        | 3.1      | 2.7       |
| Washington   | 20        | 33         | 23       | 13        | 3.5       | 2.6        | 2.3      | 2.3       |
| West Virginia  | 2         | 9          | 6        | 6         | 0.4       | 0.7        | 0.6      | 1.1       |
| Wisconsin  | 11        | 19         | 15       | 5         | 2.0       | 1.5        | 1.5      | 0.9       |
| Wyoming  | 2         | 3          | 2        | 3         | 0.4       | 0.2        | 0.2      | 0.5       |

(continued)

**Table A1. Descriptive Statistics for the 2018 Background Questionnaire (continued)**

| Question   | Count     |            |          |           | Percent   |            |          |           |
|--|-----------|------------|----------|-----------|-----------|------------|----------|-----------|
|  | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA |
| <b>Q8 In which of the following United States physical therapy jurisdictions are you currently licensed (percentages may sum to more than 100%)?</b> |           |            |          |           |           |            |          |           |
| Alabama  | 7         | 20         | 14       | 12        | 1.2       | 1.6        | 1.4      | 2.2       |
| Alaska   | 7         | 4          | 8        | 0         | 1.2       | 0.3        | 0.8      | 0.0       |
| Arizona  | 11        | 36         | 32       | 14        | 2.0       | 2.8        | 3.2      | 2.5       |
| Arkansas   | 8         | 17         | 9        | 5         | 1.4       | 1.3        | 0.9      | 0.9       |
| California   | 49        | 105        | 85       | 44        | 8.7       | 8.3        | 8.6      | 7.9       |
| Colorado   | 16        | 32         | 27       | 10        | 2.8       | 2.5        | 2.7      | 1.8       |
| Connecticut  | 8         | 13         | 30       | 9         | 1.4       | 1.0        | 3.0      | 1.6       |
| District of Columbia (Washington)  | 8         | 2          | 6        | 2         | 1.4       | 0.2        | 0.6      | 0.4       |
| Delaware   | 4         | 6          | 15       | 5         | 0.7       | 0.5        | 1.5      | 0.9       |
| Florida  | 25        | 89         | 46       | 48        | 4.4       | 7.0        | 4.7      | 8.6       |
| Georgia  | 21        | 47         | 29       | 12        | 3.7       | 3.7        | 2.9      | 2.2       |
| Guam   | 1         | 0          | 0        | 0         | 0.2       | 0.0        | 0.0      | 0.0       |
| Hawaii   | 9         | 5          | 4        | 5         | 1.6       | 0.4        | 0.4      | 0.9       |
| Idaho  | 6         | 9          | 14       | 10        | 1.1       | 0.7        | 1.4      | 1.8       |
| Illinois   | 33        | 59         | 60       | 27        | 5.9       | 4.6        | 6.1      | 4.8       |
| Indiana  | 12        | 56         | 24       | 19        | 2.1       | 4.4        | 2.4      | 3.4       |
| Iowa   | 4         | 20         | 14       | 15        | 0.7       | 1.6        | 1.4      | 2.7       |
| Kansas   | 5         | 10         | 19       | 10        | 0.9       | 0.8        | 1.9      | 1.8       |
| Kentucky   | 5         | 30         | 15       | 7         | 0.9       | 2.4        | 1.5      | 1.3       |
| Louisiana  | 7         | 19         | 8        | 4         | 1.2       | 1.5        | 0.8      | 0.7       |
| Maine  | 6         | 12         | 5        | 4         | 1.1       | 0.9        | 0.5      | 0.7       |
| Maryland   | 20        | 29         | 28       | 12        | 3.5       | 2.3        | 2.8      | 2.2       |
| Massachusetts  | 21        | 38         | 39       | 13        | 3.7       | 3.0        | 3.9      | 2.3       |
| Michigan   | 20        | 43         | 15       | 25        | 3.5       | 3.4        | 1.5      | 4.5       |
| Minnesota  | 9         | 25         | 34       | 6         | 1.6       | 2.0        | 3.4      | 1.1       |
| Mississippi  | 4         | 14         | 5        | 4         | 0.7       | 1.1        | 0.5      | 0.7       |
| Missouri   | 9         | 27         | 28       | 18        | 1.6       | 2.1        | 2.8      | 3.2       |
| Montana  | 6         | 5          | 5        | 7         | 1.1       | 0.4        | 0.5      | 1.3       |
| Nebraska   | 5         | 7          | 8        | 11        | 0.9       | 0.6        | 0.8      | 2.0       |
| Nevada   | 3         | 11         | 5        | 9         | 0.5       | 0.9        | 0.5      | 1.6       |
| New Hampshire  | 9         | 22         | 5        | 6         | 1.6       | 1.7        | 0.5      | 1.1       |
| New Jersey   | 61        | 55         | 46       | 5         | 10.8      | 4.3        | 4.7      | 0.9       |
| New Mexico   | 4         | 16         | 18       | 11        | 0.7       | 1.3        | 1.8      | 2.0       |
| New York   | 65        | 95         | 118      | 37        | 11.5      | 7.5        | 11.9     | 6.6       |
| North Carolina   | 14        | 46         | 28       | 6         | 2.5       | 3.6        | 2.8      | 1.1       |
| North Dakota   | 4         | 2          | 4        | 3         | 0.7       | 0.2        | 0.4      | 0.5       |
| Northern Mariana Islands   | 0         | 0          | 1        | 0         | 0.0       | 0.0        | 0.1      | 0.0       |
| Ohio   | 8         | 43         | 25       | 26        | 1.4       | 3.4        | 2.5      | 4.7       |

(continued)

**Table A1. Descriptive Statistics for the 2018 Background Questionnaire (continued)**

| Question   | Count     |            |          |           | Percent   |            |          |           |
|--|-----------|------------|----------|-----------|-----------|------------|----------|-----------|
|  | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA |
| <b>Q8 (continued) In which of the following United States physical therapy jurisdictions are you currently licensed (percentages may sum to more than 100%)?</b> |           |            |          |           |           |            |          |           |
| Oklahoma   | 1         | 8          | 6        | 3         | 0.2       | 0.6        | 0.6      | 0.5       |
| Oregon   | 13        | 23         | 26       | 11        | 2.3       | 1.8        | 2.6      | 2.0       |
| Pennsylvania   | 27        | 62         | 50       | 32        | 4.8       | 4.9        | 5.1      | 5.7       |
| Puerto Rico  | 0         | 1          | 0        | 0         | 0.0       | 0.1        | 0.0      | 0.0       |
| Rhode Island   | 3         | 10         | 6        | 1         | 0.5       | 0.8        | 0.6      | 0.2       |
| South Carolina   | 12        | 42         | 26       | 9         | 2.1       | 3.3        | 2.6      | 1.6       |
| South Dakota   | 1         | 2          | 4        | 0         | 0.2       | 0.2        | 0.4      | 0.0       |
| Tennessee  | 8         | 32         | 23       | 10        | 1.4       | 2.5        | 2.3      | 1.8       |
| Texas  | 56        | 143        | 99       | 41        | 9.9       | 11.2       | 10.0     | 7.4       |
| U.S. Virgin Islands  | 0         | 1          | 1        | 0         | 0.0       | 0.1        | 0.1      | 0.0       |
| Utah   | 3         | 15         | 13       | 5         | 0.5       | 1.2        | 1.3      | 0.9       |
| Vermont  | 0         | 3          | 3        | 0         | 0.0       | 0.2        | 0.3      | 0.0       |
| Virginia   | 25        | 52         | 45       | 19        | 4.4       | 4.1        | 4.6      | 3.4       |
| Washington   | 23        | 42         | 25       | 13        | 4.1       | 3.3        | 2.5      | 2.3       |
| West Virginia  | 3         | 10         | 7        | 5         | 0.5       | 0.8        | 0.7      | 0.9       |
| Wisconsin  | 12        | 22         | 24       | 7         | 2.1       | 1.7        | 2.4      | 1.3       |
| Wyoming  | 2         | 3          | 2        | 3         | 0.4       | 0.2        | 0.2      | 0.5       |
| <b>Q9 Which best describes the location of your PRIMARY clinical work setting?</b>   |           |            |          |           |           |            |          |           |
| Urban/Metropolitan   | 212       | 412        | 383      | 175       | 37.6      | 32.4       | 38.7     | 31.4      |
| Suburban   | 253       | 587        | 431      | 244       | 44.9      | 46.1       | 43.6     | 43.8      |
| Rural  | 92        | 264        | 157      | 127       | 16.3      | 20.8       | 15.9     | 22.8      |
| <b>Q10 What is your employment status as a physical therapist (physical therapist assistant)?</b>  |           |            |          |           |           |            |          |           |
| Actively employed as a physical therapist (physical therapist assistant) full-time   | 417       | 982        | 905      | 446       | 73.9      | 77.2       | 91.5     | 80.1      |
| Actively employed as a physical therapist (physical therapist assistant) part-time   | 99        | 214        | 31       | 85        | 17.6      | 16.8       | 3.1      | 15.3      |
| Self-employed as a physical therapist (physical therapist assistant) full-time   | 19        | 33         | 18       | 8         | 3.4       | 2.6        | 1.8      | 1.4       |
| Self-employed as a physical therapist (physical therapist assistant) part-time   | 24        | 22         | 6        | 7         | 4.3       | 1.7        | 0.6      | 1.3       |
| Retired  | 0         | 0          | 0        | 0         | 0.0       | 0.0        | 0.0      | 0.0       |
| Unemployed, seeking employment as a physical therapist (physical therapist assistant)  | 5         | 21         | 29       | 11        | 0.9       | 1.7        | 2.9      | 2.0       |
| NOT seeking employment as a physical therapist (physical therapist assistant)  | 0         | 0          | 0        | 0         | 0.0       | 0.0        | 0.0      | 0.0       |

(continued)

**Table A1. Descriptive Statistics for the 2018 Background Questionnaire (continued)**

| Question  | Count     |            |          |           | Percent   |            |          |           |
|---|-----------|------------|----------|-----------|-----------|------------|----------|-----------|
|   | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA |
| <b>Q11 How many physical therapist (physical therapist assistant) positions/jobs have you held in the past 12 months?</b> |           |            |          |           |           |            |          |           |
| 1   | 399       | 880        | 637      | 337       | 70.7      | 69.2       | 64.4     | 60.5      |
| 2 to 3  | 151       | 353        | 329      | 194       | 26.8      | 27.8       | 33.3     | 34.8      |
| 4 to 5  | 7         | 25         | 11       | 17        | 1.2       | 2.0        | 1.1      | 3.1       |
| 6 to 7  | 1         | 3          | 1        | 1         | 0.2       | 0.2        | 0.1      | 0.2       |
| More than 7   | 0         | 1          | 1        | 1         | 0.0       | 0.1        | 0.1      | 0.2       |
| <b>Q12 Summary: Count of respondents spending at least 50% of their time in a facility.</b>                               |           |            |          |           |           |            |          |           |
| Academic institution (post-secondary)   | 74        | 171        | 139      | 48        | 13.1      | 13.4       | 14.1     | 8.6       |
| School system (preschool/primary/secondary)   | 166       | 266        | 263      | 94        | 29.4      | 20.9       | 26.6     | 16.9      |
| Acute care hospital   | 137       | 324        | 191      | 86        | 24.3      | 25.5       | 19.3     | 15.4      |
| Health and wellness facility  | 155       | 254        | 335      | 185       | 27.5      | 20.0       | 33.9     | 33.2      |
| Outpatient facility (health system or hospital-based)   | 170       | 544        | 375      | 261       | 30.1      | 42.8       | 37.9     | 46.9      |
| Outpatient facility (private)   | 152       | 250        | 330      | 184       | 27.0      | 19.7       | 33.4     | 33.0      |
| Industrial Rehabilitation   | 1         | 4          | 2        | 0         | 0.2       | 0.3        | 0.2      | 0.0       |
| Inpatient Rehab Facility (IRF)  | 22        | 62         | 47       | 19        | 3.9       | 4.9        | 4.8      | 3.4       |
| US Military/Veterans Administration/Indian Health Services  | 7         | 30         | 10       | 1         | 1.2       | 2.4        | 1.0      | 0.2       |
| Patient's home/home care  | 80        | 177        | 60       | 40        | 14.2      | 13.9       | 6.1      | 7.2       |
| Research center   | 3         | 0          | 0        | 0         | 0.5       | 0.0        | 0.0      | 0.0       |
| Skilled Nursing Facility (SNF)/Long-term Care/Assisted Living Facility  | 43        | 306        | 128      | 172       | 7.6       | 24.1       | 12.9     | 30.9      |
| Other   | 17        | 13         | 12       | 3         | 3.0       | 1.0        | 1.2      | 0.5       |
| <b>Q13 For the facility in which you work the most, what is your principal area of responsibility?</b>                    |           |            |          |           |           |            |          |           |
| Administration/Management   | 31        | 72         | 9        | 6         | 5.5       | 5.7        | 0.9      | 1.1       |
| Consultation  | 7         | 5          | 6        | 3         | 1.2       | 0.4        | 0.6      | 0.5       |
| Direct patient care   | 486       | 1146       | 948      | 538       | 86.2      | 90.1       | 95.9     | 96.6      |
| Research  | 6         | 0          | 2        | 0         | 1.1       | 0.0        | 0.2      | 0.0       |
| Sales/Marketing   | 0         | 1          | 0        | 0         | 0.0       | 0.1        | 0.0      | 0.0       |
| Academic education  | 10        | 14         | 4        | 1         | 1.8       | 1.1        | 0.4      | 0.2       |
| Clinical education  | 6         | 7          | 4        | 0         | 1.1       | 0.6        | 0.4      | 0.0       |
| [other]   | 14        | 15         | 5        | 4         | 2.5       | 1.2        | 0.5      | 0.7       |
| <b>Q14 Approximately what percentage of your time over the past 12 months was spent in direct patient care?</b>           |           |            |          |           |           |            |          |           |
| 0%  | 4         | 16         | 1        | 0         | 0.7       | 1.3        | 0.1      | 0.0       |
| 1 to 25%  | 29        | 38         | 4        | 4         | 5.1       | 3.0        | 0.4      | 0.7       |
| 26 to 50%   | 20        | 37         | 13       | 4         | 3.5       | 2.9        | 1.3      | 0.7       |
| 51 to 75%   | 83        | 139        | 91       | 36        | 14.7      | 10.9       | 9.2      | 6.5       |
| 76 to 100%  | 423       | 1033       | 872      | 510       | 75.0      | 81.2       | 88.2     | 91.6      |

(continued)



**Table A1. Descriptive Statistics for the 2018 Background Questionnaire (continued)**

| Question   | Count     |            |          |           | Percent   |            |          |           |
|--|-----------|------------|----------|-----------|-----------|------------|----------|-----------|
|  | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA | PT<br>KSR | PTA<br>KSR | PT<br>WA | PTA<br>WA |
| <b>Q15 Summary: Count of respondents spending at least 50% of their time with a population group.</b>  |           |            |          |           |           |            |          |           |
| 18 and under   | 96        | 65         | 72       | 14        | 17.0      | 5.1        | 7.3      | 2.5       |
| 19 to 64   | 215       | 350        | 384      | 174       | 38.1      | 27.5       | 38.8     | 31.2      |
| 65 and over  | 230       | 821        | 460      | 329       | 40.8      | 64.5       | 46.5     | 59.1      |
| <b>Q16 Are you a current member of American Physical Therapy Association (APTA)?</b>   |           |            |          |           |           |            |          |           |
| Yes  | 176       | 288        | 430      | 126       | 31.2      | 22.6       | 43.5     | 22.6      |
| No   | 375       | 950        | 516      | 391       | 66.5      | 74.7       | 52.2     | 70.2      |
| I don't know   | 5         | 20         | 37       | 36        | 0.9       | 1.6        | 3.7      | 6.5       |
| <b>Q17 Which of these statements is true regarding your experience supervising PTAs over the past 12 months?</b>                                     |           |            |          |           |           |            |          |           |
| I routinely supervise PTAs and have a good understanding of the knowledge and skills they need to provide safe and effective care                    | 122       | 742        | 644      | --        | 21.6      | 58.3       | 65.1     | --        |
| I do NOT routinely supervise PTAs and/or I do NOT have a good understanding of the knowledge and skills they need to provide safe and effective care | 428       | --         | 340      | --        | 75.9      | --         | 34.4     | --        |

*Note.* Percentages are based on the observed values divided by the total number of usable cases. Missing data are not reported. Within a question, the results may not sum to 100%. For question 8, respondents were allowed to select multiple jurisdictions in which they are currently licensed. The respondents who indicated being licensed in Guam and Northern Mariana Islands are also licensed in at least one U.S. state. For questions 12 and 15, percentages may not sum to 100% because these items used a rate all that apply format. Question 17 was not administered to PTA respondents. The 742 respondents shown for Q17 within the PTA KSR sample are PT KSR survey respondents who were reassigned based on their response to Q17.

## **Appendix B. Summary of Work Activity and Knowledge and Skill Requirements Survey Responses**

**Table B1. PT Work Activity Survey Results**

| PT WAs  | %Perf |       | n    |      | Importance |      |      |      | %Imp  |       |
|---|-------|-------|------|------|------------|------|------|------|-------|-------|
|   | 2018  | 2016  | 2018 | 2016 | M          |      | SD   |      | 2018  | 2016  |
|   |       |       |      |      | 2018       | 2016 | 2018 | 2016 |       |       |
| <b>PATIENT/CLIENT ASSESSMENT</b>  |       |       |      |      |            |      |      |      |       |       |
| <i>Information Gathering &amp; Synthesis</i>  |       |       |      |      |            |      |      |      |       |       |
| <i>Interview patients/clients, caregivers, and family to obtain patient/client history and current information (e.g., medical, surgical, medications, social, cultural, language preference, economic) to</i> |       |       |      |      |            |      |      |      |       |       |
| establish prior and current level of function/activity  | 100.0 | 99.8  | 489  | 460  | 4.74       | 4.66 | 0.55 | 0.51 | 100.0 | 100.0 |
| establish general health status   | 100.0 | 99.8  | 489  | 460  | 4.46       | 4.52 | 0.72 | 0.64 | 99.8  | 99.3  |
| identify red flags (e.g., fever, malaise, unexplained weight change) and contraindications  | 100.0 | 99.6  | 489  | 459  | 4.74       | 4.68 | 0.59 | 0.56 | 99.6  | 99.3  |
| identify risk factors and needs for preventative measures   | 100.0 | 99.6  | 489  | 460  | 4.37       | 4.34 | 0.78 | 0.76 | 99.8  | 97.8  |
| identify patient/client's, family/caregiver's goals, values, and preferences  | 100.0 | 99.8  | 489  | 458  | 4.45       | 4.46 | 0.73 | 0.62 | 99.8  | 99.3  |
| determine if patient/client is appropriate for PT   | 99.8  | 99.8  | 489  | 456  | 4.52       | 4.52 | 0.72 | 0.64 | 99.8  | 99.6  |
| determine insurance and financial resources and issues (e.g., co-pays, deductibles, insurance limitations)  | 96.3  | 88.6  | 489  | 445  | 3.29       | 3.50 | 1.17 | 1.05 | 89.8  | 82.5  |
| determine impact of medications on plan of care (e.g., medication reconciliation, timing of intervention delivery, adherence)   | 99.4  | 98.1  | 489  | 455  | 3.81       | 3.97 | 1.00 | 0.86 | 97.5  | 96.5  |
| Administer standardized questionnaires (e.g., pain inventory, fall risk assessment)   | 99.2  | 97.9  | 489  | 454  | 3.73       | 4.03 | 1.04 | 0.88 | 96.9  | 94.9  |
| Review medical records (e.g., lab values, diagnostic tests, imaging, specialty reports, narrative, consults)  | 100.0 | 100.0 | 489  | 459  | 4.16       | 4.22 | 0.92 | 0.75 | 99.8  | 97.6  |
| Gather information/discuss patient/client's current health status with interprofessional/interdisciplinary team members   | 99.8  | 99.0  | 489  | 395  | 3.98       | 4.11 | 0.96 | 0.72 | 99.4  | 99.0  |
| Identify signs/symptoms of change in patient/client's health status that require intervention by interprofessional/interdisciplinary team members   | 99.6  | 99.5  | 489  | 395  | 4.40       | 4.33 | 0.79 | 0.69 | 99.2  | 99.0  |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs   | Importance |      |      |      |      |      |      |      |      |       |
|--|------------|------|------|------|------|------|------|------|------|-------|
|  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |       |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016  |
| <b>Systems Review</b>  |            |      |      |      |      |      |      |      |      |       |
| <i>Perform screen of the</i>   |            |      |      |      |      |      |      |      |      |       |
| patient/client's current affect, cognition, communication, and learning preferences (e.g., ability to convey needs, consciousness, orientation, expected emotional/behavioral responses) | 97.1       | 97.3 | 489  | 393  | 4.00 | 4.04 | 0.97 | 0.80 | 96.3 | 97.2  |
| patient/client's quality of speech, hearing, and vision (e.g., dysarthria, pitch/tone, use of corrective lenses, use of hearing aids)  | 93.9       | 81.8 | 489  | 376  | 3.25 | 3.43 | 1.18 | 0.99 | 89.0 | 82.7  |
| vestibular system (e.g., dizziness, vertigo)   | 97.1       | 89.5 | 481  | 383  | 3.50 | 3.57 | 1.04 | 0.89 | 92.8 | 90.6  |
| gastrointestinal system (e.g., difficulty swallowing, nausea, change in appetite/diet, change in bowel function)   | 94.1       | 76.0 | 481  | 372  | 2.90 | 3.19 | 1.05 | 1.01 | 84.9 | 75.0  |
| genitourinary system (e.g., changes in bladder function, catheter complications)   | 91.6       | 72.5 | 481  | 362  | 2.98 | 3.20 | 1.11 | 1.05 | 82.6 | 73.5  |
| reproductive system (e.g., sexual and/or menstrual dysfunction, menopause status)  | 84.9       | 48.4 | 481  | 350  | 2.45 | 2.75 | 1.07 | 1.08 | 67.1 | 54.6  |
| cardiovascular/pulmonary system (e.g., blood pressure, heart rate, respiration rate)   | 99.6       | 97.6 | 481  | 393  | 4.19 | 4.22 | 0.95 | 0.77 | 96.9 | 98.2  |
| lymphatic system (e.g., primary and/or secondary edema)  | 95.1       | 78.7 | 481  | 371  | 3.12 | 3.33 | 1.06 | 1.03 | 88.3 | 80.6  |
| integumentary system (e.g., presence of scar formation, skin integrity, discoloration)   | 99.4       | 99.0 | 481  | 388  | 3.59 | 3.92 | 0.97 | 0.79 | 95.9 | 96.6  |
| musculoskeletal system (e.g., gross symmetry, strength, range of motion)   | 100.0      | 99.8 | 481  | 387  | 4.77 | 4.70 | 0.56 | 0.48 | 98.0 | 100.0 |
| neuromuscular system (e.g., gross coordination, motor function, balance, locomotion, gross sensory function)   | 100.0      | 99.8 | 481  | 388  | 4.73 | 4.67 | 0.56 | 0.49 | 98.2 | 100.0 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs  | Importance |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|
|   | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Tests &amp; Measures</b>   |            |      |      |      |      |      |      |      |      |      |
| <b>Cardiovascular/Pulmonary</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>   |            |      |      |      |      |      |      |      |      |      |
| cardiovascular function (e.g., blood pressure, heart rate, heart sounds)  | 99.4       | 98.2 | 474  | 364  | 4.24 | 4.25 | 0.93 | 0.72 | 95.9 | 98.4 |
| pulmonary function (e.g., respiratory rate, breathing patterns, breath sounds, chest excursion)   | 98.2       | 85.7 | 474  | 349  | 3.71 | 3.85 | 1.18 | 0.96 | 92.0 | 90.8 |
| perfusion and gas exchange (e.g., oxygen saturation)  | 93.0       | 71.5 | 474  | 342  | 3.65 | 3.83 | 1.21 | 1.01 | 85.5 | 88.3 |
| peripheral circulation (e.g., capillary refill, blood pressure in upper versus lower extremities)   | 93.3       | 79.6 | 474  | 342  | 3.24 | 3.54 | 1.16 | 1.01 | 85.1 | 84.8 |
| critical limb ischemia (e.g., peripheral pulses, skin perfusion pressure)   | 89.8       | 73.2 | 474  | 331  | 3.21 | 3.49 | 1.17 | 1.03 | 82.2 | 83.4 |
| physiological responses to position change (e.g., orthostatic hypotension, skin color, blood pressure, heart rate)                        | 98.8       | 93.8 | 474  | 360  | 4.04 | 4.00 | 1.01 | 0.85 | 94.7 | 95.6 |
| aerobic capacity under maximal and submaximal conditions (e.g., endurance, exercise tolerance, metabolic equivalents, perceived exertion) | 94.9       | 77.1 | 474  | 340  | 3.66 | 3.56 | 1.13 | 1.00 | 89.2 | 85.9 |
| <b>Anthropometric</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>   |            |      |      |      |      |      |      |      |      |      |
| body composition (e.g., percent body fat, lean muscle mass)   | 86.7       | 39.9 | 474  | 312  | 2.51 | 2.71 | 1.08 | 1.13 | 70.3 | 52.9 |
| body dimensions (e.g., height, weight, girth, limb length, head circumference/shape)  | 93.3       | 72.9 | 474  | 341  | 2.60 | 2.99 | 1.08 | 1.08 | 76.9 | 66.3 |
| Quantify and qualify edema (e.g., pitting, volume, circumference)   | 97.3       | 90.2 | 474  | 354  | 3.23 | 3.45 | 1.01 | 0.90 | 91.4 | 88.4 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs   | %Perf |      | n    |      | Importance |      |      |      | %Imp |      |
|--|-------|------|------|------|------------|------|------|------|------|------|
|  | 2018  | 2016 | 2018 | 2016 | M          |      | SD   |      | 2018 | 2016 |
|  |       |      |      |      | 2018       | 2016 | 2018 | 2016 |      |      |
| <b>Arousal, Attention, &amp; Cognition</b>   |       |      |      |      |            |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>  |       |      |      |      |            |      |      |      |      |      |
| arousal and orientation (e.g., level of consciousness, time, person, place, situation)   | 95.3  | 79.8 | 465  | 328  | 3.76       | 3.86 | 1.19 | 0.91 | 86.3 | 92.4 |
| attention and cognition (e.g., ability to process commands, delirium, confusion)   | 95.3  | 80.8 | 465  | 325  | 3.80       | 3.76 | 1.12 | 0.94 | 87.3 | 90.8 |
| communication (e.g., expressive and receptive skills, following instructions)  | 96.1  | 79.4 | 465  | 321  | 3.78       | 3.70 | 1.04 | 0.96 | 89.4 | 88.5 |
| recall (including memory and retention)  | 95.3  | 73.4 | 465  | 318  | 3.45       | 3.47 | 1.10 | 1.04 | 86.5 | 83.0 |
| <b>Nerve Integrity</b>   |       |      |      |      |            |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>  |       |      |      |      |            |      |      |      |      |      |
| cranial nerve integrity (e.g., facial asymmetry, oculomotor function, hearing)   | 94.3  | 83.2 | 465  | 332  | 3.38       | 3.82 | 1.18 | 0.96 | 85.5 | 90.7 |
| spinal nerve integrity (e.g., dermatome, myotome)  | 99.4  | 97.6 | 465  | 353  | 4.10       | 4.17 | 0.93 | 0.84 | 94.1 | 96.9 |
| peripheral nerve integrity (e.g., sensation, strength)   | 99.8  | 99.7 | 465  | 351  | 4.23       | 4.28 | 0.83 | 0.70 | 94.7 | 99.4 |
| neural provocation (e.g., tapping, tension, stretch)   | 95.5  | 89.7 | 465  | 337  | 3.59       | 3.81 | 1.11 | 1.00 | 87.7 | 90.2 |
| <b>Environmental &amp; Community Integration/Reintegration (Home, Work, Job, School, Play, &amp; Leisure)</b>  |       |      |      |      |            |      |      |      |      |      |
| Assess activities of daily living (ADL) (e.g., bed mobility, transfers, household mobility, dressing, self-care, toileting, sexual relations)                                  | 99.8  | 98.4 | 457  | 355  | 4.47       | 4.41 | 0.82 | 0.69 | 92.6 | 99.2 |
| Assess instrumental activities of daily living (IADL) (e.g., household chores, hobbies)  | 99.0  | 94.0 | 457  | 348  | 4.00       | 4.11 | 1.03 | 0.86 | 90.6 | 96.8 |
| Assess ability to perform skills needed for integration or reintegration into the community, work, or school   | 99.0  | 92.4 | 457  | 313  | 4.13       | 4.04 | 0.94 | 0.81 | 91.2 | 96.8 |
| Assess barriers (e.g., social, economic, physical, psychological, environmental, work conditions and activities) to home, community, work, or school integration/reintegration | 98.8  | 95.9 | 457  | 322  | 4.18       | 3.99 | 0.89 | 0.82 | 91.2 | 97.5 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs   | Importance |      |      |      |      |      |      |      |      |       |
|--|------------|------|------|------|------|------|------|------|------|-------|
|  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |       |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016  |
| <b><i>Environmental &amp; Community (continued)</i></b>  |            |      |      |      |      |      |      |      |      |       |
| Assess safety in home, community, work, or school environments   | 96.5       | 79.8 | 457  | 300  | 4.25 | 4.07 | 0.93 | 0.82 | 88.8 | 97.0  |
| Assess ability to participate in activities with or without the use of devices, equipment, or technologies   | 98.8       | 96.8 | 457  | 319  | 4.30 | 4.08 | 0.84 | 0.78 | 91.4 | 97.2  |
| <b><i>Ergonomics and Body Mechanics</i></b>  |            |      |      |      |      |      |      |      |      |       |
| <i>Select and perform tests and measures of</i>  |            |      |      |      |      |      |      |      |      |       |
| ergonomics and body mechanics during functional activities   | 98.8       | 93.3 | 446  | 317  | 4.12 | 4.00 | 0.99 | 0.87 | 88.5 | 95.9  |
| postural alignment and position (static and dynamic)   | 99.6       | 98.0 | 446  | 326  | 4.21 | 4.16 | 0.89 | 0.75 | 90.6 | 98.8  |
| specific work conditions or activities   | 97.5       | 84.0 | 446  | 301  | 3.83 | 3.75 | 1.04 | 0.91 | 87.3 | 92.0  |
| tools, devices, equipment, and workstations related to work actions, tasks, or activities                    | 96.1       | 73.4 | 446  | 282  | 3.52 | 3.58 | 1.13 | 0.95 | 82.0 | 88.3  |
| <b><i>Functional Mobility, Balance, &amp; Vestibular</i></b>   |            |      |      |      |      |      |      |      |      |       |
| <i>Select and perform tests and measures of</i>  |            |      |      |      |      |      |      |      |      |       |
| balance (dynamic and static) with or without the use of specialized equipment                                | 99.8       | 98.8 | 446  | 326  | 4.60 | 4.27 | 0.69 | 0.67 | 90.8 | 100.0 |
| gait and locomotion (e.g., ambulation, wheelchair mobility) with or without the use of specialized equipment | 99.8       | 99.4 | 446  | 327  | 4.72 | 4.42 | 0.58 | 0.64 | 90.6 | 99.7  |
| mobility during functional activities and transitional movements (e.g., transfers, bed mobility)             | 99.8       | 97.9 | 446  | 307  | 4.69 | 4.35 | 0.63 | 0.69 | 91.0 | 99.7  |
| vestibular function (e.g., peripheral dysfunction, central dysfunction, BPPV)                                | 95.3       | 84.2 | 446  | 284  | 3.64 | 3.68 | 1.03 | 0.87 | 84.5 | 93.0  |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs  | Importance |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|
|   | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b><i>Integumentary Integrity</i></b>   |            |      |      |      |      |      |      |      |      |      |
| Assess skin characteristics (e.g., continuity of skin color, sensation, temperature, texture, turgor)                       | 98.6       | 97.0 | 442  | 309  | 3.49 | 3.77 | 1.04 | 0.85 | 87.1 | 93.9 |
| Assess wound characteristics (e.g., tissue involvement, depth, tunneling, burn classification, ulcer/injury classification) | 89.2       | 61.6 | 442  | 261  | 3.17 | 3.48 | 1.17 | 1.05 | 74.4 | 81.2 |
| Assess scar tissue characteristics (e.g., banding, pliability, sensation, and texture)                                      | 94.7       | 85.4 | 442  | 288  | 3.26 | 3.52 | 1.06 | 0.96 | 81.4 | 86.8 |
| Assess activities, positioning, and postures that may produce or relieve trauma to the skin                                 | 94.5       | 84.8 | 442  | 288  | 3.83 | 3.93 | 1.08 | 0.81 | 82.8 | 95.5 |
| Assess devices and equipment that may produce or relieve trauma to the skin   | 93.5       | 78.3 | 442  | 277  | 3.71 | 3.74 | 1.10 | 0.94 | 81.6 | 90.3 |
| <b><i>Joint Integrity &amp; Range of Motion</i></b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>   |            |      |      |      |      |      |      |      |      |      |
| spinal and peripheral joint stability (e.g., ligamentous integrity, joint structure)  | 98.8       | 94.5 | 440  | 301  | 4.03 | 4.10 | 1.09 | 0.87 | 86.7 | 95.3 |
| spinal and peripheral joint mobility (e.g., glide, end feel)  | 98.2       | 93.3 | 440  | 300  | 3.90 | 4.10 | 1.19 | 0.92 | 84.5 | 95.0 |
| range of motion (e.g., passive, active, functional)   | 99.8       | 99.4 | 440  | 313  | 4.54 | 4.45 | 0.75 | 0.67 | 89.6 | 99.0 |
| flexibility (e.g., muscle length, soft tissue extensibility)  | 99.8       | 97.8 | 440  | 294  | 4.35 | 4.24 | 0.89 | 0.77 | 89.4 | 98.0 |
| <b><i>Motor Function</i></b>  |            |      |      |      |      |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>   |            |      |      |      |      |      |      |      |      |      |
| muscle tone (e.g., hypertonicity, hypotonicity, dystonia)   | 99.4       | 98.1 | 440  | 295  | 4.29 | 3.99 | 0.87 | 0.81 | 89.4 | 96.9 |
| dexterity, coordination, and agility (e.g., rapid alternating movement, finger to nose)                                     | 99.0       | 95.5 | 440  | 291  | 3.93 | 3.86 | 1.00 | 0.81 | 88.5 | 96.9 |
| ability to initiate, modify and control movement patterns and postures (e.g., catching a ball, gait)                        | 99.8       | 98.4 | 440  | 292  | 4.30 | 4.11 | 0.86 | 0.78 | 89.4 | 97.9 |
| ability to change movement performance with practice (e.g., motor learning)   | 99.8       | 95.8 | 440  | 290  | 4.30 | 4.03 | 0.83 | 0.77 | 89.6 | 97.6 |
| movement quality (e.g., purpose, precision, efficiency, biomechanics, kinematics)   | 99.6       | 97.1 | 440  | 288  | 4.39 | 4.00 | 0.77 | 0.81 | 89.6 | 96.9 |

(continued)



**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs  | %Perf |       | Importance |      |      |      |      |      |      |      |
|---|-------|-------|------------|------|------|------|------|------|------|------|
|   |       |       | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018  | 2016  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Muscle Performance</b>   |       |       |            |      |      |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>   |       |       |            |      |      |      |      |      |      |      |
| muscle strength, power, and endurance without specialized equipment (e.g., manual muscle test, functional strength testing) | 99.8  | 100.0 | 438        | 297  | 4.63 | 4.37 | 0.69 | 0.66 | 89.2 | 99.7 |
| muscle strength, power, and endurance with specialized equipment (e.g., isokinetic testing, dynamometry)                    | 89.2  | 70.6  | 438        | 258  | 3.39 | 3.43 | 1.40 | 1.06 | 69.3 | 79.8 |
| electrophysiological function using surface electrodes (e.g., surface EMG)  | 70.6  | 20.9  | 438        | 201  | 2.58 | 2.67 | 1.24 | 1.22 | 45.2 | 51.2 |
| electrophysiological function using needle insertion (e.g., nerve conduction)   | 64.6  | 8.4   | 438        | 190  | 2.31 | 2.41 | 1.20 | 1.25 | 36.6 | 38.9 |
| muscle integrity (e.g., ultrasound imaging)   | 67.9  | 14.1  | 438        | 186  | 2.53 | 2.51 | 1.25 | 1.14 | 42.7 | 44.6 |
| <b>Neuromotor Development &amp; Sensory Integration</b>   |       |       |            |      |      |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>   |       |       |            |      |      |      |      |      |      |      |
| acquisition and evolution of motor skills throughout the lifespan   | 86.1  | 45.5  | 438        | 209  | 3.15 | 3.06 | 1.24 | 1.09 | 67.7 | 69.4 |
| sensorimotor integration  | 90.4  | 62.7  | 438        | 224  | 3.29 | 3.23 | 1.16 | 1.03 | 75.1 | 75.9 |
| developmental reflexes and reactions (e.g., asymmetrical tonic neck reflex, righting reactions)                             | 80.4  | 45.3  | 438        | 204  | 3.15 | 3.17 | 1.29 | 1.04 | 61.6 | 74.0 |
| oral motor function, phonation, and speech production   | 75.1  | 24.8  | 438        | 188  | 2.65 | 2.69 | 1.20 | 1.12 | 53.4 | 55.3 |
| <b>Reflex Integrity</b>   |       |       |            |      |      |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>   |       |       |            |      |      |      |      |      |      |      |
| deep tendon/muscle stretch reflexes (e.g., quadriceps, biceps)  | 98.2  | 88.6  | 432        | 274  | 3.66 | 3.62 | 1.15 | 0.93 | 83.4 | 89.8 |
| upper motor neuron integrity (e.g., Babinski reflex, Hoffman sign)  | 96.1  | 84.1  | 432        | 263  | 3.64 | 3.69 | 1.17 | 0.95 | 81.6 | 89.0 |
| superficial reflexes and reactions (e.g., cremasteric reflex, abdominal reflexes)   | 84.0  | 42.0  | 432        | 206  | 2.92 | 3.03 | 1.24 | 1.14 | 63.2 | 65.0 |

(continued)

Table B1. PT Work Activity Survey Results (continued)

| PT WAs   | Importance |      |      |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|------|------|
|  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Pain &amp; Sensory Integrity</b>  |            |      |      |      |      |      |      |      |      |      |
| <i>Select and perform tests and measures of</i>  |            |      |      |      |      |      |      |      |      |      |
| pain (e.g., location, intensity, frequency, central, peripheral, psychogenic)  | 99.6       | 96.1 | 432  | 290  | 4.40 | 4.10 | 0.81 | 0.81 | 87.3 | 96.6 |
| deep sensation (e.g., proprioception, kinesthesia, pressure)   | 99.2       | 93.8 | 432  | 281  | 3.79 | 3.78 | 1.10 | 0.83 | 85.1 | 94.7 |
| superficial sensation (e.g., touch, temperature discrimination)  | 99.0       | 95.9 | 432  | 278  | 3.94 | 3.78 | 1.01 | 0.87 | 86.1 | 93.5 |
| visceral organ sensitivity and integrity (e.g., palpation, auscultation)   | 82.2       | 58.6 | 432  | 222  | 2.88 | 3.13 | 1.16 | 1.14 | 63.2 | 68.9 |
| <b>Evaluation &amp; Diagnosis</b>  |            |      |      |      |      |      |      |      |      |      |
| <i>Interpret each of the following types of data to determine the need for intervention or the response to intervention:</i> |            |      |      |      |      |      |      |      |      |      |
| Cardiovascular/pulmonary system  | 99.4       | 76.4 | 431  | 247  | 4.34 | 3.87 | 0.91 | 0.97 | 86.9 | 90.3 |
| Lymphatic system   | 91.4       | 45.9 | 431  | 206  | 3.13 | 3.13 | 1.09 | 1.10 | 75.1 | 69.4 |
| Arousal, attention, cognition, and communication   | 96.3       | 76.8 | 431  | 237  | 3.80 | 3.71 | 1.08 | 0.93 | 82.4 | 90.3 |
| Neuromuscular system   | 99.6       | 91.3 | 431  | 271  | 4.66 | 3.98 | 0.64 | 0.86 | 87.5 | 95.2 |
| Functional mobility, balance, and vestibular   | 99.8       | 96.2 | 431  | 276  | 4.67 | 4.14 | 0.64 | 0.79 | 87.5 | 97.8 |
| Musculoskeletal system   | 99.8       | 97.6 | 431  | 279  | 4.82 | 4.33 | 0.50 | 0.72 | 87.7 | 98.9 |
| Integumentary system   | 98.4       | 86.0 | 431  | 261  | 3.52 | 3.59 | 1.05 | 0.91 | 84.3 | 89.3 |
| Anthropometric   | 90.4       | 63.8 | 431  | 226  | 2.84 | 3.11 | 1.11 | 1.09 | 70.3 | 70.8 |
| Gastrointestinal system  | 88.5       | 51.9 | 431  | 212  | 2.71 | 2.90 | 0.99 | 1.12 | 70.1 | 60.8 |
| Genitourinary system   | 88.1       | 48.6 | 431  | 209  | 2.68 | 2.91 | 1.02 | 1.14 | 68.9 | 62.2 |
| Need for or use of assistive and adaptive devices/technologies   | 99.2       | 95.2 | 430  | 273  | 4.52 | 4.05 | 0.78 | 0.83 | 86.9 | 96.0 |
| Need for or use of orthotic, protective, and supportive devices/technologies   | 98.8       | 93.4 | 430  | 267  | 4.27 | 3.81 | 0.89 | 0.86 | 86.5 | 92.9 |
| Need for or use of prosthetic devices/technologies   | 89.8       | 71.4 | 430  | 233  | 3.98 | 3.52 | 1.05 | 0.99 | 76.5 | 84.5 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs   | Importance |       |      |      |      |      |      |      |      |       |
|--|------------|-------|------|------|------|------|------|------|------|-------|
|  | %Perf      |       | n    |      | M    |      | SD   |      | %Imp |       |
|  | 2018       | 2016  | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016  |
| <b><i>Evaluation &amp; Diagnosis (continued)</i></b>   |            |       |      |      |      |      |      |      |      |       |
| Barriers to home, community, work, or school integration/reintegration   | 97.8       | 91.4  | 430  | 266  | 4.21 | 3.81 | 0.92 | 0.89 | 85.1 | 93.6  |
| Ergonomics and body mechanics  | 99.4       | 90.7  | 430  | 259  | 4.12 | 3.78 | 0.94 | 0.89 | 86.9 | 93.8  |
| Pain and sensory integrity   | 100.0      | 94.4  | 430  | 270  | 4.22 | 3.93 | 0.86 | 0.88 | 87.7 | 95.2  |
| ADLs/IADLs and home management   | 99.2       | 94.8  | 430  | 267  | 4.40 | 3.99 | 0.81 | 0.80 | 87.1 | 97.0  |
| Imaging, lab values, and medications   | 98.4       | 91.7  | 430  | 262  | 3.61 | 3.84 | 1.05 | 0.88 | 84.0 | 93.5  |
| Evaluate the patient/client's ability to assume or resume home, community, work, school, and/or leisure activities   | 99.4       | 97.2  | 430  | 273  | 4.63 | 4.12 | 0.61 | 0.76 | 87.1 | 98.2  |
| Develop physical therapy diagnosis by integrating system and non-system data   | 99.6       | 95.7  | 430  | 266  | 4.48 | 4.18 | 0.79 | 0.81 | 86.9 | 97.4  |
| <b><i>Development of Prognosis, Plan of Care, &amp; Goals</i></b>  |            |       |      |      |      |      |      |      |      |       |
| Establish PT prognosis based on information gathered during the examination process  | 100.0      | 100.0 | 429  | 279  | 4.59 | 4.50 | 0.68 | 0.63 | 87.5 | 99.3  |
| Develop plan of care based on data gathered during the examination process, incorporating information from the patient/client, caregiver, family members, and other professionals                    | 100.0      | 100.0 | 429  | 276  | 4.78 | 4.63 | 0.50 | 0.53 | 87.5 | 100.0 |
| Revise treatment intervention plan based on treatment outcomes, change in patient/client's health status, and ongoing evaluation   | 100.0      | 100.0 | 429  | 278  | 4.79 | 4.60 | 0.48 | 0.54 | 87.5 | 100.0 |
| Develop objective and measurable goals based on information gathered during the examination process, in collaboration with the patient/client, caregiver, family members, and/or other professionals | 100.0      | 100.0 | 429  | 278  | 4.68 | 4.58 | 0.57 | 0.59 | 87.7 | 99.6  |
| Select interventions based on information gathered during the examination process, incorporating information from the patient/client, caregiver, family members, and other professionals             | 100.0      | 100.0 | 429  | 278  | 4.79 | 4.60 | 0.46 | 0.57 | 87.7 | 99.6  |
| Modify plan of care based on patient/client's resources (e.g., financial, transportation, time, insurance benefits, available technologies)  | 99.4       | 98.6  | 429  | 277  | 4.56 | 4.32 | 0.74 | 0.79 | 86.9 | 97.8  |

(continued)

Table B1. PT Work Activity Survey Results (continued)

| PT WAs  | %Perf |      | Importance |      |      |      |      |      |      |       |
|---|-------|------|------------|------|------|------|------|------|------|-------|
|   |       |      | n          |      | M    |      | SD   |      | %Imp |       |
|   | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016  |
| <b>INTERVENTIONS</b>  |       |      |            |      |      |      |      |      |      |       |
| <i>Procedural Interventions</i>   |       |      |            |      |      |      |      |      |      |       |
| <i>Therapeutic Exercise/Therapeutic Activities</i>  |       |      |            |      |      |      |      |      |      |       |
| <i>Perform and/or train patient/client/caregiver in</i>   |       |      |            |      |      |      |      |      |      |       |
| aerobic capacity/endurance conditioning   | 99.4  | 95.2 | 500        | 458  | 3.91 | 3.96 | 0.96 | 0.85 | 98.8 | 94.8  |
| balance, coordination, and agility activities   | 99.8  | 99.4 | 500        | 463  | 4.57 | 4.52 | 0.67 | 0.60 | 99.6 | 100.0 |
| body mechanics and postural stabilization techniques  | 99.8  | 99.4 | 500        | 460  | 4.45 | 4.46 | 0.81 | 0.64 | 99.6 | 99.6  |
| flexibility techniques  | 99.8  | 99.4 | 500        | 457  | 3.76 | 4.12 | 1.01 | 0.77 | 98.4 | 97.4  |
| neuromotor techniques (e.g., movement pattern training, neuromuscular education or re-education)  | 99.6  | 98.6 | 500        | 458  | 4.21 | 4.25 | 0.92 | 0.75 | 98.2 | 98.0  |
| relaxation techniques   | 98.8  | 97.2 | 500        | 457  | 3.44 | 3.54 | 1.09 | 0.91 | 96.2 | 89.1  |
| strength, power, and endurance exercises  | 99.8  | 99.4 | 500        | 460  | 4.33 | 4.41 | 0.83 | 0.70 | 99.6 | 98.9  |
| genitourinary management (e.g., pelvic floor exercises, bladder strategies)   | 71.2  | 61.7 | 500        | 420  | 2.72 | 3.05 | 1.22 | 1.06 | 59.8 | 67.9  |
| gastrointestinal management (e.g., bowel strategies, positioning to avoid reflux)   | 69.6  | 53.1 | 500        | 415  | 2.57 | 2.87 | 1.16 | 1.05 | 57.2 | 61.4  |
| manual/mechanical airway clearance techniques (e.g., assistive devices, assistive cough, incentive spirometer, flutter valve, postural drainage, percussion, vibration) | 69.6  | 56.6 | 500        | 419  | 2.77 | 3.19 | 1.24 | 1.06 | 57.6 | 73.0  |
| techniques to maximize ventilation and perfusion (e.g., positioning, active cycle breathing, autogenic drainage, paced breathing, pursed lip breathing)                 | 77.6  | 71.1 | 500        | 381  | 3.13 | 3.45 | 1.21 | 1.04 | 70.2 | 81.1  |
| mechanical repositioning for vestibular dysfunction   | 84.6  | 75.5 | 500        | 391  | 3.21 | 3.33 | 1.16 | 0.94 | 79.4 | 82.1  |
| habituation/adaptation exercises for vestibular dysfunction   | 86.2  | 74.4 | 500        | 384  | 3.20 | 3.30 | 1.13 | 0.94 | 81.2 | 81.0  |

(continued)

Table B1. PT Work Activity Survey Results (continued)

| PT WAs   | Importance |      |      |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|------|------|
|  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Functional Training</b>   |            |      |      |      |      |      |      |      |      |      |
| Recommend barrier accommodations or modifications (e.g., ramps, grab bars, raised toilet, environmental control units)                         | 92.4       | 94.7 | 500  | 414  | 3.93 | 3.92 | 1.17 | 0.86 | 89.2 | 94.9 |
| <i>Perform and/or train patient/client in</i>  |            |      |      |      |      |      |      |      |      |      |
| the use of environmental modifications (e.g., ramps, grab bars, raised toilet, environmental control units)                                    | 93.2       | 90.3 | 491  | 408  | 3.88 | 3.91 | 1.17 | 0.89 | 88.6 | 94.4 |
| activities of daily living (ADL) (e.g., bed mobility, transfers, household mobility, dressing, self-care, toileting, sexual relations)         | 98.4       | 97.8 | 491  | 419  | 4.27 | 4.29 | 0.94 | 0.77 | 96.0 | 98.1 |
| community and leisure integration or reintegration (e.g., work/school/play)  | 96.0       | 90.9 | 491  | 406  | 3.81 | 3.75 | 1.04 | 0.92 | 92.0 | 91.9 |
| instrumental activities of daily living (IADL) (e.g., household chores, hobbies)   | 97.8       | 91.2 | 491  | 403  | 3.88 | 3.79 | 1.00 | 0.95 | 94.4 | 92.3 |
| mobility techniques  | 99.0       | 99.1 | 491  | 418  | 4.36 | 4.30 | 0.79 | 0.73 | 97.0 | 99.8 |
| gross motor development  |            |      |      |      |      |      |      |      |      |      |
| fall prevention and fall recovery strategies   | 98.8       | 98.5 | 491  | 420  | 4.55 | 4.43 | 0.73 | 0.68 | 96.6 | 99.3 |
| behavior modification and strategies that enhance functioning (e.g., energy conservation, pacing, pre-activity planning, reminder schedules)   | 98.4       | 94.1 | 491  | 383  | 3.95 | 3.74 | 0.99 | 0.88 | 95.2 | 92.2 |
| <b>Manual Therapy Techniques</b>   |            |      |      |      |      |      |      |      |      |      |
| Perform manual lymphatic drainage  | 52.8       | 30.9 | 491  | 315  | 2.66 | 2.78 | 1.20 | 1.14 | 42.8 | 55.2 |
| Perform dry needling   | 44.8       | 10.1 | 491  | 295  | 2.90 | 2.27 | 1.37 | 1.18 | 35.4 | 37.6 |
| Perform spinal and peripheral manual traction  | 84.6       | 74.3 | 491  | 356  | 3.15 | 3.51 | 1.19 | 0.96 | 75.6 | 86.5 |
| Perform and/or train patient/client/caregiver in soft tissue mobilization (e.g., connective tissue massage, therapeutic massage, foam rolling) | 93.0       | 94.8 | 491  | 384  | 3.46 | 3.74 | 1.20 | 0.95 | 86.2 | 89.3 |
| Perform instrument-assisted soft tissue mobilization   | 77.8       | 61.8 | 491  | 337  | 3.29 | 3.06 | 1.27 | 1.13 | 68.6 | 68.0 |
| Perform peripheral joint range of motion   | 98.0       | 97.2 | 491  | 392  | 4.12 | 4.23 | 1.03 | 0.82 | 94.6 | 96.7 |
| Perform peripheral mobilization/manipulation (thrust)  | 71.8       | 63.0 | 485  | 347  | 3.13 | 3.45 | 1.36 | 1.15 | 60.2 | 79.3 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs  | %Perf |      | Importance |      |      |      |      |      |      |      |
|---|-------|------|------------|------|------|------|------|------|------|------|
|   |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| Perform peripheral mobilization/manipulation (non-thrust)   | 87.8  | 83.7 | 485        | 369  | 3.81 | 3.96 | 1.21 | 1.00 | 80.0 | 91.3 |
| Perform spinal mobilization/manipulation (thrust)   | 73.8  | 63.7 | 485        | 347  | 3.25 | 3.52 | 1.34 | 1.12 | 63.6 | 81.8 |
| Perform spinal mobilization/manipulation (non-thrust)   | 84.8  | 75.8 | 485        | 333  | 3.77 | 3.72 | 1.20 | 1.05 | 78.4 | 87.1 |
| Perform cervical spinal manipulation (thrust)   | 61.2  | 30.0 | 485        | 288  | 2.89 | 2.98 | 1.37 | 1.20 | 48.2 | 64.2 |
| Perform thoracic and lumbar spinal manipulation (thrust)  | 75.0  | 58.1 | 485        | 312  | 3.37 | 3.40 | 1.35 | 1.15 | 64.8 | 78.2 |
| <i>Apply taping for</i>   |       |      |            |      |      |      |      |      |      |      |
| neuromuscular reeducation   | 86.6  | 78.3 | 480        | 340  | 3.04 | 3.15 | 1.17 | 0.99 | 74.8 | 74.7 |
| lymphatic drainage  | 54.0  | 28.0 | 480        | 279  | 2.59 | 2.61 | 1.15 | 1.06 | 40.4 | 51.3 |
| pain management   | 83.2  | 67.6 | 480        | 325  | 3.01 | 2.96 | 1.23 | 1.00 | 70.2 | 68.9 |
| <b>Equipment &amp; Devices</b>  |       |      |            |      |      |      |      |      |      |      |
| <i>Fabricate, apply, and/or adjust</i>  |       |      |            |      |      |      |      |      |      |      |
| adaptive devices (e.g., utensils, seating and positioning devices, steering wheel devices)  | 66.2  | 57.4 | 480        | 309  | 3.17 | 3.25 | 1.27 | 1.11 | 55.8 | 74.8 |
| protective devices (e.g., braces, cushions, helmets, protective taping)   | 77.2  | 70.3 | 480        | 327  | 3.38 | 3.35 | 1.20 | 1.00 | 68.8 | 80.1 |
| supportive devices (e.g., compression garments, corsets, elastic wraps, neck collars, serial casts, short-stretch bandages)                                 | 80.6  | 73.0 | 480        | 333  | 3.36 | 3.30 | 1.22 | 1.01 | 71.2 | 78.4 |
| orthotic devices (e.g., braces, shoe inserts, splints)  | 88.4  | 84.5 | 480        | 353  | 3.54 | 3.48 | 1.14 | 0.92 | 81.8 | 86.7 |
| <i>Apply and/or adjust</i>  |       |      |            |      |      |      |      |      |      |      |
| assistive devices/technologies (e.g., canes, crutches, walkers, wheelchairs, tilt tables, standing frames)  | 99.0  | 98.2 | 476        | 353  | 4.52 | 4.23 | 0.80 | 0.76 | 94.0 | 98.6 |
| prosthetic devices/technologies (e.g., lower-extremity and upper-extremity prostheses, microprocessor-controlled prosthetic devices)                        | 71.6  | 50.8 | 476        | 278  | 3.57 | 3.26 | 1.15 | 1.07 | 64.0 | 75.2 |
| mechanical neuromuscular re-education devices/technologies (e.g., weighted vests, therapeutic suits, body weight supported treadmill, robotic exoskeletons) | 65.0  | 38.2 | 476        | 266  | 3.26 | 2.97 | 1.31 | 1.03 | 53.8 | 67.3 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs  | %Perf |      | Importance |      |      |      |      |      |      |      |
|---|-------|------|------------|------|------|------|------|------|------|------|
|   |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Equipment &amp; Devices (continued)</b>  |       |      |            |      |      |      |      |      |      |      |
| prescribed oxygen during interventions  | 70.8  | 61.5 | 476        | 300  | 3.77 | 3.76 | 1.25 | 1.07 | 62.2 | 87.7 |
| <i>Train patient/client/caregiver in the use of</i>   |       |      |            |      |      |      |      |      |      |      |
| adaptive devices (e.g., utensils, seating and positioning devices, steering wheel devices)  | 68.2  | 59.2 | 465        | 285  | 3.39 | 3.27 | 1.31 | 1.00 | 55.6 | 80.7 |
| assistive devices/technologies (e.g., canes, crutches, walkers, wheelchairs, tilt tables, standing frames)  | 95.8  | 95.8 | 465        | 352  | 4.49 | 4.22 | 0.83 | 0.82 | 88.0 | 98.0 |
| orthotic devices (e.g., braces, shoe inserts, splints)  | 95.0  | 93.9 | 465        | 341  | 3.88 | 3.67 | 1.11 | 0.89 | 85.6 | 92.4 |
| prosthetic devices/technologies (e.g., lower-extremity and upper-extremity prostheses, microprocessor-controlled prosthetic devices)                        | 69.0  | 46.2 | 465        | 271  | 3.56 | 3.21 | 1.22 | 1.08 | 58.2 | 74.2 |
| protective devices (e.g., braces, cushions, helmets, protective taping)   | 79.0  | 72.9 | 465        | 309  | 3.66 | 3.30 | 1.16 | 0.96 | 69.6 | 82.2 |
| supportive devices (e.g., compression garments, corsets, elastic wraps, neck collars, serial casts, short-stretch bandages)                                 | 83.8  | 75.3 | 465        | 313  | 3.55 | 3.27 | 1.20 | 0.96 | 72.4 | 78.9 |
| mechanical neuromuscular re-education devices/technologies (e.g., weighted vests, therapeutic suits, body weight supported treadmill, robotic exoskeletons) | 63.6  | 33.2 | 465        | 218  | 3.23 | 2.83 | 1.33 | 1.02 | 49.6 | 59.2 |
| <b>Integumentary Repair &amp; Protection Techniques</b>   |       |      |            |      |      |      |      |      |      |      |
| <i>Perform and/or train patient/client/caregiver in</i>   |       |      |            |      |      |      |      |      |      |      |
| nonselective debridement (e.g., removal of nonselective areas of devitalized tissue)  | 41.0  | 15.9 | 460        | 204  | 2.61 | 2.74 | 1.29 | 1.10 | 25.0 | 53.4 |
| selective enzymatic or autolytic debridement (e.g., removal of specific areas of devitalized tissue)  | 38.8  | 11.2 | 460        | 199  | 2.62 | 2.71 | 1.25 | 1.11 | 23.6 | 51.8 |
| sharp debridement (e.g., removal of specific areas of devitalized tissue)   | 38.6  | 9.8  | 460        | 195  | 2.54 | 2.67 | 1.28 | 1.12 | 22.0 | 49.7 |
| application of topical agents (e.g., cleansers, creams, moisturizers, ointments, sealants) and dressings (e.g., hydrogels, wound coverings)                 | 51.0  | 30.0 | 460        | 224  | 2.83 | 2.85 | 1.17 | 1.09 | 37.4 | 58.5 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs   | %Perf |      | Importance |      |      |      |      |      |      |      |
|--|-------|------|------------|------|------|------|------|------|------|------|
|  |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b><i>Integumentary Repair &amp; Protection Techniques (continued)</i></b>   |       |      |            |      |      |      |      |      |      |      |
| desensitization techniques (e.g., brushing, tapping, use of textures)  | 77.8  | 76.3 | 460        | 289  | 3.02 | 3.10 | 1.08 | 0.96 | 65.2 | 72.7 |
| hyperbaric therapy   | 33.2  | 3.4  | 460        | 189  | 2.17 | 2.30 | 1.03 | 1.11 | 16.8 | 36.5 |
| negative pressure wound therapy  | 37.8  | 9.2  | 460        | 195  | 2.46 | 2.54 | 1.20 | 1.12 | 22.2 | 46.2 |
| Recommend topical agents (e.g., pharmacological to physician, over-the-counter to patient) and dressings (e.g., hydrogels, negative pressure wound therapy, wound coverings)   | 50.6  | 26.5 | 460        | 221  | 2.69 | 2.76 | 1.14 | 1.11 | 36.2 | 54.3 |
| <b><i>Therapeutic Modalities</i></b>   |       |      |            |      |      |      |      |      |      |      |
| <i>Perform and/or train patient/client/caregiver in</i>  |       |      |            |      |      |      |      |      |      |      |
| biofeedback therapy (e.g., relaxation techniques, muscle reeducation, EMG)   | 87.0  | 75.8 | 458        | 265  | 3.26 | 3.35 | 1.16 | 1.03 | 74.4 | 77.7 |
| iontophoresis  | 66.6  | 52.8 | 458        | 237  | 2.53 | 2.82 | 1.21 | 1.04 | 45.0 | 62.0 |
| phonophoresis  | 47.0  | 34.9 | 456        | 209  | 2.29 | 2.56 | 1.25 | 1.18 | 25.8 | 49.3 |
| electrotherapy modalities, excluding iontophoresis (e.g., neuromuscular electrical stimulation (NMES), transcutaneous electrical nerve stimulation (TENS), functional electrical stimulation (FES), interferential therapy, high-voltage pulsed current) | 91.0  | 86.1 | 458        | 289  | 3.31 | 3.49 | 1.22 | 1.01 | 77.6 | 83.7 |
| cryotherapy (e.g., cold pack, ice massage, vapocoolant spray)  | 96.8  | 94.4 | 458        | 306  | 3.46 | 3.62 | 1.17 | 0.98 | 84.8 | 86.6 |
| hydrotherapy using contrast baths/pools  | 51.6  | 27.4 | 458        | 201  | 2.73 | 2.69 | 1.32 | 1.22 | 34.2 | 49.8 |
| hydrotherapy (e.g., aquatic exercise, underwater treadmill)  | 58.0  | 36.0 | 458        | 215  | 3.03 | 3.01 | 1.26 | 1.08 | 43.6 | 68.8 |
| phototherapy (laser light)   | 45.6  | 12.1 | 458        | 185  | 2.23 | 2.26 | 1.20 | 1.17 | 24.6 | 36.2 |
| monochromatic infrared agent procedures (e.g., light emitting diodes [LEDs])   | 38.6  | 8.0  | 456        | 182  | 2.00 | 2.13 | 1.03 | 1.12 | 18.6 | 34.1 |
| ultrasound procedures  | 77.4  | 67.3 | 456        | 262  | 2.59 | 3.08 | 1.28 | 1.17 | 53.4 | 69.5 |
| diathermy  | 43.2  | 14.3 | 456        | 188  | 2.14 | 2.24 | 1.23 | 1.19 | 20.6 | 36.7 |

(continued)



**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs  | %Perf |      | Importance |      |      |      |      |      |      |      |
|---|-------|------|------------|------|------|------|------|------|------|------|
|   |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Therapeutic Modalities (continued)</b>   |       |      |            |      |      |      |      |      |      |      |
| dry heat thermotherapy (e.g., Fluidotherapy)  | 44.2  | 15.2 | 456        | 189  | 2.18 | 2.31 | 1.20 | 1.15 | 22.0 | 39.2 |
| hot pack thermotherapy  | 89.2  | 88.4 | 456        | 292  | 3.12 | 3.39 | 1.21 | 1.00 | 75.2 | 82.5 |
| paraffin bath thermotherapy   | 55.2  | 26.2 | 456        | 201  | 2.63 | 2.60 | 1.26 | 1.21 | 36.6 | 49.8 |
| shockwave therapy   | 36.0  | 3.9  | 456        | 173  | 2.12 | 2.01 | 1.17 | 1.14 | 16.4 | 29.5 |
| <b>Mechanical Modalities</b>  |       |      |            |      |      |      |      |      |      |      |
| <i>Apply and/or train patient/client/caregiver in</i>   |       |      |            |      |      |      |      |      |      |      |
| intermittent pneumatic compression  | 54.8  | 30.4 | 455        | 206  | 2.89 | 2.63 | 1.21 | 1.18 | 40.2 | 51.0 |
| assisted movement devices (e.g., dynamic splint, continuous passive motion devices)   | 68.8  | 58.9 | 455        | 251  | 2.90 | 2.90 | 1.20 | 1.05 | 53.2 | 62.9 |
| mechanical spinal traction  | 69.6  | 59.8 | 455        | 243  | 2.98 | 3.17 | 1.24 | 1.09 | 53.4 | 74.9 |
| <b>Non-procedural Interventions</b>   |       |      |            |      |      |      |      |      |      |      |
| <b>Communication</b>  |       |      |            |      |      |      |      |      |      |      |
| <i>Discuss physical therapy evaluation findings, interventions, goals, prognosis, discharge planning, and plan of care with</i> |       |      |            |      |      |      |      |      |      |      |
| physical therapists, physical therapist assistants, and/or support staff  | 100.0 | 99.4 | 454        | 311  | 4.79 | 4.67 | 0.54 | 0.60 | 90.6 | 99.0 |
| interprofessional/interdisciplinary team members  | 99.2  | 98.8 | 454        | 310  | 4.63 | 4.60 | 0.70 | 0.62 | 90.0 | 99.4 |
| patient/client/caregiver  | 100.0 | 99.7 | 454        | 313  | 4.85 | 4.73 | 0.42 | 0.51 | 90.8 | 99.7 |
| Provide written, oral, and electronic information to the patient/client and/or caregiver  | 100.0 | 98.8 | 454        | 312  | 4.73 | 4.62 | 0.55 | 0.61 | 90.8 | 98.7 |
| <b>Documentation</b>  |       |      |            |      |      |      |      |      |      |      |
| <i>Document</i>   |       |      |            |      |      |      |      |      |      |      |
| examination results   | 100.0 | 99.7 | 449        | 312  | 4.81 | 4.71 | 0.48 | 0.55 | 89.8 | 99.4 |
| evaluation to include diagnosis, goals, and prognosis   | 100.0 | 99.7 | 449        | 310  | 4.83 | 4.70 | 0.47 | 0.55 | 89.8 | 99.7 |
| intervention(s) and patient/client response(s) to intervention  | 100.0 | 99.4 | 449        | 312  | 4.84 | 4.72 | 0.43 | 0.53 | 89.8 | 99.7 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs  | Importance |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|
|   | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Documentation (continued)</b>  |            |      |      |      |      |      |      |      |      |      |
| patient/client/caregiver education  | 100.0      | 99.4 | 449  | 310  | 4.76 | 4.65 | 0.55 | 0.58 | 89.8 | 99.4 |
| outcomes (e.g., discharge summary, reassessments)   | 100.0      | 98.8 | 449  | 311  | 4.67 | 4.66 | 0.65 | 0.58 | 89.6 | 99.4 |
| communication with the interdisciplinary/interprofessional team related to the patient/client's care  | 99.4       | 99.1 | 449  | 310  | 4.62 | 4.54 | 0.69 | 0.69 | 89.2 | 98.4 |
| rationale for billing and reimbursement   | 99.8       | 94.1 | 449  | 291  | 4.37 | 4.45 | 0.89 | 0.73 | 89.2 | 97.9 |
| disclosure and consent (e.g., disclosure of medical information, consent for treatment)   | 99.2       | 91.2 | 449  | 279  | 4.47 | 4.27 | 0.85 | 0.82 | 88.6 | 95.3 |
| letter of medical necessity (e.g., wheelchair, assistive equipment, disability parking placard)   | 86.8       | 76.6 | 449  | 251  | 4.02 | 3.86 | 1.07 | 0.95 | 76.0 | 91.2 |
| intervention/plan of care for specialized services and settings (e.g., individual education plan, individual family service plan, vocational transition plan)                           | 78.2       | 57.3 | 449  | 219  | 4.28 | 3.81 | 1.02 | 1.08 | 67.0 | 87.2 |
| Assign billing codes for physical therapy evaluation and treatment provided   | 98.6       | 90.7 | 454  | 280  | 4.53 | 4.42 | 0.81 | 0.83 | 88.8 | 96.4 |
| <b>Education</b>  |            |      |      |      |      |      |      |      |      |      |
| <i>Educate patient/client and/or caregiver about</i>  |            |      |      |      |      |      |      |      |      |      |
| the patient/client's current condition and health status (e.g., nature of the condition, prognosis, potential benefits of physical therapy interventions, potential treatment outcomes) | 100.0      | 99.7 | 446  | 300  | 4.84 | 4.60 | 0.41 | 0.57 | 89.2 | 99.7 |
| the role of the physical therapist and/or physical therapist assistant in patient/client management   | 99.8       | 98.8 | 446  | 301  | 4.75 | 4.56 | 0.55 | 0.62 | 89.0 | 99.3 |
| lifestyle and behavioral changes to promote wellness (e.g., nutrition, physical activity, tobacco cessation)  | 99.6       | 99.1 | 446  | 301  | 4.48 | 4.33 | 0.77 | 0.73 | 88.6 | 98.0 |
| the role of physical therapy in transitional planning (e.g., hospice, palliative care, setting changes)   | 90.4       | 81.1 | 446  | 264  | 4.13 | 3.97 | 1.11 | 0.98 | 77.6 | 90.9 |
| <i>Educate the healthcare team about</i>  |            |      |      |      |      |      |      |      |      |      |
| the role of the physical therapist and/or physical therapist assistant in patient/client management   | 97.4       | 94.4 | 446  | 291  | 4.49 | 4.15 | 0.85 | 0.87 | 85.8 | 94.5 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs   | %Perf |      | Importance |      |      |      |      |      |      |      |
|--|-------|------|------------|------|------|------|------|------|------|------|
|  |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Education (continued)</b>   |       |      |            |      |      |      |      |      |      |      |
| safe patient handling (e.g., injury prevention, ergonomics, use of equipment)  | 96.2  | 90.6 | 446        | 282  | 4.49 | 4.12 | 0.83 | 0.87 | 84.8 | 96.1 |
| Educate community groups on lifestyle and behavioral changes to promote wellness (e.g., nutrition, physical activity, tobacco cessation)   | 84.4  | 70.1 | 446        | 241  | 3.66 | 3.68 | 1.08 | 1.04 | 72.2 | 88.0 |
| Participate in the clinical education of students  | 85.8  | 76.4 | 446        | 260  | 3.98 | 3.78 | 1.00 | 1.09 | 74.0 | 88.1 |
| <b>Patient/client &amp; Staff Safety</b>   |       |      |            |      |      |      |      |      |      |      |
| <b>Emergency Procedures</b>  |       |      |            |      |      |      |      |      |      |      |
| Implement emergency procedures (e.g., CPR, AED, calling a code)  | 85.6  | 52.8 | 446        | 224  | 4.23 | 4.20 | 0.93 | 0.92 | 74.6 | 94.2 |
| Perform first aid  | 87.8  | 70.9 | 446        | 245  | 4.00 | 4.00 | 1.05 | 0.98 | 76.4 | 92.2 |
| Implement disaster response procedures   | 79.4  | 36.4 | 446        | 199  | 3.74 | 3.68 | 1.12 | 1.11 | 67.8 | 83.9 |
| <b>Environmental Safety</b>  |       |      |            |      |      |      |      |      |      |      |
| Perform risk assessment of the physical environment (e.g., barrier-free environment, outlets, windows, floors, lighting)   | 96.7  | 77.0 | 429        | 243  | 4.14 | 3.76 | 0.96 | 0.98 | 83.4 | 89.7 |
| Prepare and maintain a safe working environment for performing interventions (e.g., unobstructed walkways, equipment availability)   | 98.6  | 92.4 | 429        | 266  | 4.40 | 4.17 | 0.86 | 0.91 | 85.7 | 93.6 |
| Perform regular equipment inspections and/or maintenance (e.g., modalities, assistive devices)   | 95.3  | 79.9 | 429        | 248  | 3.94 | 3.75 | 1.05 | 1.01 | 81.6 | 87.5 |
| <b>Infection Control</b>   |       |      |            |      |      |      |      |      |      |      |
| Perform and/or train patient/client and/or caregiver on appropriate infection control practices (e.g., universal precautions, hand hygiene, isolation, airborne precautions, equipment cleaning) | 94.1  | 86.0 | 429        | 259  | 4.11 | 3.88 | 1.08 | 0.99 | 80.6 | 89.6 |

(continued)

Table B1. PT Work Activity Survey Results (continued)

| PT WAs  | %Perf |      | Importance |      |      |      |      |      |      |      |
|---|-------|------|------------|------|------|------|------|------|------|------|
|   |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Research &amp; Evidence-Based Practice</b>   |       |      |            |      |      |      |      |      |      |      |
| Search the literature for current best evidence   | 99.6  | 99.0 | 429        | 280  | 4.09 | 4.00 | 0.91 | 0.88 | 86.9 | 96.1 |
| Evaluate the quality of published data  | 97.5  | 91.4 | 429        | 268  | 3.95 | 3.87 | 0.95 | 0.94 | 84.5 | 92.9 |
| Integrate current best evidence, clinical experience, and patient values in clinical practice (e.g., clinical prediction rules, patient preference)               | 99.6  | 98.3 | 429        | 278  | 4.28 | 4.20 | 0.84 | 0.85 | 87.3 | 97.1 |
| Design, direct, and/or participate in research activities   | 83.8  | 50.7 | 429        | 207  | 3.17 | 3.29 | 1.14 | 1.06 | 67.5 | 75.4 |
| Compare intervention outcomes with normative data   | 91.6  | 72.8 | 429        | 235  | 3.60 | 3.62 | 1.06 | 1.06 | 77.5 | 85.5 |
| <b>Professional Responsibilities</b>  |       |      |            |      |      |      |      |      |      |      |
| Supervise physical therapist assistant(s) and support personnel (licensed/unlicensed)   | 93.2  | 88.6 | 444        | 275  | 4.49 | 4.23 | 0.80 | 0.83 | 81.8 | 96.7 |
| Assign tasks to other personnel (licensed/unlicensed) to assist with patient/client care  | 95.8  | 91.5 | 444        | 279  | 4.21 | 4.10 | 0.95 | 0.86 | 83.8 | 95.0 |
| Discuss ongoing patient care with the interprofessional/interdisciplinary team members  | 99.4  | 98.7 | 444        | 293  | 4.55 | 4.26 | 0.76 | 0.81 | 87.8 | 98.3 |
| Refer patient/client to specialists or other healthcare providers when necessary  | 99.0  | 98.1 | 444        | 290  | 4.52 | 4.18 | 0.71 | 0.79 | 87.6 | 98.3 |
| Disclose financial interest in recommended products or services to the patient/client   | 78.0  | 51.8 | 444        | 208  | 3.73 | 3.26 | 1.21 | 1.25 | 64.0 | 72.6 |
| Provide notice and information about alternative care when the physical therapist terminates provider relationship with the patient/client                        | 92.8  | 87.5 | 444        | 266  | 4.01 | 3.59 | 1.04 | 1.02 | 80.4 | 86.8 |
| Document transfer of patient/client care to another physical therapist (therapist of record)  | 88.8  | 75.6 | 444        | 247  | 3.94 | 3.52 | 1.14 | 1.11 | 75.4 | 81.8 |
| Report healthcare providers that are suspected to not perform their professional responsibilities with reasonable skill and safety to the appropriate authorities | 79.0  | 32.6 | 444        | 203  | 4.27 | 4.13 | 0.90 | 0.92 | 67.8 | 94.6 |
| Report suspected cases of abuse to the appropriate authority  | 81.4  | 35.0 | 444        | 207  | 4.57 | 4.31 | 0.72 | 0.85 | 70.2 | 95.2 |

(continued)

**Table B1. PT Work Activity Survey Results (continued)**

| PT WAs  | %Perf |      | Importance |      |      |      |      |      |      |      |
|---|-------|------|------------|------|------|------|------|------|------|------|
|   |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Professional Responsibilities (continued)</b>  |       |      |            |      |      |      |      |      |      |      |
| Report suspected illegal or unethical acts performed by health care professionals to the relevant authority   | 81.8  | 27.8 | 443        | 195  | 4.59 | 4.30 | 0.74 | 0.83 | 70.2 | 95.4 |
| Advocate for public access to physical therapy and other healthcare services  | 89.6  | 72.1 | 443        | 245  | 4.34 | 4.02 | 0.85 | 0.96 | 78.0 | 92.7 |
| Determine own need for professional development   | 99.4  | 99.4 | 443        | 298  | 4.60 | 4.28 | 0.67 | 0.78 | 88.0 | 97.3 |
| Participate in learning and/or development activities (e.g., journal clubs, self-directed reading, continuing competence activities) to maintain the currency of knowledge, skills, and abilities | 99.2  | 98.4 | 443        | 297  | 4.46 | 4.22 | 0.78 | 0.82 | 87.8 | 96.3 |
| Practice within the federal and jurisdiction regulations and professional standards   | 99.6  | 96.8 | 443        | 293  | 4.80 | 4.66 | 0.49 | 0.67 | 88.2 | 98.0 |
| Participate in professional organizations   | 95.6  | 82.0 | 443        | 263  | 3.82 | 3.65 | 1.14 | 1.03 | 83.0 | 86.7 |
| Perform community based screenings (e.g., fall risk, posture, musculoskeletal, flexibility, sports-specific)  | 86.8  | 68.8 | 443        | 241  | 3.87 | 3.61 | 1.06 | 1.00 | 74.6 | 87.6 |
| Participate in performance improvement and quality reporting activities (e.g., Physician Quality Reporting System, standardized outcomes measurement, application of health informatics)          | 91.4  | 76.2 | 443        | 258  | 3.99 | 3.72 | 1.07 | 1.02 | 79.0 | 88.4 |

**Table B2. PTA Work Activity Survey Results**

| PTA WAs   | %Perf      |      | n    |      | M    |      | SD   |      | %Imp  |      |
|---|------------|------|------|------|------|------|------|------|-------|------|
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018  | 2016 |
|   | Importance |      |      |      |      |      |      |      |       |      |
| <b>DATA COLLECTION</b>  |            |      |      |      |      |      |      |      |       |      |
| <b>Information Gathering &amp; Synthesis</b>  |            |      |      |      |      |      |      |      |       |      |
| <i>Interview patients/clients, caregivers, and family to obtain patient/client history and current information (e.g., medical, surgical, medications, social, cultural, language preference, economic) to</i> |            |      |      |      |      |      |      |      |       |      |
| review prior and current level of function/activity   | 100.0      | 93.3 | 264  | 263  | 4.55 | 4.21 | 0.76 | 0.84 | 99.2  | 96.2 |
| establish general health status   | 99.6       | 92.6 | 264  | 259  | 4.36 | 4.21 | 0.82 | 0.85 | 99.6  | 96.1 |
| identify red flags (e.g., fever, malaise, unexplained weight change) and contraindications  | 99.6       | 94.4 | 264  | 263  | 4.60 | 4.40 | 0.73 | 0.81 | 99.2  | 96.6 |
| identify patient/client's, family/caregiver's goals, values, and preferences  | 100.0      | 95.1 | 264  | 262  | 4.30 | 4.16 | 0.82 | 0.83 | 100.0 | 95.8 |
| determine impact of medications on plan of care (e.g., medication reconciliation, timing of intervention delivery, adherence)   | 98.5       | 90.9 | 264  | 262  | 3.78 | 3.98 | 1.11 | 0.96 | 95.8  | 92.4 |
| Administer standardized questionnaires (e.g., pain inventory, fall risk assessment)   | 97.7       | 93.0 | 264  | 264  | 3.66 | 4.05 | 1.07 | 0.92 | 95.1  | 93.6 |
| Review medical records (e.g., lab values, diagnostic tests, imaging, specialty reports, narrative, consults, physical therapy documentation) prior to carrying out the PT plan of care                        | 98.9       | 98.6 | 264  | 268  | 4.10 | 4.42 | 0.96 | 0.76 | 98.1  | 97.8 |
| Gather information/discuss patient/client's current health status with interprofessional/interdisciplinary team members   | 98.9       | 97.6 | 264  | 267  | 4.05 | 4.35 | 0.90 | 0.77 | 98.9  | 98.1 |
| Identify signs/symptoms of change in patient/client's health status that require intervention by physical therapist   | 99.6       | 99.3 | 264  | 266  | 4.53 | 4.52 | 0.71 | 0.65 | 99.6  | 98.9 |
| Identify signs/symptoms of change in patient/client's health status that require intervention by interprofessional/interdisciplinary team members   | 98.9       | 97.9 | 264  | 263  | 4.39 | 4.40 | 0.84 | 0.75 | 98.5  | 98.1 |
| <b>Systems Review</b>   |            |      |      |      |      |      |      |      |       |      |
| Check patient/client's current affect, cognition, communication, and learning preferences (e.g., ability to convey needs, consciousness, orientation, expected emotional/behavioral responses)                | 99.6       | 96.7 | 264  | 232  | 4.15 | 4.28 | 0.94 | 0.72 | 99.2  | 98.7 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs   | Importance |       |      |      |      |      |      |      |      |      |
|---|------------|-------|------|------|------|------|------|------|------|------|
|   | %Perf      |       | n    |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016  | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Systems Review (continued)</b>   |            |       |      |      |      |      |      |      |      |      |
| <i>Recognize changes in status of the</i>   |            |       |      |      |      |      |      |      |      |      |
| patient/client's quality of speech, hearing, and vision (e.g., dysarthria, pitch/tone, use of corrective lenses, use of hearing aids) | 96.2       | 93.9  | 256  | 228  | 3.77 | 4.18 | 1.08 | 0.84 | 90.9 | 96.1 |
| vestibular system (e.g., dizziness, vertigo)  | 96.6       | 95.5  | 256  | 232  | 4.02 | 4.21 | 0.94 | 0.77 | 93.2 | 97.4 |
| gastrointestinal system (e.g., difficulty swallowing, nausea, change in appetite/diet, change in bowel function)                      | 94.3       | 89.7  | 256  | 227  | 3.40 | 3.89 | 1.14 | 0.94 | 88.6 | 93.4 |
| genitourinary system (e.g., changes in bladder function, catheter complications)  | 90.9       | 81.0  | 256  | 215  | 3.43 | 3.78 | 1.18 | 1.07 | 84.5 | 88.8 |
| reproductive system (e.g., sexual and/or menstrual dysfunction, menopause status)   | 80.7       | 38.6  | 256  | 196  | 2.51 | 2.78 | 1.18 | 1.42 | 61.7 | 54.1 |
| cardiovascular/pulmonary system (e.g., blood pressure, heart rate, respiration rate)  | 99.6       | 98.0  | 256  | 231  | 4.40 | 4.54 | 0.82 | 0.63 | 96.2 | 99.6 |
| lymphatic system (e.g., primary and/or secondary edema)   | 94.7       | 95.1  | 256  | 230  | 3.84 | 4.07 | 0.96 | 0.91 | 90.5 | 95.2 |
| integumentary system (e.g., presence of scar formation, skin integrity, discoloration)  | 99.2       | 98.0  | 256  | 232  | 4.00 | 4.16 | 0.96 | 0.83 | 96.2 | 94.8 |
| musculoskeletal system (e.g., gross symmetry, strength, range of motion)  | 100.0      | 99.6  | 256  | 233  | 4.64 | 4.52 | 0.62 | 0.62 | 97.0 | 99.6 |
| neuromuscular system (e.g., gross coordination, motor function, balance, locomotion, gross sensory function)                          | 100.0      | 100.0 | 256  | 223  | 4.70 | 4.49 | 0.59 | 0.63 | 97.0 | 99.6 |
| <b>Tests &amp; Measures</b>   |            |       |      |      |      |      |      |      |      |      |
| <b>Cardiovascular/Pulmonary</b>   |            |       |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>  |            |       |      |      |      |      |      |      |      |      |
| cardiovascular function (e.g., blood pressure, heart rate, heart sounds)  | 98.1       | 96.0  | 252  | 210  | 4.31 | 4.33 | 0.93 | 0.83 | 93.2 | 96.7 |
| pulmonary function (e.g., respiratory rate, breathing patterns, breath sounds, chest excursion)                                       | 93.6       | 83.8  | 252  | 200  | 4.09 | 4.08 | 1.06 | 0.98 | 88.3 | 90.5 |
| perfusion and gas exchange (e.g., oxygen saturation)  | 92.4       | 77.2  | 252  | 197  | 4.09 | 4.07 | 1.08 | 1.09 | 85.6 | 91.4 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs   | Importance |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|
|   | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Cardiovascular/Pulmonary (continued)</b>   |            |      |      |      |      |      |      |      |      |      |
| peripheral circulation (e.g., capillary refill, blood pressure in upper versus lower extremities)   | 86.7       | 61.4 | 252  | 182  | 3.48 | 3.45 | 1.24 | 1.19 | 77.3 | 78.0 |
| critical limb ischemia (e.g., peripheral pulses, skin perfusion pressure)   | 85.2       | 63.0 | 252  | 178  | 3.39 | 3.48 | 1.26 | 1.17 | 74.2 | 76.4 |
| physiological responses to position change (e.g., orthostatic hypotension, skin color, blood pressure, heart rate)                        | 96.6       | 92.0 | 252  | 206  | 4.24 | 4.08 | 0.90 | 0.92 | 91.7 | 93.2 |
| aerobic capacity under maximal and submaximal conditions (e.g., endurance, exercise tolerance, metabolic equivalents, perceived exertion) | 94.7       | 79.8 | 252  | 197  | 3.82 | 3.69 | 1.11 | 1.18 | 87.1 | 82.7 |
| <b>Anthropometric</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>  |            |      |      |      |      |      |      |      |      |      |
| body composition (e.g., percent body fat, lean muscle mass)   | 81.1       | 27.7 | 252  | 161  | 2.55 | 2.72 | 1.20 | 1.39 | 61.7 | 52.8 |
| body dimensions (e.g., height, weight, girth, limb length, head circumference/shape)  | 88.6       | 62.7 | 252  | 183  | 2.66 | 3.10 | 1.20 | 1.22 | 69.7 | 68.3 |
| Quantify and qualify edema (e.g., pitting, volume, circumference)   | 95.5       | 84.8 | 252  | 202  | 3.47 | 3.51 | 1.12 | 1.02 | 87.9 | 85.6 |
| <b>Arousal, Attention, &amp; Cognition</b>  |            |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>  |            |      |      |      |      |      |      |      |      |      |
| arousal and orientation (e.g., level of consciousness, time, person, place, situation)  | 92.4       | 83.2 | 246  | 186  | 3.89 | 3.80 | 1.11 | 1.05 | 83.3 | 90.3 |
| attention and cognition (e.g., ability to process commands, delirium, confusion)  | 93.6       | 80.3 | 246  | 181  | 3.96 | 3.78 | 1.01 | 1.01 | 85.6 | 89.0 |
| communication (e.g., expressive and receptive skills, following instructions)   | 95.5       | 76.0 | 246  | 178  | 3.93 | 3.72 | 1.04 | 1.03 | 87.5 | 89.3 |
| recall (including memory and retention)   | 92.4       | 71.5 | 246  | 173  | 3.63 | 3.59 | 1.07 | 1.13 | 83.7 | 84.4 |

(continued)



**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs  | %Perf |      | n    |      | Importance |      |      |      | %Imp |      |
|--|-------|------|------|------|------------|------|------|------|------|------|
|  | 2018  | 2016 | 2018 | 2016 | M          |      | SD   |      | 2018 | 2016 |
|  |       |      |      |      | 2018       | 2016 | 2018 | 2016 |      |      |
| <b><i>Nerve Integrity</i></b>  |       |      |      |      |            |      |      |      |      |      |
| <i>Perform tests and measures of</i>   |       |      |      |      |            |      |      |      |      |      |
| cranial nerve integrity (e.g., facial asymmetry, oculomotor function, hearing)   | 83.3  | 45.6 | 246  | 155  | 3.36       | 3.27 | 1.19 | 1.27 | 72.7 | 72.3 |
| spinal nerve integrity (e.g., dermatome, myotome)  | 89.8  | 63.2 | 246  | 169  | 3.60       | 3.46 | 1.08 | 1.16 | 81.4 | 78.1 |
| peripheral nerve integrity (e.g., sensation, strength)   | 95.5  | 84.2 | 246  | 185  | 3.88       | 3.75 | 1.01 | 0.98 | 87.5 | 89.2 |
| neural provocation (e.g., tapping, tension, stretch)   | 94.3  | 71.3 | 246  | 169  | 3.61       | 3.47 | 1.03 | 1.09 | 87.1 | 82.8 |
| <b><i>Environmental &amp; Community Integration/Reintegration (Home, Work, Job, School, Play, &amp; Leisure)</i></b>   |       |      |      |      |            |      |      |      |      |      |
| Collect data on patient/client's ability to perform activities of daily living (ADL) (e.g., bed mobility, transfers, household mobility, dressing, self-care, toileting, sexual relations) | 99.2  | 98.6 | 242  | 196  | 4.38       | 4.37 | 0.90 | 0.71 | 90.2 | 98.5 |
| Collect data on patient/client's ability to perform instrumental activities of daily living (IADL) (e.g., household chores, hobbies)   | 97.7  | 94.8 | 242  | 195  | 4.07       | 4.04 | 1.02 | 0.95 | 88.6 | 92.3 |
| Collect data on patient/client's ability to perform skills needed for integration or reintegration into the community, work, or school   | 97.7  | 86.0 | 242  | 175  | 4.09       | 3.89 | 0.96 | 1.03 | 88.6 | 91.4 |
| Collect data on barriers (e.g., social, economic, physical, psychological, environmental, work conditions and activities) to home, community, work, or school integration/reintegration    | 96.2  | 82.0 | 242  | 171  | 3.88       | 3.78 | 1.05 | 1.03 | 86.0 | 89.5 |
| Collect data on safety in home, community, work, or school environments  | 96.6  | 88.0 | 242  | 176  | 4.05       | 3.89 | 1.04 | 1.02 | 88.3 | 90.3 |
| Collect data on patient/client's ability to participate in activities with or without the use of devices, equipment, or technologies   | 98.9  | 93.0 | 242  | 181  | 4.19       | 4.06 | 0.95 | 0.87 | 90.2 | 94.5 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs  | Importance |      |      |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|------|------|
|  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Ergonomics and Body Mechanics</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>   |            |      |      |      |      |      |      |      |      |      |
| ergonomics and body mechanics during functional activities   | 99.6       | 91.9 | 240  | 183  | 4.36 | 3.95 | 0.88 | 0.96 | 90.5 | 90.2 |
| postural alignment and position (static and dynamic)   | 99.6       | 95.0 | 240  | 183  | 4.43 | 4.08 | 0.77 | 0.88 | 90.5 | 93.4 |
| <b>Functional Mobility, Balance, &amp; Vestibular</b>  |            |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>   |            |      |      |      |      |      |      |      |      |      |
| balance (dynamic and static) with or without the use of specialized equipment  | 99.6       | 97.0 | 240  | 185  | 4.63 | 4.30 | 0.62 | 0.67 | 90.5 | 98.9 |
| gait and locomotion (e.g., ambulation, wheelchair mobility) with or without the use of specialized equipment                         | 99.2       | 98.0 | 240  | 185  | 4.70 | 4.42 | 0.58 | 0.63 | 89.8 | 98.9 |
| mobility during functional activities and transitional movements (e.g., transfers, bed mobility)                                     | 98.9       | 97.5 | 240  | 187  | 4.66 | 4.39 | 0.63 | 0.67 | 89.4 | 98.4 |
| vestibular function (e.g., peripheral dysfunction, central dysfunction, BPPV)  | 92.8       | 73.2 | 240  | 159  | 3.76 | 3.62 | 1.12 | 1.10 | 80.3 | 82.4 |
| <b>Integumentary Integrity</b>   |            |      |      |      |      |      |      |      |      |      |
| Observe skin characteristics (e.g., continuity of skin color, sensation, temperature, texture, turgor)                               | 98.5       | 95.4 | 239  | 173  | 3.73 | 3.92 | 1.05 | 0.84 | 87.9 | 94.8 |
| Collect data on wound characteristics (e.g., tissue involvement, depth, tunneling, burn classification, ulcer/injury classification) | 86.7       | 54.9 | 239  | 139  | 3.22 | 3.61 | 1.25 | 1.19 | 70.8 | 84.2 |
| Observe scar tissue characteristics (e.g., banding, pliability, sensation, and texture)  | 92.4       | 80.8 | 239  | 162  | 3.30 | 3.59 | 1.20 | 1.04 | 76.9 | 85.8 |
| Collect data on patient/client's activities, positioning, and postures that produce or relieve trauma to the skin                    | 92.0       | 85.5 | 239  | 163  | 3.83 | 3.87 | 1.12 | 0.99 | 79.9 | 91.4 |
| Identify devices and equipment that produce or relieve trauma to the patient/client's skin   | 91.7       | 83.8 | 239  | 164  | 3.79 | 3.79 | 1.12 | 1.02 | 79.2 | 89.6 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs   | Importance |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|
|   | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Joint Integrity &amp; Range of Motion</b>  |            |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>  |            |      |      |      |      |      |      |      |      |      |
| spinal joint stability (e.g., ligamentous integrity, joint structure)   | 89.0       | 63.4 | 237  | 146  | 3.78 | 3.59 | 1.09 | 1.20 | 76.1 | 82.9 |
| peripheral joint stability (e.g., ligamentous integrity, joint structure)   | 91.7       | 75.5 | 237  | 157  | 3.96 | 3.71 | 1.01 | 1.06 | 80.7 | 86.6 |
| spinal joint mobility (e.g., glide, end feel)   | 88.3       | 58.9 | 237  | 143  | 3.62 | 3.62 | 1.22 | 1.21 | 73.1 | 82.5 |
| peripheral joint mobility (e.g., glide, end feel)   | 93.6       | 80.7 | 237  | 163  | 3.88 | 3.83 | 1.09 | 1.01 | 81.1 | 88.3 |
| range of motion (e.g., passive, active, functional)   | 99.6       | 99.0 | 237  | 180  | 4.54 | 4.30 | 0.71 | 0.75 | 89.0 | 98.9 |
| flexibility (e.g., muscle length, soft tissue extensibility)  | 98.9       | 91.0 | 237  | 157  | 4.35 | 4.00 | 0.87 | 0.85 | 87.9 | 94.9 |
| <b>Motor Function</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>  |            |      |      |      |      |      |      |      |      |      |
| muscle tone (e.g., hypertonicity, hypotonicity, dystonia)   | 95.1       | 88.2 | 235  | 152  | 3.97 | 3.85 | 1.06 | 0.91 | 82.6 | 93.4 |
| dexterity, coordination, and agility (e.g., rapid alternating movement, finger to nose)                                     | 92.8       | 81.8 | 235  | 145  | 3.68 | 3.72 | 1.13 | 0.99 | 79.9 | 87.6 |
| ability to initiate, modify and control movement patterns and postures (e.g., catching a ball, gait)                        | 99.2       | 98.3 | 235  | 164  | 4.23 | 4.08 | 0.89 | 0.81 | 87.5 | 97.0 |
| ability to change movement performance with practice (e.g., motor learning)   | 98.5       | 93.1 | 235  | 156  | 4.17 | 3.90 | 0.91 | 0.84 | 86.7 | 96.2 |
| movement quality (e.g., purpose, precision, efficiency, biomechanics, kinematics)   | 99.2       | 90.4 | 235  | 151  | 4.11 | 3.90 | 0.93 | 0.89 | 87.5 | 94.7 |
| <b>Muscle Performance</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>  |            |      |      |      |      |      |      |      |      |      |
| muscle strength, power, and endurance without specialized equipment (e.g., manual muscle test, functional strength testing) | 98.5       | 95.5 | 235  | 162  | 4.30 | 4.12 | 0.92 | 0.83 | 86.7 | 96.3 |
| muscle strength, power, and endurance with specialized equipment (e.g., isokinetic testing, dynamometry)                    | 87.9       | 67.4 | 235  | 137  | 3.74 | 3.60 | 1.27 | 1.21 | 71.2 | 81.8 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs  | %Perf |      | n    |      | M    |      | SD   |      | %Imp |      |
|--|-------|------|------|------|------|------|------|------|------|------|
|  | 2018  | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Neuromotor Development &amp; Sensory Integration</b>  |       |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>   |       |      |      |      |      |      |      |      |      |      |
| acquisition and evolution of motor skills throughout the lifespan  | 90.2  | 47.1 | 235  | 114  | 3.44 | 3.19 | 1.18 | 1.34 | 74.2 | 69.3 |
| sensorimotor integration   | 89.0  | 59.1 | 235  | 125  | 3.52 | 3.24 | 1.11 | 1.30 | 76.5 | 68.0 |
| developmental reflexes and reactions (e.g., asymmetrical tonic neck reflex, righting reactions)  | 82.2  | 41.4 | 235  | 115  | 3.42 | 3.29 | 1.22 | 1.26 | 67.0 | 69.6 |
| <b>Reflex Integrity</b>  |       |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>   |       |      |      |      |      |      |      |      |      |      |
| deep tendon/muscle stretch reflexes (e.g., quadriceps, biceps)   | 88.3  | 66.7 | 233  | 134  | 3.53 | 3.40 | 1.18 | 1.10 | 73.5 | 76.9 |
| upper motor neuron integrity (e.g., Babinski reflex, Hoffman sign)   | 78.8  | 49.1 | 233  | 119  | 3.28 | 3.22 | 1.22 | 1.26 | 62.1 | 69.7 |
| superficial reflexes and reactions (e.g., cremasteric reflex, abdominal reflexes)  | 75.8  | 37.6 | 233  | 108  | 3.11 | 3.07 | 1.26 | 1.36 | 58.7 | 64.8 |
| <b>Pain &amp; Sensory Integrity</b>  |       |      |      |      |      |      |      |      |      |      |
| <i>Perform tests and measures of</i>   |       |      |      |      |      |      |      |      |      |      |
| pain (e.g., location, intensity, frequency, central, peripheral, psychogenic)  | 97.0  | 81.7 | 233  | 148  | 4.38 | 4.01 | 0.87 | 0.88 | 84.5 | 95.9 |
| deep sensation (e.g., proprioception, kinesthesia, pressure)   | 88.6  | 75.3 | 233  | 143  | 3.76 | 3.51 | 1.14 | 1.03 | 74.2 | 84.6 |
| superficial sensation (e.g., touch, temperature discrimination)  | 90.5  | 77.1 | 233  | 147  | 3.63 | 3.50 | 1.17 | 0.93 | 75.8 | 85.7 |
| <b>Plan of Care &amp; Goals</b>  |       |      |      |      |      |      |      |      |      |      |
| Modify and/or progress within the plan of care based on patient/client's resources (e.g., financial, transportation, time, insurance benefits, available technologies) | 95.1  | 88.1 | 232  | 156  | 4.25 | 4.18 | 0.97 | 0.96 | 82.2 | 94.2 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs   | %Perf      |      | n    |      | M    |      | SD   |      | %Imp  |       |
|---|------------|------|------|------|------|------|------|------|-------|-------|
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018  | 2016  |
|   | Importance |      |      |      |      |      |      |      |       |       |
| <b>INTERVENTIONS</b>  |            |      |      |      |      |      |      |      |       |       |
| <i>Procedural Interventions</i>   |            |      |      |      |      |      |      |      |       |       |
| <i>Therapeutic Exercise/Therapeutic Activities</i>  |            |      |      |      |      |      |      |      |       |       |
| <i>Perform and/or train patient/client/caregiver in</i>   |            |      |      |      |      |      |      |      |       |       |
| aerobic capacity/endurance conditioning   | 99.3       | 93.4 | 293  | 269  | 4.00 | 4.10 | 0.97 | 0.80 | 98.3  | 96.3  |
| balance, coordination, and agility activities   | 100.0      | 98.8 | 293  | 278  | 4.60 | 4.55 | 0.64 | 0.57 | 99.7  | 100.0 |
| body mechanics and postural stabilization techniques  | 100.0      | 99.4 | 293  | 279  | 4.58 | 4.49 | 0.68 | 0.62 | 100.0 | 99.6  |
| flexibility techniques  | 100.0      | 97.2 | 293  | 276  | 3.84 | 4.12 | 1.03 | 0.80 | 98.3  | 98.2  |
| neuromotor techniques (e.g., movement pattern training, neuromuscular education or reeducation)   | 99.7       | 97.2 | 293  | 276  | 4.06 | 4.16 | 0.99 | 0.80 | 98.0  | 97.5  |
| relaxation techniques   | 98.6       | 94.7 | 293  | 271  | 3.36 | 3.62 | 1.13 | 0.91 | 93.5  | 90.8  |
| strength, power, and endurance exercises  | 100.0      | 98.4 | 293  | 273  | 4.26 | 4.46 | 0.80 | 0.66 | 99.7  | 99.3  |
| genitourinary management (e.g., pelvic floor exercises, bladder strategies)   | 68.6       | 61.1 | 293  | 249  | 2.67 | 3.06 | 1.23 | 1.18 | 55.3  | 65.5  |
| gastrointestinal management (e.g., bowel strategies, positioning to avoid reflux)   | 64.2       | 48.4 | 293  | 240  | 2.42 | 2.85 | 1.15 | 1.18 | 47.8  | 55.4  |
| manual/mechanical airway clearance techniques (e.g., assistive devices, assistive cough, incentive spirometer, flutter valve, postural drainage, percussion, vibration) | 66.2       | 52.8 | 293  | 247  | 2.71 | 3.17 | 1.33 | 1.26 | 53.6  | 64.8  |
| techniques to maximize ventilation and perfusion (e.g., positioning, active cycle breathing, autogenic drainage, paced breathing, pursed-lip breathing)                 | 80.5       | 73.0 | 293  | 228  | 3.09 | 3.58 | 1.22 | 1.16 | 73.4  | 83.8  |
| mechanical repositioning for vestibular dysfunction   | 68.3       | 55.0 | 293  | 211  | 2.78 | 3.13 | 1.15 | 1.27 | 59.4  | 68.2  |
| habituation/adaptation exercises for vestibular dysfunction   | 73.7       | 58.6 | 293  | 206  | 2.81 | 3.14 | 1.19 | 1.26 | 63.8  | 66.5  |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs  | Importance |      |      |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|------|------|
|  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Functional Training</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Perform and/or train patient/client in</i>  |            |      |      |      |      |      |      |      |      |      |
| the use of environmental modifications (e.g., ramps, grab bars, raised toilet, environmental control units)                                    | 92.2       | 88.7 | 289  | 236  | 4.09 | 4.13 | 1.12 | 0.86 | 88.4 | 96.2 |
| activities of daily living (ADL) (e.g., bed mobility, transfers, household mobility, dressing, self-care, toileting, sexual relations)         | 98.0       | 94.7 | 289  | 245  | 4.35 | 4.43 | 0.98 | 0.77 | 95.2 | 97.6 |
| community and leisure integration or reintegration (e.g., work/school/play)  | 93.5       | 81.0 | 289  | 224  | 3.68 | 3.76 | 1.07 | 1.06 | 89.4 | 89.7 |
| Instrumental Activities of Daily Living (IADL) (e.g., household chores, hobbies)   | 96.6       | 84.8 | 289  | 229  | 3.87 | 3.86 | 1.06 | 0.98 | 92.5 | 91.7 |
| mobility techniques  | 99.3       | 97.2 | 289  | 245  | 4.30 | 4.33 | 0.82 | 0.79 | 97.3 | 98.0 |
| gross motor development  |            |      |      |      |      |      |      |      |      |      |
| fall prevention and fall recovery strategies   | 99.3       | 95.0 | 289  | 242  | 4.55 | 4.45 | 0.68 | 0.72 | 98.0 | 98.8 |
| behavior modification and strategies that enhance functioning (e.g., energy conservation, pacing, pre-activity planning, reminder schedules)   | 94.9       | 90.8 | 289  | 237  | 3.91 | 4.04 | 1.09 | 0.88 | 90.4 | 94.5 |
| <b>Manual Therapy Techniques</b>   |            |      |      |      |      |      |      |      |      |      |
| Perform manual lymphatic drainage  | 54.9       | 26.5 | 285  | 174  | 2.61 | 3.00 | 1.14 | 1.29 | 44.0 | 64.4 |
| Perform spinal manual traction   | 73.4       | 50.4 | 285  | 186  | 3.12 | 3.45 | 1.24 | 1.26 | 63.1 | 78.0 |
| Perform peripheral manual traction   | 73.4       | 47.4 | 285  | 183  | 3.11 | 3.34 | 1.26 | 1.33 | 63.1 | 72.1 |
| Perform and/or train patient/client/caregiver in soft tissue mobilization (e.g., connective tissue massage, therapeutic massage, foam rolling) | 93.2       | 91.1 | 285  | 227  | 3.53 | 3.90 | 1.28 | 0.93 | 84.3 | 94.7 |
| Perform instrument-assisted soft tissue mobilization   | 77.8       | 55.8 | 285  | 193  | 3.32 | 3.42 | 1.25 | 1.19 | 68.9 | 78.8 |
| Perform peripheral joint range of motion   | 95.6       | 93.7 | 285  | 227  | 4.13 | 4.31 | 1.08 | 0.81 | 90.8 | 96.9 |
| Perform peripheral mobilization/manipulation (thrust)  | 52.6       | 26.1 | 285  | 166  | 2.92 | 3.06 | 1.37 | 1.47 | 40.6 | 62.7 |
| Perform peripheral mobilization/manipulation (non-thrust)  | 77.1       | 56.4 | 285  | 188  | 3.45 | 3.55 | 1.33 | 1.22 | 67.2 | 80.9 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|--|------------|------|------|------|------|------|------|------|------|------|
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
|  | Importance |      |      |      |      |      |      |      |      |      |
| <b>Manual Therapy Techniques (continued)</b>   |            |      |      |      |      |      |      |      |      |      |
| Perform spinal mobilization/manipulation (thrust)  | 45.7       | 15.5 | 285  | 153  | 2.56 | 2.88 | 1.34 | 1.44 | 31.7 | 58.2 |
| Perform spinal mobilization/manipulation (non-thrust)  | 66.9       | 36.0 | 285  | 170  | 3.26 | 3.27 | 1.36 | 1.39 | 56.7 | 70.0 |
| <i>Apply taping for</i>  |            |      |      |      |      |      |      |      |      |      |
| neuromuscular reeducation  | 85.7       | 57.3 | 284  | 176  | 4.10 | 3.26 | 1.04 | 1.13 | 80.9 | 77.3 |
| lymphatic drainage   | 59.0       | 21.7 | 284  | 150  | 3.01 | 2.87 | 1.34 | 1.35 | 47.4 | 60.7 |
| pain management  | 87.4       | 54.0 | 284  | 174  | 4.06 | 3.22 | 1.14 | 1.17 | 81.6 | 74.1 |
| <b>Equipment &amp; Devices</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Apply and/or adjust</i>   |            |      |      |      |      |      |      |      |      |      |
| adaptive devices (e.g., utensils, seating and positioning devices, steering wheel devices)   | 79.5       | 62.3 | 283  | 187  | 3.65 | 3.39 | 1.30 | 1.21 | 71.7 | 78.1 |
| protective devices (e.g., braces, cushions, helmets, protective taping)  | 90.1       | 80.3 | 283  | 203  | 3.70 | 3.65 | 1.18 | 1.08 | 82.6 | 86.7 |
| supportive devices (e.g., compression garments, corsets, elastic wraps, neck collars serial casts, short-stretch bandages)                                 | 91.1       | 81.5 | 283  | 207  | 3.57 | 3.57 | 1.16 | 1.05 | 84.0 | 84.5 |
| orthotic devices (e.g., braces, shoe inserts, splints)   | 95.2       | 89.1 | 283  | 211  | 3.91 | 3.82 | 1.04 | 0.97 | 89.8 | 91.5 |
| <i>Apply and/or adjust</i>   |            |      |      |      |      |      |      |      |      |      |
| assistive devices/technologies (e.g., canes, crutches, walkers, wheelchairs, tilt tables, standing frames)   | 99.3       | 97.2 | 283  | 221  | 4.57 | 4.29 | 0.74 | 0.75 | 95.9 | 98.6 |
| prosthetic devices/technologies (e.g., lower-extremity and upper-extremity prostheses, microprocessor-controlled prosthetic devices)                       | 81.2       | 55.9 | 283  | 179  | 3.64 | 3.46 | 1.19 | 1.18 | 74.1 | 77.1 |
| mechanical neuromuscular reeducation devices/technologies (e.g., weighted vests, therapeutic suits, body weight supported treadmill, robotic exoskeletons) | 61.8       | 28.5 | 283  | 149  | 3.12 | 2.99 | 1.35 | 1.33 | 50.2 | 62.4 |
| prescribed oxygen during interventions   | 76.8       | 71.4 | 283  | 186  | 4.02 | 4.02 | 1.20 | 1.13 | 70.0 | 89.8 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs   | Importance |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|
|   | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Equipment &amp; Devices (continued)</b>  |            |      |      |      |      |      |      |      |      |      |
| <i>Train patient/client/caregiver in the use of</i>   |            |      |      |      |      |      |      |      |      |      |
| adaptive devices (e.g., utensils, seating and positioning devices, steering wheel devices)  | 74.7       | 57.6 | 277  | 167  | 3.60 | 3.49 | 1.33 | 1.20 | 63.5 | 81.4 |
| assistive devices/technologies (e.g., canes, crutches, walkers, wheelchairs, tilt tables, standing frames)  | 98.6       | 96.1 | 276  | 206  | 4.55 | 4.35 | 0.76 | 0.72 | 92.5 | 99.5 |
| orthotic devices (e.g., braces, shoe inserts, splints)  | 94.5       | 87.1 | 276  | 193  | 4.04 | 3.82 | 1.02 | 0.91 | 88.1 | 93.8 |
| prosthetic devices/technologies (e.g., lower-extremity and upper-extremity prostheses, microprocessor-controlled prosthetic devices)                        | 77.1       | 46.7 | 276  | 154  | 3.65 | 3.40 | 1.22 | 1.28 | 66.2 | 77.3 |
| protective devices (e.g., braces, cushions, helmets, protective taping)   | 84.0       | 69.0 | 276  | 175  | 3.62 | 3.50 | 1.24 | 1.12 | 74.1 | 81.1 |
| supportive devices (e.g., compression garments, corsets, elastic wraps, neck collars, serial casts, short-stretch bandages)                                 | 87.7       | 74.8 | 276  | 187  | 3.66 | 3.45 | 1.14 | 1.05 | 78.8 | 85.6 |
| mechanical neuromuscular re-education devices/technologies (e.g., weighted vests, therapeutic suits, body weight supported treadmill, robotic exoskeletons) | 59.0       | 26.6 | 276  | 133  | 3.31 | 2.83 | 1.35 | 1.36 | 47.8 | 55.6 |
| <b>Integumentary Repair &amp; Protection Techniques</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Perform and/or train patient/client/caregiver in</i>   |            |      |      |      |      |      |      |      |      |      |
| nonselective debridement (e.g., removal of nonselective areas of devitalized tissue)  | 35.8       | 12.6 | 272  | 127  | 2.67 | 2.53 | 1.35 | 1.44 | 20.8 | 46.5 |
| selective enzymatic or autolytic debridement (e.g., removal of specific areas of devitalized tissue)  | 34.1       | 8.3  | 271  | 122  | 2.65 | 2.48 | 1.36 | 1.45 | 19.5 | 43.4 |
| sharp debridement (e.g., removal of specific areas of devitalized tissue)   | 30.4       | 4.3  | 271  | 117  | 2.64 | 2.27 | 1.38 | 1.38 | 16.4 | 34.2 |
| application of topical agents (e.g., cleansers, creams, moisturizers, ointments, sealants) and dressings (e.g., hydrogels, wound coverings)                 | 51.9       | 28.0 | 271  | 135  | 2.85 | 2.68 | 1.32 | 1.33 | 36.2 | 48.9 |

(continued)



**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs  | Importance |      |      |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|------|------|
|  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b><i>Integumentary Repair &amp; Protection Techniques (continued)</i></b>   |            |      |      |      |      |      |      |      |      |      |
| desensitization techniques (e.g., brushing, tapping, use of textures)  | 72.0       | 50.0 | 271  | 159  | 2.99 | 2.91 | 1.21 | 1.20 | 58.7 | 61.6 |
| hyperbaric therapy   | 29.4       | 2.6  | 271  | 118  | 2.52 | 2.28 | 1.31 | 1.37 | 15.7 | 38.1 |
| negative pressure wound therapy  | 32.1       | 5.2  | 271  | 118  | 2.61 | 2.28 | 1.30 | 1.33 | 18.8 | 35.6 |
| <b><i>Therapeutic Modalities</i></b>   |            |      |      |      |      |      |      |      |      |      |
| <b><i>Perform and/or train patient/client/caregiver in</i></b>   |            |      |      |      |      |      |      |      |      |      |
| biofeedback therapy (e.g., relaxation techniques, muscle reeducation, EMG)   | 80.2       | 69.9 | 270  | 170  | 3.42 | 3.41 | 1.21 | 1.05 | 67.6 | 82.9 |
| iontophoresis  | 68.6       | 42.9 | 270  | 147  | 3.02 | 3.01 | 1.39 | 1.30 | 51.2 | 66.7 |
| phonophoresis  | 47.8       | 29.6 | 270  | 133  | 2.85 | 2.82 | 1.38 | 1.40 | 31.7 | 60.2 |
| electrotherapy modalities, excluding iontophoresis (e.g., neuromuscular electrical stimulation (NMES), transcutaneous electrical nerve stimulation (TENS), functional electrical stimulation (FES), interferential therapy, high-voltage pulsed current) | 91.5       | 86.7 | 270  | 191  | 4.05 | 3.93 | 1.15 | 0.98 | 80.2 | 91.1 |
| cryotherapy (e.g., cold pack, ice massage, vapocoolant spray)  | 95.9       | 91.2 | 270  | 195  | 4.01 | 3.87 | 1.12 | 0.97 | 86.3 | 92.8 |
| hydrotherapy using contrast baths/pools  | 50.2       | 33.0 | 270  | 126  | 2.90 | 2.98 | 1.41 | 1.31 | 33.8 | 61.9 |
| hydrotherapy (e.g., aquatic exercise, underwater treadmill)  | 55.3       | 32.2 | 270  | 134  | 3.31 | 3.13 | 1.38 | 1.30 | 41.3 | 64.9 |
| phototherapy (laser light)   | 44.0       | 12.4 | 270  | 120  | 2.58 | 2.58 | 1.26 | 1.39 | 27.3 | 46.7 |
| monochromatic infrared agent procedures (e.g., light emitting diodes [LEDs])   | 37.2       | 6.2  | 270  | 116  | 2.57 | 2.44 | 1.35 | 1.35 | 20.5 | 43.1 |
| ultrasound procedures  | 88.4       | 79.7 | 270  | 185  | 3.58 | 3.69 | 1.35 | 1.05 | 73.7 | 87.0 |
| diathermy  | 46.1       | 24.1 | 270  | 128  | 3.04 | 2.62 | 1.41 | 1.30 | 30.7 | 50.8 |
| dry heat thermotherapy (e.g., Fluidotherapy)   | 43.3       | 17.4 | 270  | 118  | 2.95 | 2.54 | 1.34 | 1.31 | 30.0 | 46.6 |
| hot pack thermotherapy   | 94.9       | 86.9 | 270  | 185  | 3.84 | 3.76 | 1.25 | 1.02 | 82.9 | 91.4 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs   | %Perf |      | Importance |      |      |      |      |      |      |      |
|---|-------|------|------------|------|------|------|------|------|------|------|
|   |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Therapeutic Modalities (continued)</b>   |       |      |            |      |      |      |      |      |      |      |
| paraffin bath thermotherapy   | 55.3  | 35.4 | 270        | 138  | 3.12 | 2.80 | 1.38 | 1.29 | 39.9 | 56.5 |
| shockwave therapy   | 29.4  | 2.7  | 270        | 111  | 2.51 | 2.15 | 1.34 | 1.32 | 15.0 | 33.3 |
| <b>Mechanical Modalities</b>  |       |      |            |      |      |      |      |      |      |      |
| <i>Apply and/or train patient/client/caregiver in</i>   |       |      |            |      |      |      |      |      |      |      |
| intermittent pneumatic compression  | 53.2  | 24.7 | 270        | 127  | 3.11 | 2.67 | 1.31 | 1.33 | 38.9 | 52.8 |
| assisted movement devices (e.g., dynamic splint, continuous passive motion devices)   | 66.9  | 55.6 | 270        | 152  | 3.15 | 3.13 | 1.32 | 1.24 | 52.6 | 69.7 |
| mechanical spinal traction  | 66.9  | 45.3 | 270        | 138  | 3.57 | 3.30 | 1.30 | 1.28 | 53.9 | 73.2 |
| <b>Non-procedural Interventions</b>   |       |      |            |      |      |      |      |      |      |      |
| <b>Communication</b>  |       |      |            |      |      |      |      |      |      |      |
| <i>Discuss physical therapy evaluation findings, interventions, goals, prognosis, discharge planning, and plan of care with</i> |       |      |            |      |      |      |      |      |      |      |
| the supervising physical therapist  | 100.0 | 99.5 | 269        | 201  | 4.81 | 4.65 | 0.54 | 0.61 | 91.8 | 99.5 |
| interprofessional/interdisciplinary team members  | 99.0  | 96.4 | 269        | 194  | 4.53 | 4.52 | 0.73 | 0.71 | 90.4 | 99.0 |
| patient/client/caregiver  | 100.0 | 98.6 | 269        | 198  | 4.73 | 4.56 | 0.60 | 0.62 | 91.5 | 99.5 |
| Provide written, oral, and electronic information to the patient/client and/or caregiver  | 99.0  | 95.5 | 269        | 192  | 4.60 | 4.43 | 0.75 | 0.80 | 90.1 | 97.9 |
| <b>Documentation</b>  |       |      |            |      |      |      |      |      |      |      |
| <i>Document</i>   |       |      |            |      |      |      |      |      |      |      |
| data collection results   | 99.0  | 91.9 | 268        | 188  | 4.45 | 4.41 | 0.87 | 0.85 | 90.1 | 96.3 |
| intervention(s) and patient/client response(s) to intervention  | 99.7  | 99.1 | 268        | 198  | 4.73 | 4.60 | 0.63 | 0.62 | 90.8 | 99.5 |
| patient/client/caregiver education  | 99.7  | 97.7 | 268        | 196  | 4.67 | 4.55 | 0.67 | 0.62 | 91.1 | 99.5 |
| communication with the interdisciplinary/interprofessional team related to the patient/client's care                            | 99.0  | 95.9 | 268        | 194  | 4.40 | 4.46 | 0.88 | 0.68 | 90.1 | 99.0 |
| rationale for billing and reimbursement   | 96.2  | 86.8 | 268        | 188  | 4.32 | 4.44 | 0.96 | 0.84 | 87.0 | 96.8 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs  | Importance |      |      |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|------|------|
|  | %Perf      |      | n    |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Documentation (continued)</b>   |            |      |      |      |      |      |      |      |      |      |
| disclosure and consent (e.g., disclosure of medical information, consent for treatment)  | 94.2       | 76.6 | 268  | 170  | 4.26 | 4.21 | 1.01 | 1.00 | 84.6 | 93.5 |
| Assign billing codes for physical therapy treatment provided   | 87.4       | 60.4 | 268  | 157  | 4.29 | 4.04 | 1.07 | 1.19 | 77.5 | 88.5 |
| <b>Education</b>   |            |      |      |      |      |      |      |      |      |      |
| <i>Educate patient/client and/or caregiver about</i>   |            |      |      |      |      |      |      |      |      |      |
| the patient/client's current condition and health status (e.g., nature of the condition, potential benefits of physical therapy interventions, potential treatment outcomes) | 100.0      | 97.3 | 266  | 197  | 4.69 | 4.40 | 0.60 | 0.73 | 90.8 | 99.0 |
| the role of the physical therapist and/or physical therapist assistant in patient/client management  | 100.0      | 96.8 | 266  | 197  | 4.54 | 4.26 | 0.77 | 0.84 | 90.8 | 97.0 |
| lifestyle and behavioral changes to promote wellness (e.g., nutrition, physical activity, tobacco cessation)   | 98.6       | 93.6 | 266  | 194  | 4.34 | 4.20 | 0.91 | 0.84 | 89.1 | 97.4 |
| the role of physical therapy in transitional planning (e.g., hospice, palliative care, setting changes)  | 88.4       | 74.9 | 266  | 170  | 4.00 | 3.82 | 1.10 | 1.08 | 77.8 | 89.4 |
| <i>Educate the healthcare team about</i>   |            |      |      |      |      |      |      |      |      |      |
| the role of the physical therapist and/or physical therapist assistant in patient/client management  | 95.6       | 79.5 | 266  | 171  | 4.25 | 3.92 | 0.95 | 1.03 | 86.0 | 90.1 |
| safe patient handling (e.g., injury prevention, ergonomics, use of equipment)  | 95.9       | 87.2 | 266  | 181  | 4.46 | 4.13 | 0.85 | 0.89 | 86.3 | 96.7 |
| Educate community groups on lifestyle and behavioral changes to promote wellness (e.g., nutrition, physical activity, tobacco cessation)                                     | 77.1       | 53.4 | 266  | 140  | 3.78 | 3.72 | 1.13 | 1.19 | 65.9 | 85.0 |
| Participate in the clinical education of students  | 80.5       | 54.1 | 266  | 149  | 3.95 | 3.81 | 1.03 | 1.18 | 70.6 | 85.9 |
| <b>Patient/client &amp; Staff Safety</b>   |            |      |      |      |      |      |      |      |      |      |
| <b>Emergency Procedures</b>  |            |      |      |      |      |      |      |      |      |      |
| Implement emergency procedures (e.g., CPR, AED, calling a code)  | 84.0       | 40.3 | 266  | 144  | 4.16 | 4.27 | 1.07 | 0.97 | 72.7 | 94.4 |
| Perform first aid  | 82.3       | 48.2 | 266  | 145  | 4.05 | 4.13 | 1.13 | 1.00 | 70.3 | 93.8 |
| Implement disaster response procedures   | 75.8       | 33.0 | 266  | 131  | 3.88 | 4.02 | 1.18 | 1.08 | 64.5 | 90.1 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs  | %Perf |      | Importance |      |      |      |      |      |      |      |
|--|-------|------|------------|------|------|------|------|------|------|------|
|  |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Environmental Safety</b>  |       |      |            |      |      |      |      |      |      |      |
| Perform risk assessment of the physical environment (e.g., barrier-free environment, outlets, windows, floors, lighting)   | 83.3  | 58.2 | 266        | 149  | 3.94 | 4.01 | 1.17 | 1.12 | 71.7 | 89.3 |
| Prepare and maintain a safe working environment for performing interventions (e.g., unobstructed walkways, equipment availability)   | 95.9  | 91.0 | 266        | 191  | 4.37 | 4.38 | 0.93 | 0.78 | 85.3 | 97.9 |
| Perform regular equipment inspections and/or maintenance (e.g., modalities, assistive devices)   | 89.8  | 76.4 | 266        | 171  | 4.12 | 4.18 | 1.04 | 0.95 | 79.2 | 94.7 |
| <b>Infection Control</b>   |       |      |            |      |      |      |      |      |      |      |
| Perform and/or train patient/client and/or caregiver on appropriate infection control practices (e.g., universal precautions, hand hygiene, isolation, airborne precautions, equipment cleaning) | 94.7  | 85.9 | 232        | 152  | 4.02 | 4.01 | 1.18 | 0.95 | 79.9 | 93.4 |
| <b>Research &amp; Evidence-Based Practice</b>  |       |      |            |      |      |      |      |      |      |      |
| Search the literature for current best evidence  | 93.6  | 91.5 | 232        | 160  | 3.71 | 3.76 | 1.06 | 1.00 | 79.5 | 87.5 |
| Evaluate the quality of published data   | 86.7  | 74.4 | 232        | 147  | 3.47 | 3.44 | 1.15 | 1.13 | 72.0 | 77.6 |
| Integrate current best evidence, clinical experience, and patient values in clinical practice (e.g., clinical prediction rules, patient preference)  | 93.6  | 91.3 | 232        | 160  | 3.91 | 3.84 | 1.04 | 0.99 | 79.9 | 86.9 |
| Design and/or direct research activities   | 68.9  | 21.1 | 232        | 103  | 2.84 | 2.80 | 1.22 | 1.37 | 48.5 | 57.3 |
| Participate in research activities   | 67.0  | 26.4 | 232        | 110  | 2.70 | 2.94 | 1.24 | 1.34 | 44.7 | 58.2 |
| Compare intervention outcomes with normative data  | 73.1  | 44.0 | 232        | 117  | 3.02 | 3.05 | 1.24 | 1.27 | 51.9 | 65.8 |
| <b>Professional Responsibilities</b>   |       |      |            |      |      |      |      |      |      |      |
| Supervise support personnel (e.g., physical therapy aide/technician)   | 82.2  | 63.6 | 232        | 137  | 3.51 | 3.60 | 1.21 | 1.13 | 66.7 | 83.2 |
| Assign tasks to other personnel (e.g., physical therapy aide/technician) to assist with patient/client care  | 86.0  | 67.0 | 232        | 143  | 3.42 | 3.57 | 1.20 | 1.20 | 69.3 | 80.4 |
| Disclose financial interest in recommended products or services to patient/client  | 74.6  | 34.1 | 232        | 114  | 3.00 | 2.81 | 1.30 | 1.39 | 53.4 | 56.1 |

(continued)

**Table B2. PTA Work Activity Survey Results (continued)**

| PTA WAs   | %Perf |      | Importance |      |      |      |      |      |      |      |
|---|-------|------|------------|------|------|------|------|------|------|------|
|   |       |      | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018  | 2016 | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Professional Responsibilities (continued)</b>  |       |      |            |      |      |      |      |      |      |      |
| Communicate with the physical therapist when the expectations of the PTA are beyond their knowledge, skills, and abilities  | 97.7  | 95.3 | 232        | 162  | 4.58 | 4.48 | 0.72 | 0.65 | 85.6 | 99.4 |
| Report healthcare providers that are suspected to not perform their professional responsibilities with reasonable skill and safety to the appropriate authorities                                 | 86.7  | 47.2 | 232        | 125  | 4.45 | 4.34 | 0.89 | 0.91 | 73.9 | 96.0 |
| Report suspected cases of abuse to the appropriate authority  | 88.3  | 45.1 | 232        | 126  | 4.64 | 4.50 | 0.71 | 0.81 | 76.1 | 96.8 |
| Report suspected illegal or unethical acts performed by health care professionals to the relevant authority   | 87.1  | 30.6 | 232        | 117  | 4.62 | 4.44 | 0.71 | 0.93 | 75.0 | 95.7 |
| Advocate for public access to physical therapy and other healthcare services  | 88.3  | 56.2 | 231        | 124  | 3.96 | 3.94 | 1.08 | 1.14 | 73.9 | 87.9 |
| Determine own need for professional development   | 98.1  | 97.1 | 231        | 163  | 4.27 | 4.21 | 0.90 | 0.81 | 85.2 | 96.9 |
| Participate in learning and/or development activities (e.g., journal clubs, self-directed reading, continuing competence activities) to maintain the currency of knowledge, skills, and abilities | 97.7  | 93.6 | 231        | 160  | 4.24 | 4.17 | 0.95 | 0.84 | 84.5 | 96.9 |
| Practice within the federal and jurisdiction regulations and professional standards   | 99.6  | 97.7 | 231        | 162  | 4.68 | 4.76 | 0.68 | 0.50 | 87.1 | 99.4 |
| Participate in professional organizations   | 92.4  | 64.5 | 231        | 134  | 3.56 | 3.52 | 1.27 | 1.01 | 74.6 | 82.8 |
| Participate in performance improvement and quality reporting activities (e.g., Physician Quality Reporting System, standardized outcomes measurement, application of health informatics)          | 87.9  | 57.4 | 231        | 122  | 3.76 | 3.57 | 1.16 | 1.07 | 73.5 | 85.2 |

**Table B3. PT Knowledge and Skill Requirements Survey Results**

| PT KSRs  | Importance |      |      |      |      |      |       |      |
|--|------------|------|------|------|------|------|-------|------|
|  | n          |      | M    |      | SD   |      | %Imp  |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018  | 2016 |
| <b>CARDIOVASCULAR/PULMONARY SYSTEM</b>   |            |      |      |      |      |      |       |      |
| <i>Physical Therapy Examination</i>  |            |      |      |      |      |      |       |      |
| Cardiovascular/pulmonary system tests/measures, including outcome measures, and their applications according to current best evidence  | 274        | 1019 | 3.88 | 3.73 | 0.96 | 1.00 | 99.6  | 86.8 |
| Anatomy and physiology of the cardiovascular/pulmonary system as related to tests/measures   | 274        | 1021 | 3.85 | 3.80 | 0.94 | 0.98 | 100.0 | 89.5 |
| Movement analysis as related to the cardiovascular/pulmonary system (e.g., rib cage excursion, breathing pattern)  | 274        | 1020 | 3.74 | 3.68 | 0.97 | 0.98 | 99.3  | 87.4 |
| <i>Foundations for Evaluation, Differential Diagnosis and Prognosis</i>  |            |      |      |      |      |      |       |      |
| Differential diagnoses related to diseases/conditions of the cardiovascular/pulmonary systems  | 274        | 1018 | 3.90 | 3.79 | 0.97 | 0.98 | 99.3  | 89.0 |
| Cardiovascular/pulmonary system diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis                                     | 274        | 1021 | 3.86 | 3.86 | 0.96 | 0.96 | 99.6  | 90.3 |
| Non-pharmacological medical management of the cardiovascular/pulmonary system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)     | 274        | 1012 | 3.35 | 3.25 | 1.00 | 0.99 | 98.2  | 76.2 |
| Pharmacological management of the cardiovascular/pulmonary system  | 274        | 1008 | 3.11 | 3.10 | 0.99 | 0.97 | 96.0  | 70.8 |
| <i>Interventions</i>   |            |      |      |      |      |      |       |      |
| Cardiovascular/pulmonary system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence | 274        | 1021 | 4.03 | 4.09 | 0.98 | 0.96 | 99.6  | 93.0 |
| Anatomy and physiology of the cardiovascular/pulmonary system as related to physical therapy interventions, daily activities, and environmental factors                        | 274        | 1021 | 4.08 | 4.19 | 0.90 | 0.88 | 99.3  | 95.2 |
| Adverse effects or complications on the cardiovascular/pulmonary system from physical therapy interventions  | 274        | 1022 | 4.37 | 4.38 | 0.77 | 0.82 | 99.6  | 96.7 |
| Adverse effects or complications on the cardiovascular/pulmonary system from physical therapy interventions used on other systems  | 262        | 927  | 4.44 | 4.21 | 0.75 | 0.87 | 95.6  | 95.6 |

(continued)

**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs   | Importance |      |      |      |      |      |       |      |
|---|------------|------|------|------|------|------|-------|------|
|   | n          |      | M    |      | SD   |      | %Imp  |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018  | 2016 |
| <b>LYMPHATIC SYSTEM</b>   |            |      |      |      |      |      |       |      |
| <i>Physical Therapy Examination</i>   |            |      |      |      |      |      |       |      |
| Lymphatic system tests/measures, including outcome measures, and their applications according to current best evidence  | 267        | 955  | 2.90 | 2.77 | 0.96 | 0.97 | 92.7  | 55.9 |
| Anatomy and physiology of the lymphatic system as related to tests/measures   | 267        | 964  | 2.97 | 2.97 | 0.95 | 1.01 | 93.4  | 64.1 |
| Movement analysis as related to the lymphatic system (e.g., compensatory movement, extremity range of motion)   | 267        | 968  | 3.15 | 3.20 | 1.08 | 1.05 | 92.0  | 71.8 |
| <i>Foundations for Evaluation, Differential Diagnosis and Prognosis</i>   |            |      |      |      |      |      |       |      |
| Differential diagnoses related to diseases/conditions of the lymphatic system   | 267        | 966  | 3.12 | 3.13 | 1.01 | 1.05 | 94.2  | 68.2 |
| Lymphatic system diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis                                     | 267        | 967  | 3.06 | 3.12 | 0.97 | 1.02 | 93.8  | 67.9 |
| Non-pharmacological medical management of the lymphatic system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)     | 267        | 957  | 2.82 | 2.77 | 0.97 | 0.94 | 90.9  | 55.0 |
| <i>Interventions</i>  |            |      |      |      |      |      |       |      |
| Lymphatic system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence | 267        | 967  | 3.25 | 3.12 | 1.08 | 1.02 | 93.4  | 67.9 |
| Anatomy and physiology of the lymphatic system as related to interventions, daily activities, and environmental factors   | 267        | 967  | 3.29 | 3.33 | 1.04 | 1.05 | 94.2  | 74.9 |
| Adverse effects or complications on the lymphatic system from physical therapy interventions  | 267        | 968  | 3.48 | 3.68 | 1.11 | 1.09 | 93.4  | 83.2 |
| Adverse effects or complications on the lymphatic system from physical therapy interventions used on other systems  | 262        | 926  | 3.90 | 3.78 | 1.07 | 1.05 | 94.2  | 86.5 |
| <b>MUSCULOSKELETAL SYSTEM</b>   |            |      |      |      |      |      |       |      |
| <i>Physical Therapy Examination</i>   |            |      |      |      |      |      |       |      |
| Musculoskeletal system tests/measures, including outcome measures, and their applications according to current best evidence                                    | 290        | 1036 | 4.74 | 4.70 | 0.51 | 0.56 | 100.0 | 99.3 |
| Anatomy and physiology of the musculoskeletal system as related to tests/measures   | 290        | 1036 | 4.68 | 4.75 | 0.56 | 0.51 | 100.0 | 99.6 |

(continued)

**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs   | Importance |      |      |      |      |      |       |      |
|---|------------|------|------|------|------|------|-------|------|
|   | n          |      | M    |      | SD   |      | %Imp  |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018  | 2016 |
| <b>Physical Therapy Examination (continued)</b>   |            |      |      |      |      |      |       |      |
| Movement analysis as related to the musculoskeletal system  | 290        | 1036 | 4.66 | 4.60 | 0.58 | 0.61 | 100.0 | 99.5 |
| Joint biomechanics and their applications   | 290        | 1036 | 4.46 | 4.44 | 0.74 | 0.75 | 100.0 | 97.7 |
| Physical therapy ultrasound imaging of the musculoskeletal system   | 290        | 973  | 2.69 | 2.67 | 1.05 | 1.13 | 88.3  | 48.7 |
| <b>Foundations for Evaluation, Differential Diagnosis and Prognosis</b>   |            |      |      |      |      |      |       |      |
| Differential diagnoses related to diseases/conditions of the musculoskeletal system   | 274        | 1036 | 4.57 | 4.44 | 0.62 | 0.73 | 94.5  | 98.6 |
| Differential diagnoses related to diseases/conditions of the connective tissue  | 274        | 1036 | 4.34 | 4.26 | 0.72 | 0.82 | 94.5  | 97.4 |
| Musculoskeletal system diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis   | 274        | 1036 | 4.55 | 4.51 | 0.60 | 0.67 | 94.5  | 99.3 |
| Connective tissue diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis  | 274        | 1036 | 4.32 | 4.27 | 0.73 | 0.80 | 94.5  | 97.3 |
| Non-pharmacological medical management of the musculoskeletal system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)           | 274        | 1033 | 3.81 | 3.64 | 0.82 | 0.93 | 94.5  | 89.2 |
| Pharmacological management of the musculoskeletal system  | 274        | 1010 | 3.27 | 3.18 | 0.86 | 0.87 | 93.8  | 78.4 |
| The impact of regenerative medicine (e.g., platelet rich plasma, stem cells) on physical therapy prognosis and interventions related to musculoskeletal diseases/conditions | 274        | 996  | 2.93 | 2.72 | 0.93 | 0.91 | 89.3  | 57.5 |
| <b>Interventions</b>  |            |      |      |      |      |      |       |      |
| Musculoskeletal system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence       | 290        | 1010 | 4.75 | 4.54 | 0.49 | 0.69 | 100.0 | 98.7 |
| Anatomy and physiology of the musculoskeletal system as related to physical therapy interventions, daily activities, and environmental factors                              | 290        | 1010 | 4.77 | 4.71 | 0.46 | 0.51 | 100.0 | 99.9 |
| Adverse effects or complications on the musculoskeletal system from physical therapy interventions  | 290        | 1010 | 4.73 | 4.66 | 0.52 | 0.58 | 100.0 | 99.5 |
| Adverse effects or complications on the musculoskeletal system from physical therapy interventions used on other systems  | 262        | 928  | 4.79 | 4.48 | 0.46 | 0.71 | 95.6  | 98.7 |

(continued)



**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs  | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>NEUROMUSCULAR &amp; NERVOUS SYSTEM</b>  |            |      |      |      |      |      |      |      |
| <i>Physical Therapy Examination</i>  |            |      |      |      |      |      |      |      |
| Neuromuscular and nervous systems tests/measures, including outcome measures, and their applications according to current best evidence  | 268        | 953  | 4.62 | 4.49 | 0.63 | 0.70 | 92.4 | 98.8 |
| Anatomy and physiology of the neuromuscular and nervous systems as related to tests/measures   | 268        | 953  | 4.58 | 4.53 | 0.65 | 0.67 | 92.4 | 99.1 |
| Movement analysis as related to the neuromuscular and nervous systems  | 268        | 952  | 4.58 | 4.38 | 0.65 | 0.80 | 92.4 | 96.9 |
| Diagnostic electromyography (EMG) using surface electrodes   | 268        | 879  | 2.49 | 2.43 | 1.01 | 0.99 | 77.2 | 39.1 |
| Diagnostic electrophysiology (EMG/NCV) using needle insertion  | 268        | 839  | 2.35 | 2.27 | 1.00 | 1.02 | 71.7 | 31.4 |
| <i>Foundations for Evaluation, Differential Diagnosis and Prognosis</i>  |            |      |      |      |      |      |      |      |
| Differential diagnoses related to diseases/conditions of the nervous system (CNS, PNS, ANS)  | 268        | 951  | 4.25 | 4.16 | 0.89 | 0.88 | 92.1 | 95.8 |
| Nervous system (CNS, PNS, ANS) diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis  | 268        | 952  | 4.38 | 4.31 | 0.78 | 0.80 | 92.1 | 97.7 |
| Non-pharmacological medical management of the neuromuscular and nervous systems (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)     | 268        | 947  | 3.65 | 3.55 | 0.90 | 0.96 | 92.4 | 86.5 |
| Pharmacological management of the neuromuscular and nervous systems  | 268        | 947  | 3.24 | 3.22 | 0.93 | 0.98 | 91.0 | 75.8 |
| <i>Interventions</i>   |            |      |      |      |      |      |      |      |
| Neuromuscular and nervous systems physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence | 264        | 953  | 4.65 | 4.48 | 0.60 | 0.74 | 91.0 | 98.1 |
| Anatomy and physiology of the neuromuscular and nervous systems as related to physical therapy interventions, daily activities, and environmental factors                        | 264        | 928  | 4.59 | 4.58 | 0.58 | 0.63 | 91.0 | 99.4 |
| Adverse effects or complications on the neuromuscular and nervous systems from physical therapy interventions  | 264        | 928  | 4.59 | 4.53 | 0.62 | 0.67 | 91.0 | 98.8 |
| Adverse effects or complications on the neuromuscular and nervous systems from physical therapy interventions used on other systems  | 262        | 928  | 4.77 | 4.46 | 0.49 | 0.71 | 95.6 | 98.6 |

(continued)

**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs   | Importance |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|
|   | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b><i>Interventions (continued)</i></b>   |            |      |      |      |      |      |      |      |
| Motor control as related to neuromuscular and nervous systems physical therapy interventions  | 264        | 928  | 4.54 | 4.42 | 0.64 | 0.75 | 91.0 | 98.6 |
| Motor learning as related to the neuromuscular and nervous systems physical therapy interventions   | 264        | 928  | 4.56 | 4.41 | 0.61 | 0.75 | 91.0 | 98.6 |
| <b>INTEGUMENTARY SYSTEM</b>   |            |      |      |      |      |      |      |      |
| <b><i>Physical Therapy Examination</i></b>  |            |      |      |      |      |      |      |      |
| Integumentary system tests/measures, including outcome measures, and their applications according to current best evidence  | 257        | 947  | 3.32 | 3.33 | 0.96 | 0.99 | 93.1 | 78.5 |
| Anatomy and physiology of the integumentary system as related to tests/measures   | 257        | 948  | 3.41 | 3.41 | 0.96 | 1.00 | 92.7 | 80.0 |
| Movement analysis as related to the integumentary system (e.g., friction, shear, pressure, and scar mobility)   | 257        | 951  | 3.82 | 3.75 | 0.94 | 0.97 | 93.1 | 89.1 |
| <b><i>Foundations for Evaluation, Differential Diagnosis and Prognosis</i></b>  |            |      |      |      |      |      |      |      |
| Differential diagnoses related to diseases/conditions of the integumentary system   | 257        | 951  | 3.43 | 3.39 | 0.99 | 1.03 | 92.0 | 78.7 |
| Integumentary system diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis                                     | 257        | 951  | 3.37 | 3.42 | 0.98 | 1.01 | 92.3 | 80.4 |
| Non-pharmacological medical management of the integumentary system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)     | 257        | 946  | 3.02 | 3.02 | 0.97 | 0.98 | 90.5 | 67.2 |
| Pharmacological management of the integumentary system  | 257        | 945  | 2.79 | 2.82 | 0.97 | 0.98 | 89.1 | 58.0 |
| <b><i>Interventions</i></b>   |            |      |      |      |      |      |      |      |
| Integumentary system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence | 257        | 951  | 3.62 | 3.64 | 1.01 | 1.02 | 93.1 | 85.5 |
| Anatomy and physiology of the integumentary system as related to physical therapy interventions, daily activities, and environmental factors                        | 257        | 950  | 3.73 | 3.71 | 0.95 | 1.00 | 93.4 | 87.6 |
| Adverse effects or complications on the integumentary system from physical therapy and medical/surgical interventions   | 257        | 951  | 3.88 | 3.89 | 0.99 | 1.00 | 93.8 | 89.7 |
| Adverse effects or complications on the integumentary system from physical therapy interventions used on other systems  | 262        | 927  | 4.10 | 3.97 | 0.96 | 0.99 | 95.6 | 90.1 |

(continued)

**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs   | Importance |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|
|   | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>METABOLIC &amp; ENDOCRINE SYSTEMS</b>  |            |      |      |      |      |      |      |      |
| <i>Foundations for Evaluation, Differential Diagnosis and Prognosis</i>   |            |      |      |      |      |      |      |      |
| Differential diagnoses related to diseases/conditions of the metabolic and endocrine systems  | 261        | 902  | 3.53 | 3.37 | 0.93 | 0.99 | 89.0 | 81.0 |
| Metabolic and endocrine system diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis   | 261        | 902  | 3.58 | 3.41 | 0.94 | 0.98 | 89.3 | 83.2 |
| Non-pharmacological medical management of the metabolic and endocrine systems (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)  | 261        | 894  | 3.16 | 2.98 | 0.94 | 1.00 | 86.9 | 66.3 |
| Pharmacological management of the metabolic and endocrine systems   | 261        | 891  | 2.90 | 2.85 | 0.93 | 0.97 | 84.8 | 62.4 |
| <i>Interventions</i>  |            |      |      |      |      |      |      |      |
| Metabolic and endocrine systems physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence  | 261        | 899  | 3.67 | 3.57 | 1.00 | 1.05 | 89.3 | 83.3 |
| Anatomy and physiology of the metabolic and endocrine systems as related to physical therapy interventions, daily activities, and environmental factors   | 261        | 901  | 3.64 | 3.60 | 1.05 | 1.04 | 88.3 | 83.7 |
| Adverse effects or complications on the metabolic and endocrine systems from physical therapy interventions   | 261        | 900  | 3.85 | 3.85 | 0.98 | 1.00 | 89.3 | 89.1 |
| Adverse effects or complications on the metabolic and endocrine systems from physical therapy interventions used on other systems   | 262        | 927  | 3.87 | 3.80 | 1.05 | 1.05 | 95.3 | 87.2 |
| <b>GASTROINTESTINAL SYSTEM</b>  |            |      |      |      |      |      |      |      |
| <i>Physical Therapy Examination</i>   |            |      |      |      |      |      |      |      |
| Gastrointestinal system tests/measures, including outcome measures, and their applications according to current best evidence (e.g., bowel dysfunction impact questionnaires, Murphy test, Rovsing test, McBurney point sign) | 258        | 856  | 2.83 | 2.69 | 1.00 | 1.02 | 82.8 | 52.5 |
| Anatomy and physiology of the gastrointestinal system as related to tests/measures  | 258        | 865  | 2.94 | 2.88 | 1.03 | 1.02 | 83.1 | 61.0 |
| Movement analysis as related to the gastrointestinal system (e.g., effects of muscular tension or trigger points, positioning for bowel movement)   | 258        | 866  | 2.96 | 2.96 | 1.11 | 1.10 | 81.7 | 61.2 |

(continued)

**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs  | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Foundations for Evaluation, Differential Diagnosis and Prognosis</b>  |            |      |      |      |      |      |      |      |
| Gastrointestinal system diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis   | 258        | 869  | 2.99 | 2.96 | 1.02 | 1.03 | 84.1 | 63.8 |
| Differential diagnoses related to diseases/conditions of the gastrointestinal system   | 258        | 871  | 3.09 | 3.03 | 1.03 | 1.08 | 84.5 | 63.8 |
| Non-pharmacological medical management of the gastrointestinal system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)   | 258        | 861  | 2.71 | 2.64 | 0.98 | 0.96 | 81.4 | 50.4 |
| Pharmacological management of the gastrointestinal system  | 258        | 854  | 2.57 | 2.49 | 0.93 | 0.91 | 80.0 | 43.6 |
| <b>Interventions</b>   |            |      |      |      |      |      |      |      |
| Gastrointestinal system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence (e.g., positioning for reflux prevention, bowel programs) | 258        | 867  | 3.09 | 3.09 | 1.09 | 1.12 | 84.5 | 66.4 |
| Anatomy and physiology of the gastrointestinal system as related to physical therapy interventions, daily activities, and environmental factors  | 258        | 872  | 3.23 | 3.26 | 1.08 | 1.10 | 85.2 | 72.9 |
| Adverse effects or complications on the gastrointestinal system from physical therapy interventions  | 258        | 872  | 3.38 | 3.43 | 1.09 | 1.12 | 85.9 | 76.2 |
| Adverse effects or complications on the gastrointestinal system from physical therapy interventions used on other systems  | 262        | 926  | 3.73 | 3.61 | 1.12 | 1.12 | 94.5 | 80.4 |
| <b>GENITOURINARY SYSTEM</b>  |            |      |      |      |      |      |      |      |
| <b>Physical Therapy Examination</b>  |            |      |      |      |      |      |      |      |
| Genitourinary system tests/measures, including outcome measures, and their applications according to current best evidence   | 255        | 844  | 2.93 | 2.77 | 1.09 | 1.04 | 80.3 | 54.0 |
| Anatomy and physiology of the genitourinary system as related to tests/measures  | 255        | 851  | 2.95 | 2.88 | 1.11 | 1.07 | 80.7 | 57.1 |
| Physical therapy ultrasound imaging of the genitourinary system  | 255        | 780  | 2.25 | 2.22 | 1.01 | 0.98 | 66.2 | 30.3 |
| <b>Foundations for Evaluation, Differential Diagnosis and Prognosis</b>  |            |      |      |      |      |      |      |      |
| Genitourinary system diseases/conditions and their pathophysiology to establish and carry out plan of care, including prognosis  | 255        | 846  | 2.90 | 2.80 | 1.09 | 1.09 | 80.3 | 53.7 |
| Differential diagnoses related to diseases/conditions of the genitourinary system  | 255        | 855  | 3.02 | 2.90 | 1.11 | 1.10 | 81.4 | 57.9 |

(continued)

**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs  | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Foundations for Evaluation, Differential Diagnosis and Prognosis (continued)</b>  |            |      |      |      |      |      |      |      |
| Non-pharmacological medical management of the genitourinary system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)  | 255        | 844  | 2.64 | 2.54 | 1.04 | 1.00 | 76.6 | 44.4 |
| Pharmacological management of the genitourinary system   | 255        | 835  | 2.49 | 2.42 | 1.00 | 0.95 | 73.8 | 39.7 |
| <b>Interventions</b>   |            |      |      |      |      |      |      |      |
| Genitourinary system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence (e.g., bladder programs, biofeedback, pelvic floor retraining) | 255        | 855  | 3.13 | 3.03 | 1.16 | 1.12 | 81.4 | 62.8 |
| Anatomy and physiology of the genitourinary system as related to physical therapy interventions, daily activities, and environmental factors   | 255        | 855  | 3.24 | 3.17 | 1.17 | 1.14 | 81.7 | 67.8 |
| Adverse effects or complications on the genitourinary system from physical therapy interventions   | 255        | 853  | 3.28 | 3.29 | 1.19 | 1.17 | 82.1 | 70.6 |
| Adverse effects or complications on the genitourinary system from physical therapy interventions used on other systems   | 262        | 927  | 3.63 | 3.56 | 1.17 | 1.17 | 93.8 | 77.8 |
| <b>SYSTEM INTERACTIONS</b>   |            |      |      |      |      |      |      |      |
| <b>Foundations for Evaluation, Differential Diagnosis and Prognosis</b>  |            |      |      |      |      |      |      |      |
| Differential diagnoses related to diseases/conditions where the primary impact is on more than one system  | 253        | 928  | 4.22 | 4.03 | 0.81 | 0.93 | 92.3 | 93.8 |
| Diseases/conditions where the primary impact is on more than one system (e.g., cancer, multi-trauma, sarcoidosis, autoimmune disorders, pregnancy) to establish and carry out plan of care, including prognosis                    | 253        | 927  | 4.22 | 4.10 | 0.81 | 0.87 | 92.3 | 95.0 |
| The impact of co-morbidities/co-existing conditions on patient/client management (e.g., diabetes and hypertension; obesity and arthritis; dementia and hip fracture)   | 253        | 915  | 4.43 | 4.43 | 0.71 | 0.71 | 92.3 | 99.1 |
| Psychological and psychiatric conditions that impact patient/client management (e.g., grief, depression, schizophrenia)  | 253        | 915  | 4.00 | 3.97 | 0.88 | 0.88 | 92.0 | 94.9 |
| Dimensions of pain that impact patient/client management (e.g., psychological, social, physiological, neurological, mechanical)  | 253        | 915  | 4.26 | 4.26 | 0.81 | 0.79 | 92.3 | 97.4 |
| Non-pharmacological medical management of multiple systems (e.g., diagnostic imaging and other medical tests, surgical procedures)   | 253        | 914  | 3.85 | 3.66 | 0.91 | 0.92 | 92.3 | 89.5 |
| Pharmacological management of multiple systems, including polypharmacy   | 253        | 913  | 3.53 | 3.42 | 0.98 | 0.98 | 92.0 | 82.1 |

(continued)

**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs  | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>EQUIPMENT, DEVICES, &amp; TECHNOLOGIES</b>  |            |      |      |      |      |      |      |      |
| <i>Applications and adjustments, indications, contraindications, and precautions of:</i>   |            |      |      |      |      |      |      |      |
| assistive and adaptive devices/technologies (e.g., walkers, wheelchairs, adaptive seating systems and positioning devices, mechanical lifts)   | 254        | 876  | 4.60 | 4.59 | 0.65 | 0.69 | 87.6 | 98.7 |
| prosthetic devices/technologies (e.g., lower-extremity and upper-extremity prostheses, microprocessor-controlled prosthetic devices)   | 254        | 874  | 3.98 | 4.01 | 0.94 | 1.04 | 87.2 | 90.4 |
| protective, supportive, and orthotic devices/technologies (e.g., braces, helmets, taping, compression garments, serial casts, shoe inserts, splints, robotic exoskeleton)  | 254        | 875  | 4.06 | 4.14 | 0.94 | 0.94 | 86.9 | 93.8 |
| <b>THERAPEUTIC MODALITIES</b>  |            |      |      |      |      |      |      |      |
| <i>Applications, indications, contraindications, and precautions of:</i>   |            |      |      |      |      |      |      |      |
| thermal modalities   | 252        | 902  | 3.71 | 4.15 | 1.19 | 0.99 | 88.0 | 91.0 |
| iontophoresis  | 252        | 889  | 3.00 | 3.73 | 1.18 | 1.19 | 82.5 | 80.2 |
| electrotherapy modalities, excluding iontophoresis (e.g., neuromuscular electrical stimulation (NMES), transcutaneous electrical nerve stimulation (TENS), functional electrical stimulation (FES), interferential therapy, high-voltage pulsed current) | 252        | 899  | 3.82 | 4.14 | 1.06 | 0.97 | 90.9 | 92.5 |
| light modalities (e.g., laser light therapy, LED light therapy)  | 252        | 875  | 2.72 | 3.44 | 1.26 | 1.29 | 75.5 | 70.0 |
| phonophoresis  | 252        | 875  | 2.65 | 3.45 | 1.24 | 1.31 | 73.0 | 69.8 |
| ultrasound modalities, excluding phonophoresis   | 252        | 888  | 3.17 | 3.83 | 1.30 | 1.17 | 82.5 | 81.9 |
| mechanical modalities (e.g., mechanical motion devices, traction devices)  | 252        | 896  | 3.62 | 3.97 | 1.12 | 1.06 | 89.1 | 88.2 |
| biofeedback  | 252        | 896  | 3.42 | 3.57 | 1.03 | 1.12 | 88.7 | 79.7 |
| diathermy  | 252        | 828  | 2.21 | 3.06 | 1.23 | 1.40 | 56.9 | 54.4 |
| intermittent compression   | 252        | 893  | 2.86 | 3.57 | 1.16 | 1.16 | 80.3 | 78.4 |
| shockwave therapy  | 252        | 740  | 2.09 | 2.45 | 1.09 | 1.26 | 58.0 | 33.0 |

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**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs  | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>SAFETY &amp; PROTECTION</b>   |            |      |      |      |      |      |      |      |
| Factors influencing safety and injury prevention (e.g., safe patient handling, fall prevention, equipment maintenance, environmental safety)                         | 254        | 874  | 4.76 | 4.79 | 0.53 | 0.51 | 87.6 | 99.2 |
| The function and implications and related precautions of intravenous lines, tubes, catheters, monitoring devices, and mechanical ventilators/oxygen delivery devices | 254        | 872  | 4.34 | 4.29 | 0.88 | 0.88 | 87.2 | 95.9 |
| Emergency preparedness (e.g., CPR, first aid, disaster response)   | 254        | 873  | 4.56 | 4.52 | 0.76 | 0.78 | 87.6 | 97.0 |
| Infection control procedures (e.g., standard/universal precautions, isolation techniques, sterile technique)   | 254        | 874  | 4.63 | 4.69 | 0.72 | 0.62 | 87.6 | 98.6 |
| Signs/symptoms of physical, sexual, and psychological abuse and neglect  | 254        | 874  | 4.50 | 4.38 | 0.74 | 0.81 | 87.6 | 97.1 |
| <b>PROFESSIONAL RESPONSIBILITIES</b>   |            |      |      |      |      |      |      |      |
| Standards of documentation   | 253        | 873  | 4.70 | 4.68 | 0.54 | 0.55 | 87.2 | 99.7 |
| Standards of professional ethics   | 253        | 873  | 4.84 | 4.80 | 0.43 | 0.46 | 87.2 | 99.8 |
| Standards of billing, coding, and reimbursement  | 253        | 872  | 4.53 | 4.27 | 0.69 | 0.87 | 87.2 | 95.8 |
| Patient/client rights (e.g., ADA, IDEA, HIPAA, patient bill of rights)   | 253        | 873  | 4.68 | 4.57 | 0.61 | 0.67 | 87.2 | 98.5 |
| Obligations for reporting illegal, unethical, or unprofessional behaviors (e.g., fraud, abuse, neglect)  | 253        | 873  | 4.70 | 4.61 | 0.59 | 0.63 | 87.2 | 98.7 |
| State and federal laws, rules, regulations, and industry standards set by state and accrediting bodies (e.g., state licensing entities, Joint Commission, CARF, CMS) | 253        | 872  | 4.61 | 4.43 | 0.70 | 0.79 | 86.9 | 97.0 |
| Risk management and quality assurance (e.g., policies and procedures, incident reports, peer chart review)   | 252        | 871  | 4.02 | 4.07 | 0.87 | 0.95 | 86.9 | 92.3 |
| Human resource legal issues (e.g., OSHA, sexual harassment)  | 252        | 872  | 3.99 | 3.96 | 0.93 | 0.99 | 86.6 | 91.3 |
| Roles and responsibilities of the PT, PTA, other healthcare professionals, and support staff   | 252        | 873  | 4.58 | 4.55 | 0.67 | 0.66 | 86.9 | 99.0 |
| Cultural factors and/or characteristics that affect patient/client management (e.g., language differences, disability, ethnicity, customs, demographics, religion)   | 252        | 873  | 4.25 | 4.23 | 0.86 | 0.86 | 86.9 | 95.8 |
| Socioeconomic factors that affect patient/client management  | 252        | 872  | 4.19 | 3.93 | 0.87 | 0.90 | 86.9 | 93.5 |
| Health information technology (e.g., electronic medical records, telemedicine)   | 252        | 872  | 4.05 | 3.88 | 0.96 | 0.98 | 86.2 | 90.7 |

(continued)

**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs   | Importance |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|
|   | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>TEACHING &amp; LEARNING THEORIES</b>   |            |      |      |      |      |      |      |      |
| Teaching and learning theories and techniques   | 251        | 897  | 3.93 | 3.70 | 1.00 | 1.05 | 90.1 | 85.3 |
| Health behavior change models (e.g., social cognitive theory, health belief model)  | 251        | 896  | 3.55 | 3.42 | 1.11 | 1.07 | 87.6 | 78.5 |
| Communication methods and techniques (e.g., motivational interviewing, health information brochures/handouts, feedback techniques)  | 251        | 903  | 4.04 | 3.86 | 1.04 | 1.02 | 90.1 | 88.6 |
| <b>RESEARCH &amp; EVIDENCE-BASED PRACTICE</b>   |            |      |      |      |      |      |      |      |
| Techniques for accessing evidence (e.g., peer-reviewed publications, scientific proceedings, guidelines, clinical prediction rules)   | 251        | 902  | 3.98 | 3.86 | 0.97 | 1.01 | 90.5 | 89.5 |
| Research methodology and interpretation (e.g., qualitative, quantitative, levels of evidence)   | 251        | 901  | 3.71 | 3.53 | 1.02 | 1.05 | 90.1 | 82.9 |
| Measurement science (e.g., reliability, validity)   | 251        | 902  | 3.74 | 3.65 | 1.00 | 1.04 | 90.1 | 85.9 |
| Statistics (e.g., t-test, chi-square, correlation coefficient, ANOVA, likelihood ratio, effect size, confidence interval)   | 251        | 882  | 2.88 | 2.93 | 1.04 | 1.11 | 83.2 | 61.0 |
| Data collection techniques (e.g., surveys, direct observation)  | 251        | 892  | 3.13 | 3.18 | 1.02 | 1.08 | 87.2 | 70.5 |
| <b>SKILLS</b>   |            |      |      |      |      |      |      |      |
| Active listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times | 251        | 905  | 4.77 | 4.72 | 0.51 | 0.55 | 91.6 | 99.6 |
| Speaking - Talking to others to convey information effectively  | 251        | 905  | 4.75 | 4.69 | 0.51 | 0.56 | 91.6 | 99.6 |
| Reading Comprehension - Understanding written sentences and paragraphs in work related documents  | 251        | 905  | 4.57 | 4.51 | 0.69 | 0.73 | 91.2 | 98.6 |
| Critical Thinking - Using logic and clinical reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems   | 251        | 905  | 4.80 | 4.77 | 0.48 | 0.50 | 91.2 | 99.8 |
| Social Perceptiveness - Being aware of others' reactions and understanding why they react as they do  | 251        | 903  | 4.73 | 4.57 | 0.55 | 0.68 | 91.6 | 98.9 |
| Time Management - Managing one's own time and the time of others  | 251        | 905  | 4.71 | 4.58 | 0.56 | 0.67 | 91.6 | 99.2 |
| Coordination - Adjusting actions in relation to others' actions   | 249        | 903  | 4.51 | 4.48 | 0.64 | 0.74 | 90.9 | 97.9 |
| Writing - Communicating effectively in writing as appropriate for the needs of the audience   | 249        | 904  | 4.44 | 4.48 | 0.71 | 0.75 | 90.9 | 98.0 |

(continued)



**Table B3. PT Knowledge and Skill Requirements Survey Results (continued)**

| PT KSRs   | Importance |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|
|   | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>SKILLS (continued)</b>   |            |      |      |      |      |      |      |      |
| Active Learning - Understanding the implications of new information for both current and future problem solving and decision-making | 249        | 904  | 4.59 | 4.55 | 0.64 | 0.70 | 90.9 | 98.2 |
| Persuasion - Persuading others to change their minds or behavior  | 249        | 901  | 3.91 | 3.89 | 0.96 | 1.01 | 90.1 | 90.1 |
| Negotiation - Bringing others together and trying to reconcile differences  | 249        | 900  | 3.98 | 3.78 | 0.96 | 1.02 | 89.8 | 88.5 |
| Service Orientation - Actively looking for ways to help people  | 249        | 902  | 4.35 | 4.08 | 0.82 | 0.93 | 90.9 | 93.5 |

**Table B4. PTA Knowledge and Skill Requirements Survey Results**

| PTA KSRs   | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>CARDIOVASCULAR/PULMONARY SYSTEM</b>   |            |      |      |      |      |      |      |      |
| <i>Physical Therapy Data Collection</i>  |            |      |      |      |      |      |      |      |
| Cardiovascular/pulmonary system tests/measures, including outcome measures, and their applications according to current best evidence  | 625        | 1123 | 3.91 | 3.59 | 0.97 | 1.06 | 98.7 | 81.8 |
| Anatomy and physiology of the cardiovascular/pulmonary system as related to tests/measures   | 625        | 1126 | 3.86 | 3.64 | 0.96 | 1.04 | 99.2 | 84.8 |
| Movement analysis as related to the cardiovascular/pulmonary system (e.g., rib cage excursion, breathing pattern)  | 625        | 1127 | 3.71 | 3.60 | 0.97 | 1.01 | 99.5 | 84.4 |
| <i>Diseases/Conditions that Impact Effective Treatment</i>   |            |      |      |      |      |      |      |      |
| Cardiovascular/pulmonary system diseases/conditions and their pathophysiology to carry out the established plan of care  | 625        | 1129 | 3.98 | 3.84 | 0.90 | 0.94 | 99.5 | 90.7 |
| Non-pharmacological medical management of the cardiovascular/pulmonary system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)     | 625        | 1116 | 3.23 | 3.02 | 0.98 | 1.03 | 97.3 | 66.3 |
| Pharmacological management of the cardiovascular/pulmonary system  | 625        | 1099 | 3.07 | 2.84 | 0.96 | 0.99 | 96.0 | 57.7 |
| <i>Interventions</i>   |            |      |      |      |      |      |      |      |
| Cardiovascular/pulmonary system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence | 625        | 1127 | 4.13 | 4.00 | 0.91 | 0.96 | 99.7 | 91.7 |
| Anatomy and physiology of the cardiovascular/pulmonary system as related to physical therapy interventions, daily activities, and environmental factors                        | 625        | 1130 | 4.20 | 4.08 | 0.87 | 0.91 | 99.7 | 93.8 |
| Adverse effects or complications on the cardiovascular/pulmonary system from physical therapy interventions  | 625        | 1130 | 4.48 | 4.33 | 0.71 | 0.83 | 99.8 | 96.9 |
| Adverse effects or complications on the cardiovascular/pulmonary system from physical therapy interventions used on other systems  | 587        | 1044 | 4.39 | 4.12 | 0.78 | 0.89 | 93.9 | 95.4 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs  | Importance |      |      |      |      |      |       |      |
|---|------------|------|------|------|------|------|-------|------|
|   | n          |      | M    |      | SD   |      | %Imp  |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018  | 2016 |
| <b>LYMPHATIC SYSTEM</b>   |            |      |      |      |      |      |       |      |
| <i>Physical Therapy Data Collection</i>   |            |      |      |      |      |      |       |      |
| Lymphatic system tests/measures, including outcome measures, and their applications according to current best evidence                                      | 604        | 1063 | 2.99 | 2.79 | 0.99 | 1.05 | 92.3  | 54.9 |
| Anatomy and physiology of the lymphatic system as related to tests/measures   | 604        | 1074 | 3.04 | 2.95 | 0.99 | 1.05 | 93.1  | 62.5 |
| Movement analysis as related to the lymphatic system (e.g., compensatory movement, extremity range of motion)   | 604        | 1078 | 3.35 | 3.32 | 1.05 | 1.07 | 93.9  | 74.2 |
| <i>Diseases/Conditions that Impact Effective Treatment</i>  |            |      |      |      |      |      |       |      |
| Lymphatic system diseases/conditions and their pathophysiology to carry out the established plan of care  | 604        | 1082 | 3.31 | 3.24 | 1.04 | 1.06 | 93.6  | 72.7 |
| Non-pharmacological medical management of the lymphatic system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures) | 604        | 1064 | 2.88 | 2.70 | 0.95 | 0.98 | 92.2  | 52.7 |
| <i>Interventions</i>  |            |      |      |      |      |      |       |      |
| Lymphatic system interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence              | 604        | 1076 | 3.37 | 3.26 | 1.07 | 1.06 | 93.8  | 72.4 |
| Anatomy and physiology of the lymphatic system as related to interventions, daily activities, and environmental factors                                     | 604        | 1083 | 3.43 | 3.36 | 1.06 | 1.08 | 94.4  | 75.1 |
| Adverse effects or complications on the lymphatic system from physical therapy interventions  | 604        | 1086 | 3.77 | 3.70 | 1.10 | 1.09 | 95.0  | 82.5 |
| Adverse effects or complications on the lymphatic system from physical therapy interventions used on other systems  | 587        | 1042 | 3.70 | 3.72 | 1.07 | 1.06 | 93.0  | 85.2 |
| <b>MUSCULOSKELETAL SYSTEM</b>   |            |      |      |      |      |      |       |      |
| <i>Physical Therapy Data Collection</i>   |            |      |      |      |      |      |       |      |
| Musculoskeletal system tests/measures, including outcome measures, and their applications according to current best evidence                                | 647        | 1162 | 4.46 | 4.31 | 0.77 | 0.85 | 99.8  | 95.8 |
| Anatomy and physiology of the musculoskeletal system as related to tests/measures   | 647        | 1164 | 4.56 | 4.51 | 0.69 | 0.73 | 100.0 | 97.9 |
| Movement analysis as related to the musculoskeletal system  | 647        | 1164 | 4.46 | 4.38 | 0.72 | 0.77 | 100.0 | 98.1 |
| Joint biomechanics and their applications   | 647        | 1165 | 4.37 | 4.33 | 0.78 | 0.80 | 99.8  | 97.0 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs  | Importance |      |      |      |      |      |       |      |
|---|------------|------|------|------|------|------|-------|------|
|   | n          |      | M    |      | SD   |      | %Imp  |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018  | 2016 |
| <b><i>Diseases/Conditions that Impact Effective Treatment</i></b>   |            |      |      |      |      |      |       |      |
| Musculoskeletal system diseases/conditions and their pathophysiology to carry out the established plan of care  | 625        | 1164 | 4.30 | 4.26 | 0.74 | 0.81 | 96.6  | 97.0 |
| Connective tissue diseases/conditions and their pathophysiology to carry out the established plan of care   | 625        | 1164 | 4.12 | 4.07 | 0.82 | 0.90 | 96.6  | 94.7 |
| Non-pharmacological medical management of the musculoskeletal system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)     | 625        | 1156 | 3.55 | 3.37 | 0.96 | 1.00 | 95.7  | 80.3 |
| Pharmacological management of the musculoskeletal system  | 625        | 1145 | 3.26 | 3.06 | 0.98 | 1.03 | 94.4  | 68.8 |
| <b><i>Interventions</i></b>   |            |      |      |      |      |      |       |      |
| Musculoskeletal system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence | 647        | 1165 | 4.63 | 4.49 | 0.59 | 0.72 | 100.0 | 98.5 |
| Anatomy and physiology of the musculoskeletal system as related to physical therapy interventions, daily activities, and environmental factors                        | 647        | 1166 | 4.63 | 4.63 | 0.62 | 0.62 | 99.8  | 99.1 |
| Adverse effects or complications on the musculoskeletal system from physical therapy interventions  | 647        | 1153 | 4.65 | 4.50 | 0.61 | 0.68 | 100.0 | 99.0 |
| Adverse effects or complications on the musculoskeletal system from physical therapy interventions used on other systems  | 587        | 1045 | 4.53 | 4.38 | 0.70 | 0.77 | 93.9  | 97.8 |
| <b>NEUROMUSCULAR &amp; NERVOUS SYSTEM</b>   |            |      |      |      |      |      |       |      |
| <b><i>Physical Therapy Data Collection</i></b>  |            |      |      |      |      |      |       |      |
| Neuromuscular and nervous systems tests/measures, including outcome measures, and their applications according to current best evidence                               | 624        | 1076 | 4.06 | 3.99 | 0.89 | 0.91 | 96.1  | 93.1 |
| Anatomy and physiology of the neuromuscular and nervous systems as related to tests/measures  | 624        | 1078 | 4.16 | 4.09 | 0.86 | 0.88 | 96.1  | 95.1 |
| Movement analysis as related to the neuromuscular and nervous systems   | 624        | 1078 | 4.24 | 4.12 | 0.83 | 0.87 | 96.1  | 95.6 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs   | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b><i>Diseases/Conditions that Impact Effective Treatment</i></b>  |            |      |      |      |      |      |      |      |
| Nervous system (CNS, PNS, ANS) diseases/conditions and their pathophysiology to carry out the established plan of care   | 625        | 1079 | 4.06 | 4.00 | 0.90 | 0.91 | 96.3 | 94.2 |
| Non-pharmacological medical management of the neuromuscular and nervous systems (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)     | 624        | 1074 | 3.51 | 3.32 | 1.01 | 1.03 | 94.9 | 77.7 |
| Pharmacological management of the neuromuscular and nervous systems  | 624        | 1061 | 3.25 | 3.09 | 0.99 | 1.05 | 94.0 | 67.7 |
| <b><i>Interventions</i></b>  |            |      |      |      |      |      |      |      |
| Neuromuscular and nervous systems physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence | 601        | 1078 | 4.40 | 4.25 | 0.74 | 0.86 | 92.7 | 95.5 |
| Anatomy and physiology of the neuromuscular and nervous systems as related to physical therapy interventions, daily activities, and environmental factors                        | 601        | 1079 | 4.38 | 4.34 | 0.75 | 0.79 | 92.7 | 97.4 |
| Adverse effects or complications on the neuromuscular and nervous systems from physical therapy interventions  | 601        | 1079 | 4.44 | 4.38 | 0.74 | 0.78 | 92.7 | 97.3 |
| Adverse effects or complications on the neuromuscular and nervous systems from physical therapy interventions used on other systems  | 587        | 1045 | 4.53 | 4.36 | 0.70 | 0.78 | 93.9 | 97.6 |
| Motor control as related to neuromuscular and nervous systems physical therapy interventions   | 601        | 1079 | 4.34 | 4.33 | 0.76 | 0.76 | 92.7 | 98.0 |
| Motor learning as related to the neuromuscular and nervous systems physical therapy interventions  | 601        | 1069 | 4.32 | 4.11 | 0.79 | 0.86 | 92.6 | 95.9 |
| <b>INTEGUMENTARY SYSTEM</b>  |            |      |      |      |      |      |      |      |
| <b><i>Physical Therapy Data Collection</i></b>   |            |      |      |      |      |      |      |      |
| Integumentary system tests/measures, including outcome measures, and their applications according to current best evidence   | 569        | 1056 | 3.32 | 3.22 | 0.97 | 1.06 | 89.3 | 72.3 |
| Anatomy and physiology of the integumentary system as related to tests/measures  | 569        | 1061 | 3.43 | 3.35 | 0.98 | 1.03 | 89.6 | 77.2 |
| Movement analysis as related to the integumentary system (e.g., friction, shear, pressure, and scar mobility)  | 569        | 1065 | 3.87 | 3.77 | 0.91 | 0.96 | 90.7 | 89.8 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs   | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b><i>Diseases/Conditions that Impact Effective Treatment</i></b>  |            |      |      |      |      |      |      |      |
| Integumentary system diseases/conditions and their pathophysiology to carry out the established plan of care   | 569        | 1063 | 3.65 | 3.58 | 0.95 | 0.98 | 90.2 | 84.9 |
| Non-pharmacological medical management of the integumentary system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)                | 569        | 1050 | 3.13 | 2.97 | 0.96 | 1.04 | 89.1 | 64.2 |
| Pharmacological management of the integumentary system   | 569        | 1041 | 2.88 | 2.77 | 0.98 | 1.06 | 85.6 | 54.8 |
| <b><i>Interventions</i></b>  |            |      |      |      |      |      |      |      |
| Integumentary system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence            | 569        | 1065 | 3.72 | 3.66 | 0.95 | 1.01 | 90.6 | 86.6 |
| Anatomy and physiology of the integumentary system as related to physical therapy interventions, daily activities, and environmental factors                                   | 569        | 1066 | 3.80 | 3.75 | 0.94 | 1.00 | 90.4 | 88.0 |
| Adverse effects or complications on the integumentary system from physical therapy and medical/surgical interventions  | 569        | 1066 | 3.98 | 3.88 | 0.95 | 1.00 | 90.6 | 89.4 |
| Adverse effects or complications on the integumentary system from physical therapy interventions used on other systems   | 587        | 1043 | 4.07 | 3.95 | 0.90 | 0.97 | 93.6 | 92.1 |
| <b>METABOLIC &amp; ENDOCRINE SYSTEMS</b>   |            |      |      |      |      |      |      |      |
| <b><i>Diseases/Conditions that Impact Effective Treatment</i></b>  |            |      |      |      |      |      |      |      |
| Metabolic and endocrine system diseases/conditions and their pathophysiology to carry out the established plan of care   | 593        | 1038 | 3.43 | 3.21 | 0.98 | 0.99 | 89.6 | 76.4 |
| Non-pharmacological medical management of the metabolic and endocrine systems (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)     | 593        | 1029 | 3.15 | 2.92 | 0.98 | 0.97 | 88.7 | 64.9 |
| Pharmacological management of the metabolic and endocrine systems  | 593        | 1019 | 2.98 | 2.77 | 0.99 | 0.98 | 87.3 | 56.8 |
| <b><i>Interventions</i></b>  |            |      |      |      |      |      |      |      |
| Metabolic and endocrine systems physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence | 593        | 1039 | 3.53 | 3.40 | 1.03 | 1.06 | 89.5 | 79.6 |
| Anatomy and physiology of the metabolic and endocrine systems as related to physical therapy interventions, daily activities, and environmental factors                        | 593        | 1041 | 3.56 | 3.42 | 1.06 | 1.06 | 89.8 | 79.3 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs   | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Interventions (continued)</b>   |            |      |      |      |      |      |      |      |
| Adverse effects or complications on the metabolic and endocrine systems from physical therapy interventions  | 593        | 1042 | 3.77 | 3.65 | 1.04 | 1.06 | 90.1 | 84.6 |
| Adverse effects or complications on the metabolic and endocrine systems from physical therapy interventions used on other systems  | 587        | 1041 | 3.74 | 3.70 | 1.03 | 1.09 | 92.8 | 84.2 |
| <b>GASTROINTESTINAL SYSTEM</b>   |            |      |      |      |      |      |      |      |
| <b>Physical Therapy Data Collection</b>  |            |      |      |      |      |      |      |      |
| Gastrointestinal system tests/measures, including outcome measures, and their applications according to current best evidence (e.g., bowel dysfunction impact questionnaires, Murphy test, Rovsing test, McBurney point sign)    | 586        | 980  | 2.77 | 2.64 | 1.05 | 1.04 | 81.1 | 49.4 |
| Anatomy and physiology of the gastrointestinal system as related to tests/measures   | 586        | 989  | 2.86 | 2.77 | 1.04 | 1.06 | 83.6 | 53.6 |
| Movement analysis as related to the gastrointestinal system (e.g., effects of muscular tension or trigger points, positioning for bowel movement)  | 586        | 996  | 2.97 | 2.93 | 1.09 | 1.04 | 83.5 | 61.1 |
| <b>Diseases/Conditions that Impact Effective Treatment</b>   |            |      |      |      |      |      |      |      |
| Gastrointestinal system diseases/conditions and their pathophysiology to carry out the established plan of care  | 586        | 1000 | 3.02 | 2.92 | 1.08 | 1.01 | 84.2 | 63.1 |
| Non-pharmacological medical management of the gastrointestinal system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)   | 586        | 984  | 2.78 | 2.63 | 1.01 | 0.98 | 83.2 | 49.3 |
| Pharmacological management of the gastrointestinal system  | 586        | 974  | 2.64 | 2.48 | 0.98 | 0.93 | 80.5 | 42.9 |
| <b>Interventions</b>   |            |      |      |      |      |      |      |      |
| Gastrointestinal system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence (e.g., positioning for reflux prevention, bowel programs) | 586        | 1003 | 3.15 | 3.06 | 1.09 | 1.07 | 85.2 | 66.6 |
| Anatomy and physiology of the gastrointestinal system as related to physical therapy interventions, daily activities, and environmental factors  | 586        | 1006 | 3.20 | 3.17 | 1.11 | 1.10 | 85.5 | 68.7 |
| Adverse effects or complications on the gastrointestinal system from physical therapy interventions  | 586        | 1008 | 3.37 | 3.35 | 1.14 | 1.11 | 85.8 | 74.1 |
| Adverse effects or complications on the gastrointestinal system from physical therapy interventions used on other systems  | 587        | 1041 | 3.59 | 3.57 | 1.09 | 1.14 | 92.5 | 79.9 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs   | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>GENITOURINARY SYSTEM</b>  |            |      |      |      |      |      |      |      |
| <i>Physical Therapy Data Collection</i>  |            |      |      |      |      |      |      |      |
| Genitourinary system tests/measures, including outcome measures, and their applications according to current best evidence   | 579        | 963  | 2.78 | 2.57 | 1.05 | 1.00 | 80.7 | 45.2 |
| Anatomy and physiology of the genitourinary system as related to tests/measures  | 579        | 971  | 2.82 | 2.70 | 1.04 | 1.04 | 81.8 | 50.0 |
| <i>Diseases/Conditions that Impact Effective Treatment</i>   |            |      |      |      |      |      |      |      |
| Genitourinary system diseases/conditions and their pathophysiology to carry out the established plan of care   | 579        | 977  | 2.89 | 2.74 | 1.06 | 1.03 | 81.9 | 52.0 |
| Non-pharmacological medical management of the genitourinary system (e.g., diagnostic imaging, laboratory test values, other medical tests, surgical procedures)  | 579        | 964  | 2.68 | 2.52 | 0.97 | 0.97 | 80.7 | 44.3 |
| Pharmacological management of the genitourinary system   | 579        | 951  | 2.52 | 2.40 | 0.95 | 0.95 | 77.4 | 38.4 |
| <i>Interventions</i>   |            |      |      |      |      |      |      |      |
| Genitourinary system physical therapy interventions and their applications for rehabilitation, health promotion, and performance according to current best evidence (e.g., bladder programs, biofeedback, pelvic floor retraining) | 579        | 978  | 3.05 | 2.94 | 1.09 | 1.08 | 82.8 | 59.2 |
| Anatomy and physiology of the genitourinary system as related to physical therapy interventions, daily activities, and environmental factors   | 579        | 982  | 3.08 | 3.01 | 1.11 | 1.11 | 82.8 | 61.0 |
| Adverse effects or complications on the genitourinary system from physical therapy interventions   | 579        | 983  | 3.21 | 3.13 | 1.17 | 1.15 | 83.6 | 65.1 |
| Adverse effects or complications on the genitourinary system from physical therapy interventions used on other systems   | 587        | 1040 | 3.49 | 3.50 | 1.15 | 1.19 | 91.4 | 76.3 |
| <b>SYSTEM INTERACTIONS</b>   |            |      |      |      |      |      |      |      |
| <i>Diseases/Conditions that Impact Effective Treatment</i>   |            |      |      |      |      |      |      |      |
| Diseases/conditions where the primary impact is on more than one system (e.g., cancer, multi-trauma, sarcoidosis, autoimmune disorders, pregnancy) to carry out the established plan of care                                       | 564        | 1044 | 4.20 | 4.03 | 0.82 | 0.92 | 90.1 | 93.7 |
| The impact of co-morbidities/co-existing conditions on patient/client management (e.g., diabetes and hypertension; obesity and arthritis; dementia and hip fracture)   | 564        | 1045 | 4.46 | 4.31 | 0.66 | 0.79 | 90.2 | 97.3 |

(continued)



**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs   | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b><i>Diseases/Conditions that Impact Effective Treatment (continued)</i></b>  |            |      |      |      |      |      |      |      |
| Psychological and psychiatric conditions that impact patient/client management (e.g., grief, depression, schizophrenia)  | 564        | 1041 | 4.06 | 3.73 | 0.85 | 0.91 | 90.1 | 89.9 |
| Dimensions of pain that impact patient/client management (e.g., psychological, social, physiological, neurological, mechanical)  | 564        | 1042 | 4.27 | 4.00 | 0.76 | 0.87 | 90.2 | 95.3 |
| Non-pharmacological medical management of multiple systems (e.g., diagnostic imaging and other medical tests, surgical procedures)   | 564        | 1031 | 3.57 | 3.29 | 0.95 | 1.01 | 89.0 | 77.4 |
| Pharmacological management of multiple systems, including polypharmacy   | 564        | 1018 | 3.30 | 3.06 | 1.00 | 1.00 | 87.5 | 68.9 |
| <b>EQUIPMENT, DEVICES, &amp; TECHNOLOGIES</b>  |            |      |      |      |      |      |      |      |
| <b><i>Applications and adjustments, indications, contraindications, and precautions of:</i></b>  |            |      |      |      |      |      |      |      |
| assistive and adaptive devices/technologies (e.g., walkers, wheelchairs, adaptive seating systems and positioning devices, mechanical lifts)   | 575        | 998  | 4.73 | 4.64 | 0.53 | 0.63 | 88.9 | 99.3 |
| prosthetic devices/technologies (e.g., lower-extremity and upper-extremity prostheses, microprocessor-controlled prosthetic devices)   | 575        | 994  | 4.17 | 4.18 | 0.90 | 0.98 | 88.4 | 92.5 |
| protective, supportive, and orthotic devices/technologies (e.g., braces, helmets, taping, compression garments, serial casts, shoe inserts, splints, robotic exoskeleton)  | 575        | 997  | 4.25 | 4.20 | 0.85 | 0.93 | 88.7 | 94.3 |
| <b>THERAPEUTIC MODALITIES</b>  |            |      |      |      |      |      |      |      |
| <b><i>Applications, indications, contraindications, and precautions of:</i></b>  |            |      |      |      |      |      |      |      |
| thermal modalities   | 561        | 1037 | 4.15 | 4.48 | 1.03 | 0.78 | 88.5 | 96.8 |
| iontophoresis  | 561        | 1022 | 3.31 | 4.01 | 1.25 | 1.15 | 83.5 | 85.1 |
| electrotherapy modalities, excluding iontophoresis (e.g., neuromuscular electrical stimulation (NMES), transcutaneous electrical nerve stimulation (TENS), functional electrical stimulation (FES), interferential therapy, high-voltage pulsed current) | 561        | 1033 | 4.15 | 4.49 | 1.02 | 0.77 | 88.3 | 96.8 |
| light modalities (e.g., laser light therapy, LED light therapy)  | 561        | 1015 | 2.98 | 3.75 | 1.24 | 1.27 | 79.0 | 77.6 |
| phonophoresis  | 561        | 1007 | 2.94 | 3.76 | 1.31 | 1.28 | 75.8 | 76.7 |
| ultrasound modalities, excluding phonophoresis   | 561        | 1027 | 3.78 | 4.31 | 1.22 | 0.94 | 85.1 | 92.6 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs   | Importance |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|
|  | n          |      | M    |      | SD   |      | %Imp |      |
|  | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>Applications, indications, contraindications, and precautions of: (continued)</b>   |            |      |      |      |      |      |      |      |
| mechanical modalities (e.g., mechanical motion devices, traction devices)  | 561        | 1028 | 3.77 | 4.24 | 1.08 | 0.98 | 88.5 | 91.7 |
| biofeedback  | 561        | 1022 | 3.45 | 3.76 | 1.13 | 1.19 | 86.2 | 80.8 |
| diathermy  | 561        | 987  | 2.73 | 3.65 | 1.40 | 1.34 | 67.8 | 72.2 |
| intermittent compression   | 561        | 1028 | 3.26 | 3.83 | 1.14 | 1.17 | 85.0 | 83.2 |
| <b>SAFETY &amp; PROTECTION</b>   |            |      |      |      |      |      |      |      |
| Factors influencing safety and injury prevention (e.g., safe patient handling, fall prevention, equipment maintenance, environmental safety)                         | 575        | 996  | 4.82 | 4.78 | 0.44 | 0.50 | 88.9 | 99.5 |
| The function and implications and related precautions of intravenous lines, tubes, catheters, monitoring devices, and mechanical ventilators/oxygen delivery devices | 575        | 995  | 4.37 | 4.34 | 0.85 | 0.89 | 88.6 | 94.8 |
| Emergency preparedness (e.g., CPR, first aid, disaster response)   | 575        | 996  | 4.57 | 4.51 | 0.72 | 0.77 | 88.7 | 97.3 |
| Infection control procedures (e.g., standard/universal precautions, isolation techniques, sterile technique)   | 575        | 995  | 4.74 | 4.72 | 0.56 | 0.60 | 88.9 | 99.1 |
| Signs/symptoms of physical, sexual, and psychological abuse and neglect  | 575        | 995  | 4.47 | 4.39 | 0.75 | 0.86 | 88.9 | 95.8 |
| <b>PROFESSIONAL RESPONSIBILITIES</b>   |            |      |      |      |      |      |      |      |
| Standards of documentation   | 572        | 994  | 4.74 | 4.68 | 0.57 | 0.58 | 88.3 | 99.7 |
| Standards of professional ethics   | 572        | 994  | 4.83 | 4.79 | 0.44 | 0.47 | 88.4 | 99.9 |
| Standards of billing, coding, and reimbursement  | 572        | 993  | 4.37 | 4.21 | 0.90 | 0.98 | 87.9 | 92.4 |
| Patient/client rights (e.g., ADA, IDEA, HIPAA, patient bill of rights)   | 572        | 994  | 4.72 | 4.63 | 0.58 | 0.66 | 88.4 | 98.6 |
| Obligations for reporting illegal, unethical, or unprofessional behaviors (e.g., fraud, abuse, neglect)  | 572        | 994  | 4.75 | 4.65 | 0.54 | 0.63 | 88.4 | 99.1 |
| State and federal laws, rules, regulations, and industry standards set by state and accrediting bodies (e.g., state licensing entities, Joint Commission, CARF, CMS) | 572        | 994  | 4.60 | 4.50 | 0.71 | 0.80 | 88.4 | 96.4 |
| Risk management and quality assurance (e.g., policies and procedures, incident reports, peer chart review)   | 572        | 991  | 4.26 | 4.14 | 0.92 | 0.98 | 87.9 | 91.9 |
| Human resource legal issues (e.g., OSHA, sexual harassment)  | 572        | 990  | 4.20 | 4.09 | 0.93 | 0.99 | 88.1 | 91.4 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs  | Importance |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|
|   | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>PROFESSIONAL RESPONSIBILITIES (continued)</b>  |            |      |      |      |      |      |      |      |
| Roles and responsibilities of the PT, PTA, other healthcare professionals, and support staff  | 572        | 994  | 4.71 | 4.64 | 0.58 | 0.65 | 88.3 | 99.1 |
| Cultural factors and/or characteristics that affect patient/client management (e.g., language differences, disability, ethnicity, customs, demographics, religion)                                      | 571        | 993  | 4.18 | 4.26 | 0.87 | 0.89 | 88.3 | 95.1 |
| Socioeconomic factors that affect patient/client management   | 571        | 992  | 4.08 | 3.79 | 0.89 | 0.97 | 88.1 | 90.0 |
| Health information technology (e.g., electronic medical records, telemedicine)  | 571        | 992  | 4.02 | 3.86 | 0.93 | 0.99 | 87.9 | 89.7 |
| <b>TEACHING &amp; LEARNING THEORIES</b>   |            |      |      |      |      |      |      |      |
| Teaching and learning theories and techniques   | 571        | 987  | 3.87 | 3.61 | 0.97 | 1.03 | 87.9 | 84.7 |
| Health behavior change models (e.g., social cognitive theory, health belief model)  | 571        | 984  | 3.70 | 3.35 | 1.01 | 1.07 | 86.6 | 77.8 |
| Communication methods and techniques (e.g., motivational interviewing, health information brochures/handouts, feedback techniques)  | 571        | 989  | 3.93 | 3.64 | 0.98 | 1.09 | 87.8 | 84.2 |
| <b>RESEARCH &amp; EVIDENCE-BASED PRACTICE</b>   |            |      |      |      |      |      |      |      |
| Techniques for accessing evidence (e.g., peer-reviewed publications, scientific proceedings, guidelines, clinical prediction rules)   | 559        | 1018 | 3.56 | 3.29 | 1.07 | 1.11 | 87.0 | 74.3 |
| Research methodology and interpretation (e.g., qualitative, quantitative, levels of evidence)   | 559        | 1017 | 3.31 | 3.07 | 1.08 | 1.07 | 85.4 | 69.2 |
| Measurement science (e.g., reliability, validity)   | 559        | 1021 | 3.45 | 3.29 | 1.10 | 1.10 | 85.4 | 75.0 |
| Data collection techniques (e.g., surveys, direct observation)  | 559        | 1021 | 3.28 | 3.12 | 1.10 | 1.12 | 85.4 | 69.3 |
| <b>SKILLS</b>   |            |      |      |      |      |      |      |      |
| Active listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times | 558        | 1032 | 4.84 | 4.75 | 0.42 | 0.53 | 89.3 | 99.5 |
| Speaking - Talking to others to convey information effectively  | 558        | 1032 | 4.83 | 4.73 | 0.42 | 0.53 | 89.3 | 99.5 |
| Reading Comprehension - Understanding written sentences and paragraphs in work related documents  | 558        | 1032 | 4.73 | 4.63 | 0.53 | 0.62 | 89.3 | 99.2 |
| Critical Thinking - Using logic and clinical reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems   | 558        | 1032 | 4.79 | 4.70 | 0.48 | 0.56 | 89.3 | 99.8 |

(continued)

**Table B4. PTA Knowledge and Skill Requirements Survey Results (continued)**

| PTA KSRs  | Importance |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|
|   | n          |      | M    |      | SD   |      | %Imp |      |
|   | 2018       | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | 2016 |
| <b>SKILLS (continued)</b>   |            |      |      |      |      |      |      |      |
| Social Perceptiveness - Being aware of others' reactions and understanding why they react as they do                                | 558        | 1032 | 4.75 | 4.60 | 0.53 | 0.66 | 89.3 | 99.2 |
| Time Management - Managing one's own time and the time of others  | 558        | 1032 | 4.76 | 4.62 | 0.50 | 0.62 | 89.3 | 99.5 |
| Coordination - Adjusting actions in relation to others' actions   | 558        | 1032 | 4.60 | 4.52 | 0.61 | 0.69 | 89.3 | 99.3 |
| Writing - Communicating effectively in writing as appropriate for the needs of the audience   | 558        | 1032 | 4.60 | 4.54 | 0.61 | 0.70 | 89.3 | 98.9 |
| Active Learning - Understanding the implications of new information for both current and future problem solving and decision-making | 558        | 1032 | 4.65 | 4.55 | 0.59 | 0.66 | 89.3 | 99.3 |
| Persuasion - Persuading others to change their minds or behavior  | 558        | 1028 | 3.92 | 3.89 | 0.99 | 1.06 | 88.2 | 88.8 |
| Negotiation - Bringing others together and trying to reconcile differences  | 558        | 1022 | 4.06 | 3.84 | 0.93 | 1.03 | 88.6 | 88.0 |
| Service Orientation - Actively looking for ways to help people  | 558        | 1029 | 4.45 | 4.30 | 0.76 | 0.84 | 89.3 | 96.4 |