OUTCOME MEASURES USED IN ACUTE CARE BY OCCUPATIONAL THERAPISTS

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ABSTRACT

The particular challenges to occupational therapy (OT) practitioners working in acute care settings are a limited number of therapy visits and quick discharge. OTs use standardized outcome tools in different settings to help inform colleagues and other medical professionals of the complexity of the patient's diagnosis and functional level and to aid in safe and effective discharge planning. Based on the current literature, there is significant variability in the use of standardized tools to measure OT outcomes at the time of discharge from the acute inpatient hospital. In this study, we retrospectively examined and analyzed datasets from OT students' level two fieldwork in Summer 2017. Seven out of 32 OT students completed their fieldwork at six acute inpatient hospital settings providing OT services for 205 patients, including 99 male and 106 female patients with an average age of 63.29±15.86. The average length of stay was 6.60±7.43 days. In all six acute settings, OT students provided activities of daily living (ADL) training (bathing/showering, toileting and toilet hygiene, dressing, functional mobility, personal hygiene and grooming). Other OT services included instrumental activities of daily living (IADL) (care of others/pets, health management and maintenance, meal preparation and clean up), formal/informal patient education, practice and simulation activities, preparatory tasks, exercises, rest and sleep, play, leisure and social participation, and assistive technology. Five outcome measures were used by the students: modified Functional Independence Measure (two settings), the Functional Independence Measure (one setting), the Boston University "6 click" AM-PAC (one setting), the Canadian Occupational Performance Measure (one setting), and self-reported goals by patients (one setting). Only three settings documented both baseline and discharge outcome measurement data. Two settings recorded only baseline evaluations and one recorded only the baseline goals. Factors impacting the use of outcome measures were identified as: 1) challenges selecting the appropriate outcome measure; 2) too time consuming for patients to complete and difficult to complete independently; 3) short length of stay; 4) limited time for therapists to complete the evaluation; 5) fast-paced and dynamic environment (different floors, different teams/members); 6) timing problems where patients undergoing tests/procedures were off the floor; 7) and patients were medically unstable at the time of the attempted/scheduled evaluation. By not using standardized outcome measurement tools, the value and benefits of OT services, such as ADL and IADL training, patient and caregiver education, and training to use adapted equipment/assistive devices is anecdotal at best. Further research is needed to identify or develop outcome measures suited for use by OTs in acute inpatient hospital settings.

INTRODUCTION

OT's role in acute care setting includes but is not limited to facilitating early mobilization, restoring function, preventing further decline, and coordinating care on transition and discharge planning. Research shows that OT is the only spending category that has been shown to reduce hospital readmissions (Rogers, Bai, Lavin, & Anderson, 2016). In spite of the short length of hospitalization in the acute care setting, OT practitioners play an integral role and collaborate closely with other health care team professionals, such as case managers, nurses, physical therapists, speech-language

pathologists, and physicians, to start a successful rehabilitation process (AOTA, 2017). OTs use outcome measurements in different settings to help inform colleagues and other medical professionals of the complexity of the patient's diagnosis, increase effectiveness, and improve patient outcomes. Standardized outcome tools assist with preventing hospital readmissions in acute care and aid in safe and effective discharge planning (Hoyer, et al., 2014). An ethnographic study indicated that non-standardized functional-based outcome measures are the most frequently used method in discharge assessment with inconsistency in the use of standardized tools at acute care settings (Crennan & MacRae, 2010). A survey study on 72 OTs working in acute care settings in New Zealand reported similar results that the majority of outcome measures used are non-standardized and include both subjective interview and observations of the patient carrying out functional tasks (Robertson & Blaga, 2014). Both studies found that OTs used a wide range of standardized tests but not on a regular basis. A scope review paper found that OTs are often time poor and within a right time frame are unable to extend their services to provide full intervention and to use currently available outcome measures necessary for the patients (Britton, et al., 2015). From the literature, OTs working at acute care settings recognized the potential benefits of using standardized outcome measures and expressed strong interest in using those tools (Blaga & Robertson, 2008; Crennan & MacRae, 2010; Jette, et al., 2003; Jette et al., 2014; Matmari et al., 2014; Robertson & Blaga, 2013; Smith-Gabai, 2016). However, acute care OTs are not using them but rather relying on skilled observation of functional performance. Even when used, there is significant variability in the use, and scarce research is available on the optimal tool to be used by OTs at acute care settings.

PURPOSE

The aim of this study was to identify the outcome measures used by OTs in acute inpatient hospital settings and to explore factors that impact the use of outcome measures.

METHODS

In this study, we retrospectively examined and analyzed datasets from occupational therapy students' level two fieldwork experiences. Before their fieldwork, we asked students to create a dataset of all the patients they worked with over an 8 week time period during summer 2017. Students recorded a range of individual characteristics (e.g., age, gender, race, educational level, and diagnosis) and length of stay into an Excel database. The students chose at least one outcome measure used in the facility and documented the baseline and final performance after therapy on the outcome measure. The students avoided documenting any protected information as designated by the Health Insurance Portability and Accountability Act identifiers.

RESULTS

Out of the 32 second year OT students, seven of them completed fieldwork at six acute inpatient hospital settings providing OT for 205 patients, including 99 male and 106 female patients with an average age of 63.29±15.86. The average length of stay was 6.60±7.43 days. In all six settings, OT students provided ADL training (bathing/showering, toileting and toilet hygiene, dressing, functional mobility, personal hygiene and grooming). Other OT services included IADL (care of others/pets, health management and maintenance, meal preparation and clean up), formal/informal patient education, practice and simulation activities, preparatory tasks, exercises, rest and sleep, play, leisure and social participation, and assistive technology. The outcome measures used by the students included: modified Functional Independence Measure (two settings), the Functional Independence Measure (one setting), the Boston University "6 click" AM-PAC (one setting), the Canadian Occupational Performance Measure (one setting), and self-reported goals by patients (one setting). Only three settings documented both baseline and final outcome measurement data. Two settings completed only baseline evaluations and one recorded only the baseline goals. Factors that impact the use of outcome measures include: challenges selecting the appropriate outcome measure; too time

consuming for patients to complete and difficult to complete independently, short length of stay, limited time for therapists to complete the evaluation, fast-paced and dynamic environment (different floors, different teams/members), timing problems where patients undergoing tests/procedures were off the floor, and patients were medically unstable at the time of the attempted/scheduled evaluation.

DISCUSSION

Mobility and function are central factors in discharge decision making for OT. OTs have an interest in finding ways to increase accuracy in predicting discharge. As a means of improving this process, previous research reported that OTs were interested in finding ways to use standardized outcome measures to help guide discharge decision making (Jette, et al., 2003; Robertson & Blaga, 2013; Smith-Gabai, 2016). Our students and their OT mentors share this interest during the fieldwork. However, despite the interest expressed by OTs at different acute care hospitals and in literature, acute care therapists are not using them but rather relying on skilled observation.

There is research suggesting this may be due to the outcome measurement tools being more time consuming than informal methods, or lack of familiarity of the OT with the standardized outcome measurement tools (Jette, et al., 2014; Robertson & Blaga, 2013; Smith-Gabai, 2016). This is partially supported by our data that some of the facilities were unfamiliar with many standardized tools. More importantly, therapists questioned applicability of the tools to the acute care setting where they would have to be administered bedside to patients who were often critically ill, vulnerable, or not feeling or performing at their best. Even for the few standardized outcome tools used by the OT, often only parts of the tool were used.

Despite the rare incorporation of standardized outcome measures in acute care settings, OT students and therapists were willing to further explore the benefits of the standardized tools. They felt that standardized outcome measures could be useful and would help them better communicate with stakeholders the rationale supporting their discharge recommendations. The results on their utility from this study were mixed but the general consensus was that although quick and easy to administer, the selected outcome measures did not help with discharge decision making or discharge planning.

By not using standardized outcome measurement tools, the value and benefits of OT services such as ADL and IADL training, patient and caregiver education, and training to use adapted equipment/assistive devices is anecdotal at best. Further research is needed to identify common outcome measures suited for use by OTs in acute inpatient hospital settings. OTs need easy access to information about the clinical utility and psychometric qualities of various measures to help with the appropriate selection and clinical applicability of standardized tools to measure functional outcomes in acute inpatient hospital practice.

There are some limitations to this study. First, this is a retrospective study and our students only practiced eight weeks during their fieldwork course. The short time period and the novice skills of our students may have influenced the quality of data collected. However, our students were asked to use at least the outcome measures being used at the acute care hospitals they were at, and they worked closed with the OTs working there to make sure the data collected were accurate enough. Second, only seven students at six acute care hospitals were included in this study, and the small sample size may make it difficult to generalize the conclusion. We will continue collecting the outcome tools data in future so we not only can see which tools are being used but also assess the appropriateness of the tools based on the measures.

CONCLUSION

There is no one standardized tool currently available that is comprehensive enough for the acute care setting. OTs agree that they were unfamiliar with any standardized outcome measurement currently available that addressed the diversity of patients in acute care. They acknowledged the benefits and necessity of a standardized tool but felt this would be difficult due to the medical acuity for acute care patients, the diversity of diagnoses,

and the difficulty of finding outcome measures that encompass all aspects related to discharge. By not using standardized outcome measurement tools, the value and benefits of OT services such as ADL and IADL training, patient and caregiver education, and training to use adapted equipment/assistive devices is anecdotal at best. Further research is needed to identify common outcome measures suited for use by OTs in acute inpatient hospital settings. OTs need easy access to information about the clinical utility and psychometric qualities of various measures to help with the appropriate selection and clinical applicability of standardized outcome measurement tools to measure functional outcomes in acute inpatient hospital practice.

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