THESIS

REEXAMINING OCCUPATIONAL AND PHYSICAL THERAPISTS' USE OF THE "6-CLICKS" ASSESSMENT IN ACUTE CARE AS A TOOL TO INFORM DISCHARGE LOCATION RECOMMENDATIONS

Submitted by

Emily O'Connor Fawaz

Department of Occupational Therapy

In partial fulfillment of the requirements

For the Degree of Master of Science

Colorado State University

Fort Collins, Colorado

Summer 2018

Master's Committee:

Advisor: Mackenzi Pergolotti

Matthew Malcom
Julia Sharp

ABSTRACT

REEXAMINING OCCUPATIONAL AND PHYSICAL THERAPISTS' USE OF THE "6-CLICK" ASSESSMENT IN ACUTE CARE AS A TOOL TO INFORM DISCHARGE LOCATION RECOMMENDATIONS

Background: The "6-Clicks" is a functional status measure used in acute care rehabilitation settings to inform discharge recommendations. Research is limited examining the assumption of first versus last score on outcomes measures and other factors known to influence discharge recommendation. The purpose of this study was to address those gaps in research.

Methods: Hospital electronic medical record data from adults admitted to a neurosciences unit between June 2014 and June 2016 were analyzed retrospectively. Logistic regression models were used to compare initial and final "6-Clicks" score for both the Daily Activity and Basic Mobility forms used in acute care as predictors of a home versus not-home discharge. Hierarchical linear regression models were used to examine the impact of predisposing, enabling and illness level factors on discharge location.

Results: 1513 individuals were included; 55% of which were discharged home. Final scores were significantly higher than initial scores. Compared to those discharged home, individuals had significantly lower scores across both forms. Final scores were stronger predictors than initial scores. "6-clicks" score, length of stay, and having Medicaid emerged as significant predictors of discharge location.

Conclusions: Final “6-Clicks” scores may indicate a more appropriate discharge location based on current status rather. Recommendations based on factors other than need, such as payer type, may have severe implications, potentially on readmission and disparities in quality of care.

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INTRODUCTION

The cost and the quality of health care have long been areas of concern; however, it was not until the late 1980s that major shifts in quality and cost management began to significantly transform the health care system (Al-Assaf, 1996; Granger, 2015; Krousel-Wood, 1999; O'Mara et al., 2017). One such shift, known as the Outcomes Management movement, resulted in the development of standardized outcome measures. These measures provided new opportunities for practitioners to develop guidelines for best practice, monitor patient progress, and make treatment decisions based on clinical outcomes (Al-Assaf, 1996; Lansky, Butler, & Waller, 1992). The field of rehabilitation, which exists within the broader health care system, followed this same shift by developing functional status measures (Granger, 2015). Functional status, previously thought to be unmeasurable, became measurable with the development of assessments such as the *Functional Independence Measure* (FIM). The FIM was developed in 1987 and is widely used in inpatient rehabilitation settings to assess basic self-care, mobility, and cognition (Bottemiller, Bieber, Basford, & Harris, 2006; Granger, 2015).

Due to the increasing cost of health care services, new concerned stakeholders emerged including politicians, public and private insurance providers, and community members (Krousel-Wood, 1999). Policy changes to reduce Medicare spending have required clinicians to demonstrate the need for and benefit of their services in order to ensure financial coverage (O'Mara et al., 2017). Furthermore, initiatives such as fixed reimbursement rates based on diagnosis have put pressure on hospitals to reduce length of stay by discharging patients more quickly in order to maximize reimbursement (Chung & Shauver, 2009). However, the potential

for patient readmission is a critical factor that clinicians must consider at discharge. In 2011, 3.3 million adults in the United States were readmitted to the hospital within 30 days of discharge, costing hospitals approximately $41.3 billion (Hines, Barrett, Jiang, & Steiner, 2006). Considering the financial consequences of readmission to both hospitals and patients, discharging patients to the setting that best matches their need is important both to provide quality care through a supported transition and reduce spending (Smith, Fields, & Fernandez, 2010).

One component of discharge planning is input from occupational and physical therapist evaluation of a patient's functional status. There is a body of research to suggest that occupational and physical therapy have a significant impact on readmission. Rogers, Bai, Lavin, and Anderson (2017) found that higher spending on occupational therapy services resulted in lower readmission rates. Similarly, Smith et al. (2010) found that patients were more likely to readmit when physical therapist discharge and follow-up care recommendations were not implemented.

Standardized outcome measures are used in the acute care setting by occupational and physical therapists to measure functional status and improve communication between clinicians regarding discharge recommendations (D. Jette et al., 2014). One such measure that has been implemented in the acute care system is known as the "6-Clicks". The "6-Clicks" was developed by researchers at Boston University based off of the Activity Measure for Post-Acute Care (AM-PAC) (Haley et al., 2004). From the larger AMPAC, short forms were created for both inpatient and outpatient settings. The two inpatient short forms, called the "6-Clicks", are the the Daily Activity and Basic Mobility assessments. The Daily Activity assessment is administered

by occupational therapists, and includes six basic self-care items, such as dressing and bathing. The Basic Mobility assessment is administered by physical therapists and includes six physical mobility items, such as walking and climbing stairs. Each item can be scored 1-4, with total raw scores ranging from 6-24 and higher scores indicating higher functional status (Jette, Haley, Coster, & Ni, 2014).

The "6-Clicks" is a quick and simple assessment that can be integrated into the electronic documenting system, allowing the assessment to be incorporated into routine hospital care (Cleveland Clinic, 2017; D. Jette et al., 2014; Lansky et al., 1992). Additionally, the Center for Medicare and Medicaid (CMS) requires G-codes and severity modifiers to be reported in therapist documentation that indicate an individual's degree of impairment. G-codes and severity modifiers can be quickly calculated from the "6-Clicks" scores and included in documentation (A. Jette et al., 2014). As this assessment is already integrated into electronic medical record systems and CMS, it is important that research continues to support the use and demonstrate the benefits of this assessment.

D. Jette et al. (2014) conducted a study to examine the predictive validity of the "6-Clicks" assessment and to determine cutoff scores based on the likelihood of a home versus not-home discharge. The rationale behind the development of such scores was to improve the clinical usefulness of the "6-Clicks" tool in informing the discharge recommendations provided by occupational and physical therapists. Individual cutoff scores for the Daily Activity and Basic Mobility forms were calculated using *initial* "6-Clicks" scores. Research on the FIM has used similar methodologies with initial scores to predict discharge location. Bottemiller et al. (2006) conducted a study examining the relationship between FIM scores and discharge location found

that mid-range FIM scores were associated with a different discharge location depending on the type of score (i.e., initial score or final score). Mid-range *initial* scores were associated with discharge to home while mid-range *final* scores were associated with discharge to an institutional setting. Patients in the study were in an inpatient rehabilitation setting and received daily therapy for 2-3 weeks for 3 hours per day. Improvement of functional status from admission to discharge would be expected. Therefore, initial scores would be expected to increase thus resulting in higher likelihood of home discharge.

However, the acute care setting is largely different from inpatient rehabilitation. Patients are primarily in acute care for medical reasons and discharge is usually a result of a patient being medically stable to either return home or transfer to a post-acute level of care (D. Jette et al., 2014). Using initial scores to inform discharge recommendation assumes that patients will improve between the time they receive an initial score and discharge. However, it is not uncommon for patients to be seen only one time by acute care therapists (Bland et al., 2015; D. Jette et al., 2014) and therefore discharge recommendations based on potential or expected improvement may not be appropriate for acute care. There has not yet been any research examining the relationship between initial and final scores on the "6-Clicks" and discharge location, therefore this present study takes a closer look at this assessment as a tool to inform discharge location recommendations in acute care.

Although functional status outcome measures provide valuable information about the patient in acute care, which informs discharge location decisions, occupational and physical therapists are trained to consider a broad scope of factors. These include social support, home set-up, employment, and behavior, all of which impact an individual's need for and ability to

access post-acute services. The Behavioral Model of Health Services Use conceptualizes this broad scope of factors and organizes them into predisposing, enabling, or illness level categories (R. Andersen & Newman, 1973; R. M. Andersen, 1995; Babitsch, Gohl, & von Lengerke, 2012). *Predisposing* factors impact the likelihood that an individual uses health care, even though they may not be directly related to health care needs. These include age, sex, race, attitudes and beliefs, marital status, education, ethnicity, health related knowledge, and employment. *Enabling* factors impact an individual's ability to access health services despite any predisposing conditions (Englum et al., 2011). These include factors such as income, health insurance, availability of health services in the community, price of health services, and geographic location. *Illness* level factors indicate a level of need and include diagnoses, symptoms, number of days experiencing disability, functional status, and reported state of health. "6-Clicks" score would fall under an illness level factor as a measure of functional status. Of these factors that have been associated with healthcare utilization (Englum et al., 2011), functional status should ideally determine discharge location as an indicator of patient need. Although research has been conducted on the psychometric properties of the "6-Clicks", prior to the present study, no studies have examined "6-Clicks" scores in the context of other factors as a predictor of discharge location.

The purpose of the present study was to better understand the "6-Clicks" assessment as a tool to help occupational and physical therapists make appropriate discharge recommendations. Due to the pressure on healthcare professional to management quality and cost of health care services through outcome measures, it is important that researchers support clinicians continuing to validate the use of such measures in rehabilitation settings. Therefore,

the first aim of this study was to determine whether initial or final scores of both the Daily Activity and Basic Mobility “6-Clicks” assessments were a better predictor of discharge location. The second aim of the study was to determine the best predictors of discharge location considering predisposing, enabling, and illness level factors.

METHODS

Study Variables

Independent variables were chosen and adapted from the Behavioral Model of Health Services Use (R. M. Andersen, 1995). Figure 1 depicts a conceptual model that illustrates the organization of variables in the present study. The **predisposing variables** included age, sex, minority status, and marital status. Race and ethnicity data were used to create a new category of *minority status.* Individuals whose race was reported as 'White or Caucasian' and whose ethnicity was reported as 'Non-Hispanic' were considered non-minority. All other race and ethnicity combinations were considered to be minorities (Agency for Healthcare Research and Quality, 2010). Marital status was categorized into *single* and *not-single. Single* included individuals who reported: single, divorced, widowed, and legally separated as their marital status. *Not-Single* included individuals who reported: married or significant other as their marital status. One **enabling variable**, insurance payer, was used and categorized by *Medicare, Medicaid, Other Public* or *Private*. *Other public* included payers such as the Veterans Administration or Tricare, both of which are publicly funded insurance providers for former or current military members and their families. **Illness level variables** included length of stay (LOS), and initial and final AM-PAC "6-Clicks" scores for Daily Activity and Basic Mobility forms, each of which contains six functional items. The Daily Activity form includes 1) lower body dressing, 2) bathing, 3) toileting, 4) upper body dressing, 5) grooming, and 6) eating meals. The Basic Mobility form includes: 1) turning over in bed, 2) sitting down and standing up from a chair, 3) moving between supine and sitting edge of bed 4) moving between the bed and chair,

5) walking in the hospital room, and 6) ascending/descending 3-5 steps with a railing. Therapists do not have to see a task performed to provide a score the item; therapists can use clinical judgement based on observations of the client to provide scores for tasks that were not completed. Scores for each item range from 1 (requires total assistance) to 4 (completes the activity independently), with a possible range of raw scores from 6 to 24. Patients received scores each time they were seen by therapy for the corresponding form. In previous research on the "6-Clicks" results were reported in AM-PAC standard scores, which can be converted from raw scores. The present study reports findings in raw scores because the data were reported as raw scores and anecdotally, the results based on raw scores are meaningful to clinicians using the "6-Clicks".

The dependent variable for this study was discharge location, categorized as home or not home. The category 'home' included patients discharged home with or without home health services. The category 'not home' included inpatient acute rehabilitation, skilled nursing facility, hospice, and those transferred to another hospital. This delineation between the two types of discharge locations was made because of the difference in the amount of medical care provided. Patients discharged from an inpatient rehabilitation setting receive 24-hour medical care and daily rehabilitation services up to 3 hours per day. Furthermore, previous research on the predictive ability of the "6-Clicks" categorized discharge either to home or an institution (D. Jette et al., 2014) The present study maintains consistency by using similar discharge categories.

Subjects

This was a retrospective study that used de-identified patient data from electronic medical records (EMR) admitted to a large Level II trauma hospital in Colorado. The data contained information on patients from the neurosciences unit, which is the inpatient acute care unit that provides specialized treatment of neurological conditions such as stroke, spinal cord injury, Parkinson's disease, seizures, and head injury (UCHealth, 2017). All patients were seen at least one time between June 2014 and June 2016 by either an occupational therapist, physical therapist, or both. All data were de-identified prior to being received by researchers. Because the researchers used de-identified data and did not interact with the patients, this study did not meet the requirements to be considered human subjects data and therefore did not require approval from the Institutional Review Board. Data for each patient includes demographic variables (sex, race, ethnicity, age, payer type, LOS, and marital status) as well as "6-Clicks" scores from each therapy session; Daily Activity scores for occupational therapy sessions, and Basic Mobility scores for physical therapy sessions.

The original data contained 3811 total admissions, 485 of which were readmissions to the same neurosciences unit between June 2014 and June 2016. Patients with missing data from any of the variables listed above (race, ethnicity, marital status, payer source, and age) were excluded. Sex was listed for all records. Individuals that did not have at least two "6-Clicks" scores on both Basic Mobility or Daily Activity were also excluded as the current study focused on the differences between initial score and final score in predicting discharge location. Finally, outliers for LOS were determined to be any length of stay that was two standard deviations above the mean or greater (Cots, Mercadé, Castells, & Salvador, 2004); these

outlying observations were excluded. See Figure 2 for a consort diagram illustrating the exclusion process. The resulting data set included 1513 total admissions, 119 of which were readmissions. Because individuals who were readmitted during the study period were reevaluated using the "6-Clicks" and discharged from the acute care hospital, they were treated as a new, independent admission.

Statistical Analyses

Aim 1

The first aim of the study was to determine which score, initial or final, for both the Daily Activity and Basic Mobility "6-Clicks" predicts discharge location. For each of the variables, individuals discharged home versus not home were compared. Means for continuous variables (i.e. age, LOS, and each "6-Clicks" scores) were compared between home and not-home use two-sample *t*-tests. Frequency distributions for categorical variables (i.e. payer type, sex, marital status, minority status) were compared using Chi-square tests. Additionally, paired t-tests were used determine if there were significant differences between initial and final scores for each of the "6-Clicks" forms. Logistic regression analyses were used to determine which of the 4 scores is the best predictor of discharge location. Akaike Information Criteria (AIC) was used to select the best predictor. Odds ratios and their associated 95% confidence intervals were computed for each "6-Clicks" score.

Aim 2

The second aim of this study was to determine which of the predisposing, enabling or illness level factors were the best predictors of discharge location. logistic regression analyses were performed using a hierarchical approach. The first model examined illness level variables

and included length of stay and one “6-Clicks” score for Basic Mobility and Daily Activity, either initial or final score based off results from aim 1. The second model added in the enabling factor of payer type. The third model added in predisposing factors: age, sex, marital status, and ethnicity. The Akaike Information Criteria (AIC) was used to compare the three models and determine which model was the best to explain discharge location. This methodology was selected because it can be used to compare multiple models with a lower AIC value representing a better fit (Symonds & Moussalli, 2011). Odds ratios and their associated 95% confidence intervals were computed. For all analyses, $p<0.01$ was considered significant. The software used for all analyses was JMP Pro Version 13.0.0.

RESULTS

Sample

Table 1 provides details and descriptive statistics of the sample characteristics. 1513 adults (119 readmissions) were evaluated and scored at least two times with both the Daily Activity and Basic Mobility assessments, 55% (*n* = 835) of which were discharged to home. *Predisposing variables:* The average age of the individuals considered in the study was 62.1 (SD=15.93) years, 50% (*n* = 756) were male, 29% (*n* = 436) were considered to be a minority, and 45% (*n* = 687) were single. *Enabling variables*: 41% (*n* = 626) of individuals had Medicare, 19% (*n* = 281) had Medicaid, 24% (*n* = 364) had Private insurance, and 16% (*n* = 242) had other public (non-Medicare/Medicaid) insurance. The average LOS was 8.5 days (SD=6.5), average initial and final Basic Mobility scores were 13.3 (SD= 4.9) and 16.9 (SD=5.4), respectively, and the average initial and final Daily Activity scores were 15.9 (SD=4.7) and 18.4 (SD=4.5), respectively. In the bivariate and Chi-square analyses (Table 1), individuals who discharged home had significantly higher initial and final scores on the Basic Mobility and Daily Activity assessments and were significantly younger than those not discharged home. There was also a significant difference in the distribution of payer type between home and not home.

Analysis

Aim 1

Initial and final scores for both Daily Activity and Basic Mobility forms were found to be significant predictors of discharge location (χ^2, p<0.001), see Table 2. Logistic regression models using final scores for both Daily Activity and Basic Mobility forms had lower AIC values (1440.61

and 1426.11, respectively) than the models using initial scores (1723.76 and 1783.55, respectively), suggesting better predictive ability of final scores (Table 2). Individuals discharged to home had significantly higher mean initial and final scores compared to individuals discharge to not-home. Initial scores were significantly lower than final scores for both Daily Activity and Basic Mobility (p<.001; Table 1) across the whole sample.

Aim 2

Using a hierarchical linear regression, the predictive ability of an individual's predisposing, enabling, and illness level factors were examined (Table 3). Based on results of Aim 1 (Table 2), final scores, rather than initial scores were used as illness level factors in Model 1 along with LOS. All three illness level factors were found to be significant predictors of discharge location (p<.001 for all illness level factors, AIC=1314.51). When adding in the enabling factor of payer type (Model 2,) illness level factors continued to show significant predictive ability (p<.001), and payer type, specifically Medicaid, emerged as a significant predictor (p<.001, AIC=1271.48). Having Medicaid increases the likelihood of a home discharge by 4.1 (OR 95% CI: 2.6 ,6.2) times compared to Medicare, 2.7 (OR 95% CI: 1.7, 4.3) times compared to private insurance and 3.6 [2.2, 5.9] compared to other public insurance. When adding in predisposing variables (Model 3), no additional variables emerged as significant predictors of discharge location. Considering all the predisposing, enabling, and illness level factors, final "6-Clicks" score, LOS, and Medicaid emerged as the strongest predictors of discharge (p<.001, AIC= 1273.33).

Based on the emergence of Medicaid as a predictor of discharge location, a sensitively analysis using *t*-tests was conducted to determine if there was a significant difference in "6-

Clicks" scores by payer type (Table 4). There was no difference by payer type for initial scores. Final scores on both Daily Activity and Basic Mobility were significantly lower for Medicare compared with other payer types (p<.001). There was no difference in final scores between Medicaid and public or other public (p=.684, p=.802).

DISCUSSION

Previous research has found that initial "6-Clicks" scores can predict discharge location (D. Jette et al., 2014). In the present study, although initial score was a significant predictor of discharge location, final score emerged as a stronger predictor, which would be expected given the final score was obtained closer to the time of discharge. The implications of this finding are important to consider in the context of acute care settings. In a previous study, D. Jette et al. (2014) found that average initial "6-Clicks" scores for Daily Activity and Basic Mobility forms were approximately 18 and 19, respectively, when converted to raw scores. The sample consisted of adults with a range of diagnoses including cardiovascular, orthopedic, neurological, infectious, and other medical conditions. Initial "6-Clicks" scores from the sample were used to determine cutoff scores indicating likelihood for a home versus institutional discharge. The present study included data from a neurology unit in acute care, and therefore represents a much narrower category of diagnoses. Initial scores for the present sample were notably lower than the previous study. The average Daily Activity and Basic Mobility initial scores for the present sample were 15.84 (SD= 4.65) and 13.28 (SD=4.90), respectively. Based on the difference in average initial scores between the two studies, generalized cutoff scores may not be appropriate for all acute care settings.

Although initial scores on outcome measures have previously been used to predict discharge location (Bland et al., 2015; Bottemiller et al., 2006), research suggests that this association may not be as strong as expected. In a study conducted by Bland et al. (2015), occupational and physical therapists in acute care measured initial status using an array of

functional assessments. Patients were successfully clustered into four different groups based on initial functional status. Discharge location, however, did not vary across the four functional groups to the extent that was as predicted. This may be due to high variability in LOS among patients admitted to acute care. In the present study, for example, LOS ranged from 1.2 to 35.8 days. This wide range of time spent in the hospital, which could impact functional status, may help to explain inconsistencies between initial functional status and discharge location.

Since final scores were found to be stronger predictors of discharge location, using guidelines developed from final scores may provide a better way to determine appropriate recommendations based on the patient's current status. Retrospective analyses of final scores, rather than initial scores, from hospital admission data could be used to develop cutoff scores or guidelines to support therapist discharge recommendations. One benefit of guidelines derived from final scores could be promoting a more conservative approach to therapeutic evaluations, as there would not be an assumption made that a patient will improve. In acute care, discharge recommendations should reflect the patient's current status, especially since many patients are only seen by occupational or physical therapist one time (Bland et al., 2015). Discharge recommendations can be updated each time a patient is seen by therapy, therefore when a patient does improve during their hospital stay, the recommendations can be revised to reflect that change. Understanding the relationship between initial and final scores on functional status measures can help therapists to better use the tools to make appropriate discharge recommendations.

Functional status, however, is just one of many factors impacting health care utilization that are considered during discharge process. Among all three models, illness level variables

including “6-Clicks” final scores and LOS were significant predictors of discharge location, which is consistent with current literature (D. Jette et al., 2014; Stecker, Stecker, & Falotico, 2017). The only other variable that emerged among the three models as a significant predictor was payer type. Specifically, individuals on Medicaid were significantly more likely to discharge home than any other payer type category, even though there was no difference in need based on functional status among Medicaid recipients (Table 4). Even though discharge recommendations should be based on the needs of the individual, this study indicates other factors may also have an influence on discharge location.

Several studies have found disparities in quality of care and outcomes based on insurance type (Ayanian, Kohler, Abe, & Epstein, 1993; LaPar et al., 2010; Spencer, Gaskin, & Roberts, 2013). One study of women with breast cancer found that uninsured individuals and those with Medicaid presented with significantly more advanced disease and had significantly lower survival rates than individuals with private insurance (Ayanian et al., 1993). Similarly, another study found that uninsured individuals and Medicaid recipients had increased risk of mortality following compared to individuals with Medicare or private insurance. Related to outcomes, the risk of readmission is also high among Medicaid recipients (Agency for Healthcare Research and Quality, 2016). According to national data, between 2011 and 2013, 30-day readmission rates for non-obstetric adults on Medicaid were 19.2% (age 21-44) and 21.6% (age 45-64). The discrepancy found in the present study surrounding the likelihood of a home discharge further supports the need to understand the impact of insurance type on the quality of care provided to individuals. If individuals are being discharged home for reasons other than their level of need, there may be severe consequences, such as poorer outcomes

and readmission leading to increased financial burden on hospitals. It is important to understand the impact that clinical practices and decisions have on patient outcomes. As policy changes are made, driven by the need for evidence-based practice and reduced health related expenditures, dependence on standardized scores and outcome measures will likely rise. Therefore, additional research focused on improving assessments and understanding how they inform practice is necessary.

To the authors' knowledge this is the first study to compare initial and final "6-Clicks" scores as predictors of discharge location as well as the first to examine the "6-Clicks" assessment in the context of determinants of health care utilization beyond functional status. Future research should compare cutoff scores developed from initial versus final "6-Clicks" scores among multiple populations to examine the appropriateness and feasibility of having a cutoff score that could be used across different populations and different diagnoses. Exploring the cases of readmission was beyond the score of the present study, however additional research is needed to examine if "6-Clicks" score and discharge location are predictors of hospital readmission.

Study Limitations

Study variables were restricted to patient data available from EMR. Primary diagnosis and encounter reason were included in the original data, but diagnosis was not included as a variable in the present study. Diagnoses were not reported in the EMR as International Classification of Disease (ICD) codes, limiting the validity of a diagnosis category for the present study. The data were from one unit within a hospital system, limiting the generalizability of the results. Furthermore, the "6-Clicks" assessment may be limited in the information the

assessment can provide regarding an individual's level of care. For example, the Daily Activity form measures basic self-care skills, but does not address more complex self-care skills such as medication management. However, research suggests that medication adherence is a predictor of 30-day readmission (Rosen, Fridman, Rosen, Shane, & Pevnick, 2017), and therefore deficits in a patient's functional status may not be captured by the limited scope of the "6-Clicks" assessment. Therapists are skilled at considering a wide range of personal and contextual factors to inform discharge location that may not be captured in the EMR data, therefore limiting researcher's ability to understand and standardize the process of providing discharge recommendations.

Conclusion

Final "6-Clicks" scores were a stronger predictor of discharge location than initial score and may be more appropriate to use as guidelines to inform occupational and physical therapist discharge recommendations in acute care. Furthermore, in additional to LOS and "6-Clicks" score, payer type was found to be a significant predictor of discharge location. Individuals on Medicaid were more likely to discharge home than any other payer type despite there being no difference in functional status, which could indicate disparities in quality of care. Due to the rising concern of quality and cost in health care, it is important that researchers and clinicians understand how outcome measures fit into the discharge process to ensure that they are used by occupational and physical therapists in a way that promotes best practice and quality care for patients.

Table 1: Demographic characteristics, total sample and by discharge location.

Characteristic	Total (n=1513)		p	Home (n=835)		Not Home (n=678)		p
	n	%		n	%	n	%	
Predisposing								
Mean Age, yr (SD)	62.08	(15.93)		59.36	(16.32)	65.42	(14.79)	<.001*
Sex								0.739
Male	756	50		414	50	342	50	
Female	757	50		421	50	336	50	
Minority Status								0.061
Non-Minority	1077	71		578	69	499	74	
Minority	436	29		257	31	179	26	
Marital								0.398
Single	687	45		371	44	316	47	
Not-Single	826	55		464	56	362	53	
Enabling								
Payer Type								<.001*
Medicaid	281	19		202	24	79	12	
Medicare	626	41		288	35	338	50	
Other Public	242	16		136	16	106	15	
Private	364	24		209	25	155	23	
Illness								
Mean LOS (SD)	8.91	(6.51)		7.18	(5.23)	11.05	(7.27)	<.001*
"6-Clicks" Basic Mobility			<.001*					
Mean Initial Score (SD)	13.28	(4.90)		15.11	(4.48)	11.02	(4.41)	<.001*
Mean Final Score (SD)	16.86	(5.39)		19.80	(3.83)	13.25	(4.81)	<.001*
"6-Clicks" Daily Activity			<.001*					
Mean Initial Score (SD)	15.84	(4.65)		17.78	(3.81)	13.44	(4.48)	<.001*
Mean Final Score (SD)	18.37	(4.47)		20.74	(3.23)	15.45	(4.04)	<.001*

Note: SD= standard deviation, yr = years. Chi-square tests were used for dichotomous and categorical variables, and *t*-tests were used for continuous variables. Paired *t*-tests were conducted for initial vs final score of total sample for both the Basic Mobility and Daily Activity forms separately. *T*-tests were used to compare scores between home versus not home discharge location for each of the "6-Clicks" scores. * indicates $p < .001$

Table 2: Predictive ability of Initial and Final score for Home discharge

	AIC	Unit Odds Ratio [95% CI]	*p*
"6-Clicks" Basic Mobility			
Initial Score	1807.69	1.212 [1.182, 1.242]	<.001*
Final Score	1442.35	1.380 [1.335, 1.427]	<.001*
"6-Clicks" Daily Activity			
Initial Score	1731.11	1.271 [1.236, 1.309]	<.001*
Final Score	1457.40	1.491 [1.430, 1.554]	<.001*

Note n= 1513. Odds CI = Confidence interval. AIC= Aikake Information Criterion, lower values indicate better model fit. Odds ratios indicate likelihood of 'Home' discharge. * indicates *p* <.001

Table 3: Models Predicting Home Versus Not Home Discharge

Variable	Model 1		Model 2		Model 3	
	Unit Odds Ratio [95% CI]	*p*	Unit Odds Ratio [95% CI]	*p*	Unit Odds Ratio [95% CI]	*p*
Illness						
Daily Activity Score - Final	1.231 [1.168, 1.297]	<.001*	1.247 [1.181, 1.317]	<.001*	1.245 [1.178, 1.315]	<.001*
Basic Mobility Score - Final	1.226 [1.176, 1.278]	<.001*	1.214 [1.162, 1.267]	<.001*	1.213 [1.161, 1.266]	<.001*
LOS	0.937 [0.915, 0.960]	<.001*	0.925 [0.902, 0.948]	<.001*	0.923 [0.900, 0.947]	<.001*
Enabling						
Medicaid vs Medicare			4.061 [2.660, 6.202]	<.001*	3.353 [2.091, 5.378]	<.001*
Medicaid vs Private			2.720 [1.713, 4.321]	<.001*	2.574 [1.577, 4.201]	<.001*
Medicaid vs Other Public			3.608 [2.192, 5.936]	<.001*	3.379 [2.010, 5.681]	<.001*
Private vs Other Public			1.326 [0.855, 2.057]	0.208	1.313 [0.842, 2.047]	0.230
Private vs Medicare			1.493 [1.047, 2.129]	0.027	1.303 [0.884, 1.920]	0.182
Other Public vs Medicare			1.126 [0.763, 1.661]	0.550	0.992 [0.657, 1.500]	0.971
Predisposing						
Age					0.991 [0.981, 1.002]	0.105
Female vs Male					1.123 [0.851, 1.482]	0.414
Minority vs Non-Minority					1.269 [0.915, 1.760]	0.154
Not-Single vs Single					1.197 [0.895, 1.601]	0.225
AIC	1329.97		1287.7		1289.63	

Note: CI= Confidence Interval, AIC = Akaike Information Criterion, smaller values indicate better fitting model. Odds ratios are based on likelihood to discharge Home vs Not Home. * indicates *p* <.001

Table 4: Comparison of Final and Initial "6-Clicks" Scores by Payer Type

Payer Type		Daily Activity				Basic Mobility			
		Initial		Final		Initial		Final	
		Mean (SD)	*p*	Mean (SD)	*p*	Mean (SD)	*p*	Mean (SD)	*p*
Medicaid		15.61 (4.93)		18.80 (4.29)		13.57 (4.88)		17.75 (5.10	
Medicare		15.74 (4.50)		17.87 (4.41)		12.98 (4.75)		15.96 (5.41)	
Other Public		16.19 (4.59)		18.89 (4.35)		13.52 (4.89)		17.43 (5.27)	
Private		15.95 (4.73)		18.54 (4.71)		13.41 (5.14)		17.35 (5.46)	
Medicaid	vs Medicare		0.154		0.003*		0.090		<.001*
Other Public	vs Medicare		0.196		0.004*		0.146		<.001*
Private	vs Medicare		0.364		0.023		0.176		<.001*
Medicaid	vs Private		0.523		0.344		0.684		0.339
Medicaid	vs Other Public		0.494		0.459		0.802		0.448
Other Public	vs Private		0.706		0.822		0.895		0.855

Note: Student *t*-tests were used to compare average scores for payer type. * indicates $p<.01$, signifying a statistically significant difference

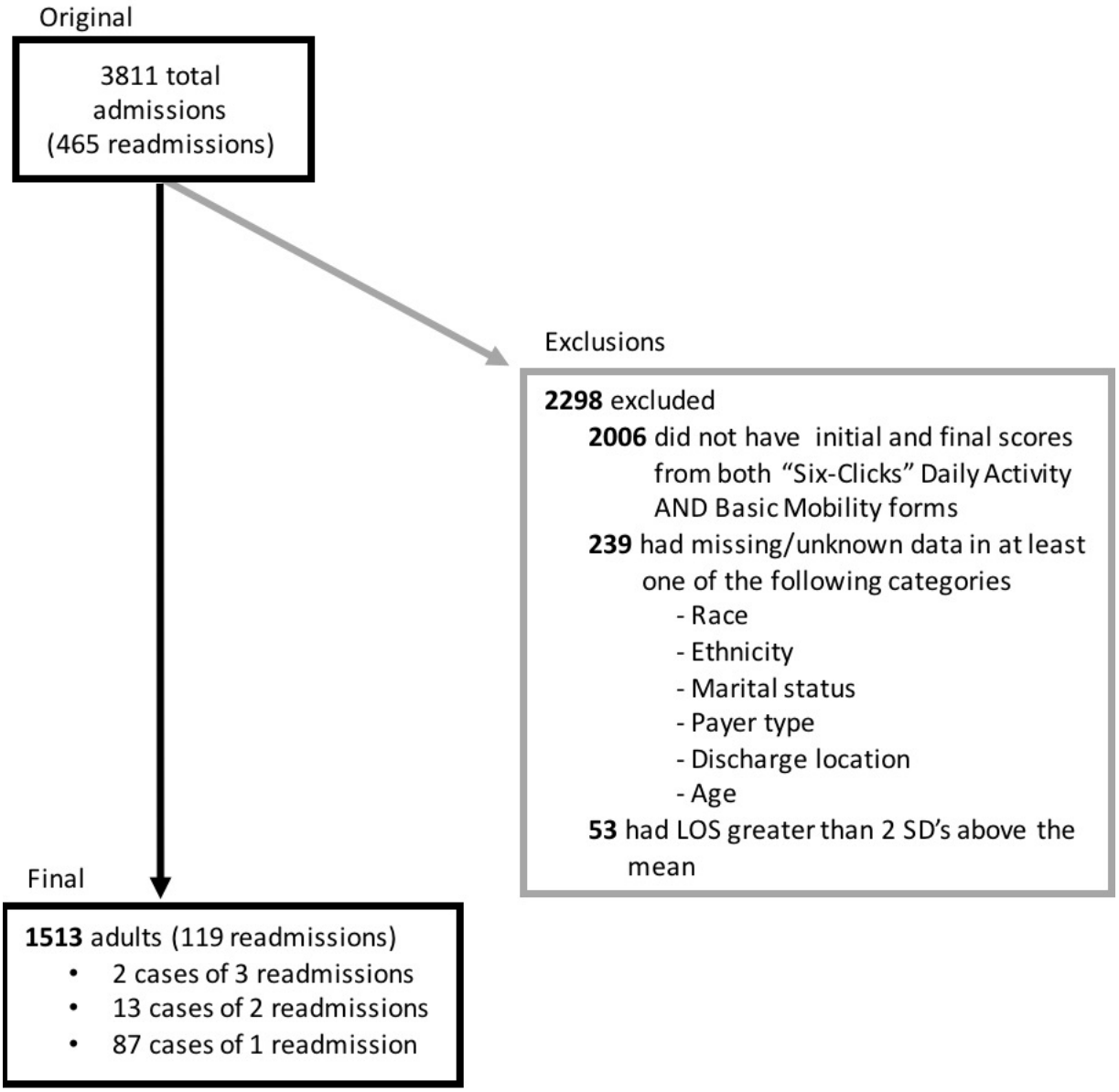

Figure 1: Flowchart illustrating exclusion process of participant data.

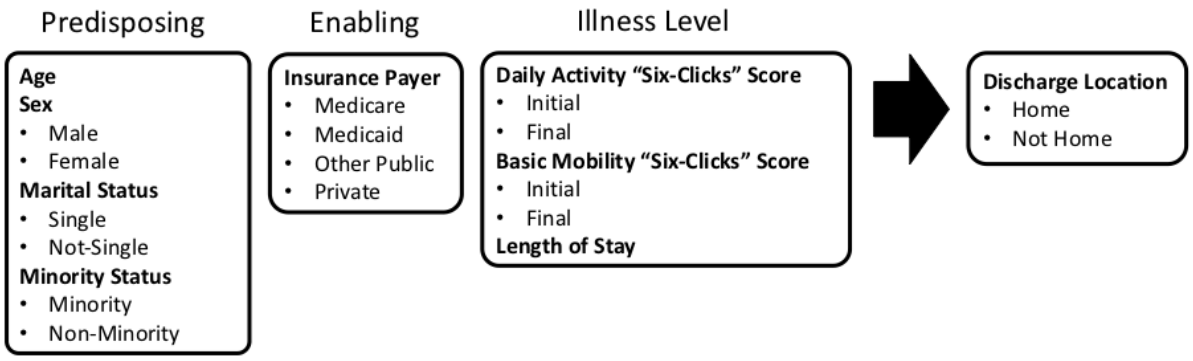

Figure 2: Conceptual model of factors impacting discharge disposition modified from Andersen (1995).

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