



Surgical service and distance traveled drive patient preference for Care Hotel: a retrospective cohort study

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Background: Mayo Clinic's Care Hotel is a virtual hybrid care model which allows postoperative patients to recover in a comfortable environment after a low-risk procedure. Hospitals need to understand the key patient factors that promote acceptance of the Care Hotel if they are to benefit from this innovative care model. This study aims to identify factors that can predict whether a patient will stay at Care Hotel.

Materials and methods: This retrospective chart review of 1065 patients was conducted between 23 July 2020, and 31 December 2021. Variables examined included patient age, sex, race, ethnicity, Charlson comorbidity index, distance patient travelled to hospital, length of surgery, day of the week of surgery, and surgical service. Associations of patient and surgery characteristics with the primary outcome of staying at the Care Hotel were assessed using unadjusted and multivariable logistic regression models.

Results: Of the 1065 patients who met criteria for admission to the Care Hotel during the study period, 717 (67.3%) chose to stay at the Care Hotel while 328 (32.7%) choose to be admitted to the hospital. In multivariable analysis, there was a significant association between surgical service and staying at the Care Hotel ($P < 0.001$). Specifically, there was a higher likelihood of staying at the Care Hotel for patients from Neurosurgery [odds ratio (OR) = 1.86, $P = 0.004$], Otorhinolaryngology (OR = 2.70, $P < 0.001$), and General Surgery (OR = 2.75, $P = 0.002$). Additionally, there was a higher likelihood of staying at the Care Hotel with distance travelled over 110 miles [OR (per each doubling) = 1.10, $P = 0.007$].

Conclusion: When developing a post-surgical care model for patients following outpatient procedures, the referring surgical service is a primary factor to consider in order to ensure patient acceptance, along with patient distance. This study can assist other healthcare organizations considering this model, as it provides guidance on which factors are most indicative of acceptance.

Keywords: care hotel, patient drivers, post-surgical, telemedicine, virtual hybrid

Introduction

As medical practices increase the use of telemedicine in patient care, new models of care delivery have emerged^[1–4]. A recent innovation in care delivery is the Care Hotel, a voluntary lodging option that offers a comfortable and private environment for

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HIGHLIGHTS

- Mayo Clinic's Care Hotel is a virtual hybrid care model which allows postoperative patients to recover in a comfortable environment after a low-risk procedure.
- Out of 1065 patients who met criteria for admission to the Care Hotel during the study period, 717 (67.3%) chose to stay at the Care Hotel while 328 (32.7%) choose to be admitted to the hospital.
- There was a higher likelihood of staying at the Care Hotel for patients from neurosurgery, otorhinolaryngology, and general surgery.
- Patients travelling a longer distance to their surgery or procedure were more likely to choose to stay at the Care Hotel.
- This study can assist other healthcare organizations considering this model, as it provides guidance on which factors are most indicative of acceptance.

patients to receive care, have a caregiver stay with them, and practice independent self-care following a medical procedure^[5–7]. It should be noted that most of these patient hoteling models usually focus on a single medical or surgical service line, such as plastic or reconstructive surgery, oncological care, post-acute rehabilitation, and COVID-19 pneumonia recovery^[5,7–9].

Mayo Clinic began its care hotel programme in July of 2020. It offers short-term postoperative care for patients that underwent low to moderate-risk procedures and meet discharge criteria but benefit from additional monitoring in a location nearby the hospital^[10]. As opposed to focusing on a single service line or procedure type, this care hotel was built with the purpose of providing an additional overnight care environment a spectrum of surgeries and procedures^[11,12]. Regarding Mayo Clinic care hotel admission, there is no stringent admission requirements; it is a post-procedure option based on surgeon and patient preference along with clinical stability after the procedure.

As more medical institutions consider this model, the question remains what factors would potentially impact whether a patient would complete a stay in the Care Hotel. Previous analysis of the Mayo Clinic care hotel model found that patients with an American Society of Anesthesiologists Physical Status (ASA PS) classification of 1 or 2 were significantly more likely to stay at the care hotel compared with those with a classification of 3 or 4^[12]. Besides this, minimal literature has analyzed which factors drive care hotel acceptance. Patient demographics, chronic medical comorbidities, distance travelled to the hospital, and procedure type, length, and timing may all have an impact on acceptance of Care Hotel as an appropriate environment for post-procedural recovery. Understanding the key patient demographics and characteristics that promote patient acceptance of the Care Hotel as a suitable alternative for post-procedural care can help hospital operations teams create competitive and efficient post-procedural hospital policies^[13]. Evaluation of such factors could greatly assist organizations in focusing their efforts on the patients most likely to stay at the Care Hotel. Therefore, the aim of this study was to evaluate patient and procedure characteristics in order to evaluate which are predictors for staying at the Mayo Clinic Care Hotel.

Methods

Patient population and setting

This study was approved by the Mayo Clinic Institutional Review Board as a retrospective chart review under protocol number 20-010753 and analyzed the de-identified patient data under protocol number 21-004666. This work is fully compliant with the STROCSS 2021 criteria^[14]. Supplemental Digital Content 1, <http://links.lww.com/MS9/A78>. The patient encounters analyzed in this review occurred between July 23, 2020, and December 31, 2021, at Mayo Clinic in Florida, a 304-bed community academic hospital. The inclusion criteria for this study were the following: all patients who had a surgery or procedure that qualified to stay at the Care Hotel. Patients were excluded from the study if their procedure did not qualify for a Care Hotel stay. The Care Hotel patient selection process has been described in detail^[10–12]. Briefly, if a patient is undergoing a surgery or procedure on a predetermined list (Table 1) in which the traditional in-hospital length of stay is less than or equal to 24 h and the surgeon/proceduralist has deemed it appropriate, the option of Care Hotel is offered. These procedures would require either an overnight observation stay in the hospital ward or a stay at the Care Hotel. Staying at the Care Hotel is completely voluntary; after discussion with the procedural provider, patients choose whether to go to the Care Hotel or be admitted to the hospital after their procedure. Patients staying at the Care Hotel do not incur any additional costs. Verbal and written consent is provided to candidate patients.

Table 1

List of surgeries and procedures accepted into Care Hotel.

Urology
Cystoscopy with biopsy and/or stent-placement
Penile prosthesis (including revisions)
Penile plication
Artificial urinary sphincter placement
Laser ablation of the prostate
Robotic prostatectomy/ureter procedures
Neurosurgery
Awake laminectomy
Minimally invasive spine surgery—laminectomy
Minimally invasive spine surgery—hemilaminectomy/foraminotomy
One level open laminectomy
One level MIS lumbar fusion (including revisions)
Interventional spinal radiology
Cardiovascular intervention
Post-EP lab cardiac ablation
Otolaryngology
Parathyroidectomy
Superficial parotidectomy
Thyroid lobectomy
Total thyroidectomy
Maxillectomy
Submandibular gland excision
Wide local excision of masses in different body regions
Neck lymph node excision
Tonsillectomy
Gynaecology
Hysterectomy
Orthopaedic surgery
Total hip and knee arthroplasty
Total and reverse shoulder arthroplasty
Elbow arthroplasty
Arthroscopy with synovectomy and meniscectomy
Open reduction internal fixation
Nerve neurolysis
Arthrodesis
Tendon transfers
Excision of exostosis
Pulmonary intervention
Post stent-placement for tracheobronchomalacia
Hypopharynx biopsy
Pulmonary + EP lab procedure
Colon, rectal, and general surgery
Fistulotomy
Hernia repair (including bilateral)
Ileostomy takedown
Mastectomies without tissue expanders
Interventional radiology
Venous or arterial interventions
Myelogram
Cosmetic surgery
Platysmaplasty
Rhytidectomy
Mastectomies with tissue expanders

EP, electrophysiologic; MIS, minimally invasive surgery.

Care hotel model

After the surgery or procedure is completed, the patient is assessed in the post anaesthesia care unit to ensure that they have met all discharge criteria. After clearance is met, they patient is discharged from the hospital and moved to the Care Hotel by medical transport. A tablet for video interface and a technology

kit for vital sign monitoring is located in each Care Hotel room. The tablet is linked to the Command Center at the main campus, where a team of physicians, registered nurses, and care coordinators can aid patients during their stay. The Command Center registered nurses follow all Care Hotel patients and answer any inquiries. There is also an on-site registered nurse or community paramedic at the Care Hotel from 10 am to 10 pm. The duties of the staff include vital sign monitoring, neurologic assessments, dressing changes, and urinary catheter and drain management education. If additional treatments, such as non-opioid pain medication, nausea medication, or post-procedural laboratory studies need to be conducted, a community paramedic can assist with administration in the Care Hotel.

Data collection and statistical analysis

Patient demographics and characteristics were collected regarding age, sex, race, ethnicity, Charlson comorbidity index, distance patient travelled to hospital, length of surgery, day of the week of surgery, and surgical/procedural service. The distance the patient travelled to the hospital was calculated as straight-line distance rather than driving distance. The primary outcome was whether or not the patient stayed at the Mayo Clinic Care Hotel following surgery.

Continuous variables were summarized with the sample median and range. Categorical variables were summarized with number and percentage. Associations of patient and surgery characteristics with the primary outcome of staying at the Care Hotel were assessed using unadjusted and multivariable logistic regression models, where odds ratios (ORs) and 95% CIs were estimated. Multivariable models were considered as the primary analysis and were adjusted for all variables that were associated with staying at the Care Hotel with a *p* value less than 0.05 in unadjusted analysis. Subsequently, pair-wise interactions between variables were assessed in additional multivariable analysis. In secondary analysis, in addition to examining continuous variables on their natural continuous scale, they were also categorized based on the sample quartiles or other cutpoints of interest in order to examine the existence of possible values above or below which the likelihood of staying at the Care Hotel substantially increases or decreases. When examined as continuous variables in logistic regression analysis, length of surgery and distance patient travelled to hospital were both considered on the base 2 logarithm scale due to their skewed distributions.

We applied a Bonferroni adjustment for multiple testing in order to correct for the nine patient/surgery characteristics that were assessed for association with staying at the Care Hotel, after which *p* values less than 0.0056 were considered as statistically significant. All statistical tests were two-sided. Statistical analyses were performed using R Statistical Software (version 4.1.2; R Foundation for Statistical Computing).

Results

Between 23 July 2020, and 31 December 2021, a total of 1065 patients met criteria for admission to the Care Hotel and were included in this study. A total of 717 patients (67.3%) chose to stay at the Care Hotel while 328 (32.7%) choose to be admitted to the hospital. Median age was 63.7 years (Range: 21.6–100.2 years) and 624 patients (58.6%) were male. A small proportion of patients were of non-White race (11.9%) or Hispanic or Latino (4.8%). The

median distance travelled to the hospital was 102.6 miles (Range: 0.7–3698.2 miles) and the median length of surgery was 155 min (Range: 42–525 min). The most common surgical services were Urology (27.1%), Cardiology (17.1%), Neurosurgery (16.9%), and Otorhinolaryngology (14.5%). (Table 2).

In exploratory unadjusted analysis and with $P < 0.0056$ considered as statistically significant after correcting for multiple testing, there was a significant association between surgical service and staying at the Care Hotel ($P < 0.001$). Specifically, in comparison to the most common surgical service of Urology, there was a higher likelihood of staying at the Care Hotel for patients from Neurosurgery (OR = 1.90, $P = 0.002$), Otorhinolaryngology (OR = 2.77, $P < 0.001$), and General Surgery (OR = 2.41, $P = 0.005$). Additionally, nominally significant ($P < 0.05$) suggestive associations with greater odds of staying at the Care Hotel were noted for younger age [OR (per 10-year increase) = 0.90, $P = 0.035$], lower Charlson comorbidity index [OR (per 1 unit increase) = 0.95, $P = 0.032$], and longer distance travelled to the hospital [OR (per each doubling) = 1.09, $P = 0.010$]. (Table 3).

In the primary multivariable analysis adjusting for age, Charlson comorbidity index, distance travelled to hospital, and surgical service, the strong association between surgical service and staying at the Care Hotel remained consistent ($P < 0.001$), with

Table 2
Patient characteristics.

Variable	<i>N</i>	Median (minimum, maximum) or No. (%) of patients
Stayed at the Mayo Clinic Care Hotel	1065	717 (67.3)
Age (years)	1065	63.7 (21.6, 100.2)
Sex (Male)	1065	624 (58.6)
Race (non-White)	1041	124 (11.9)
Ethnicity (Hispanic or Latino)	1027	49 (4.8)
Charlson comorbidity index	1065	
0		156 (14.6)
1		140 (13.1)
2		206 (19.3)
3		214 (20.1)
4		138 (13.0)
5		85 (8.0)
≥ 6		126 (11.8)
Distance travelled to hospital (miles)	1065	102.6 (0.7, 3698.2)
Length of surgery (minutes)	1065	155 (42, 525)
Day of the week	1065	
Monday		192 (18.0)
Tuesday		241 (22.6)
Wednesday		235 (22.1)
Thursday		268 (25.2)
Friday		129 (12.1)
Surgical service	1065	
Urology		289 (27.1)
Cardiology		182 (17.1)
Neurosurgery		180 (16.9)
Otorhinolaryngology		154 (14.5)
Orthopaedics		90 (8.5)
General surgery		69 (6.5)
Gynaecology		56 (5.3)
Other		45 (4.2)

Table 3
Evaluation of predictors for staying at the Mayo Clinic Care Hotel.

Variable	Association with staying at the Mayo Clinic Care Hotel					
	Median (minimum, maximum) or No. (%) of patients		Unadjusted analysis		Multivariable analysis	
	Did not stay at the advanced care hotel (N= 348)	Stayed at the advanced care hotel (N= 717)	OR (95% CI)	P value	OR (95% CI)	P value
Age (years) (10-year increase)	65.0 (21.7, 100.2)	63.0 (21.6, 88.0)	0.90 (0.81, 0.99)	0.035	1.03 (0.91, 1.18)	0.61
Sex (male) ^a	218 (62.6)	406 (56.6)	0.78 (0.60, 1.01)	0.062	0.83 (0.63, 1.09)	0.17
Race (non-White)	39 (11.5)	85 (12.1)	1.05 (0.70, 1.58)	0.80	1.11 (0.73, 1.68)	0.63
Ethnicity (Hispanic or Latino)	15 (4.5)	34 (4.9)	1.09 (0.58, 2.02)	0.79	0.94 (0.49, 1.78)	0.84
Charlson comorbidity index (1 unit increase)	3 (0, 14)	3 (0, 16)	0.95 (0.90, 1.00)	0.032	0.94 (0.88, 1.00)	0.068
Distance travelled to hospital (miles) (doubling)	91.6 (0.8, 2139.6)	111.3 (0.7, 3698.2)	1.09 (1.02, 1.17)	0.010	1.10 (1.03, 1.19)	0.007
Length of surgery (minutes) (doubling)	165 (42, 525)	155 (51, 510)	0.86 (0.70, 1.07)	0.18	0.92 (0.70, 1.22)	0.58
Day of the week			Overall test of difference: <i>P</i> =0.82		Overall test of difference: <i>P</i> =0.46	
Monday	60 (17.2)	132 (18.4)	1.00 (reference)	N/A	1.00 (reference)	N/A
Tuesday	79 (22.7)	162 (22.6)	0.93 (0.62, 1.40)	0.74	0.73 (0.48, 1.12)	0.15
Wednesday	75 (21.6)	160 (22.3)	0.97 (0.64, 1.46)	0.88	0.90 (0.59, 1.38)	0.62
Thursday	95 (27.3)	173 (24.1)	0.83 (0.56, 1.23)	0.35	0.71 (0.47, 1.08)	0.11
Friday	39 (11.2)	90 (12.6)	1.05 (0.65, 1.70)	0.85	0.78 (0.46, 1.30)	0.33
Surgical service			Overall test of difference: <i>P</i> <0.001		Overall test of difference: <i>P</i> <0.001	
Urology	116 (33.3)	173 (24.1)	1.00 (reference)	N/A	1.00 (reference)	N/A
Cardiology	69 (19.8)	113 (15.8)	1.10 (0.75, 1.61)	0.63	1.05 (0.72, 1.55)	0.79
Neurosurgery	47 (13.5)	133 (18.5)	1.90 (1.26, 2.85)	0.002	1.86 (1.21, 2.85)	0.004
Otorhinolaryngology	30 (8.6)	124 (17.3)	2.77 (1.74, 4.40)	<0.001	2.70 (1.68, 4.33)	<0.001
Orthopaedics	43 (12.4)	47 (6.6)	0.73 (0.46, 1.18)	0.20	0.65 (0.40, 1.06)	0.084
General surgery	15 (4.3)	54 (7.5)	2.41 (1.30, 4.48)	0.005	2.75 (1.43, 5.26)	0.002
Gynaecology	18 (5.2)	38 (5.3)	1.42 (0.77, 2.60)	0.26	1.34 (0.72, 2.51)	0.35
Other	10 (2.9)	35 (4.9)	2.35 (1.12, 4.92)	0.024	2.39 (1.12, 5.10)	0.024

Multivariable models were adjusted for all variables that were associated with staying at the Mayo Clinic Care Hotel with a *p* value <0.05 in unadjusted analysis, which were age, Charlson comorbidity index, distance travelled to hospital, and surgical service. ORs are correspond to the increase given in parenthesis (continuous variables) or presence of the given characteristic (categorical variables). ORs, 95% CIs, and *P* values result from logistic regression models.

N/A, not applicable; OR, odds ratio.

^aThe multivariable model for sex was not adjusted for surgical service due to the interdependence between these two variables (all gynaecology patients were female, and 283/289 [97.9%] of Urology patients were male). *P* values <0.0056 were considered as statistically significant after applying a Bonferroni correction for multiple testing.

Neurosurgery (OR=1.86, *P*=0.004), Otorhinolaryngology (OR=2.70, *P*<0.001), and General Surgery (OR=2.75, *P*=0.002) patients again more commonly staying at the Care Hotel. More specifically, the proportion of patients who stayed at the Care Hotel was highest for Otorhinolaryngology (80.5%), followed by General Surgery (78.3%), other surgery (77.8%), Neurosurgery (73.9%), Gynaecology (67.9%), Cardiology (62.1%), Urology (59.9%), and Orthopaedics (52.2%). (Supplemental Table 1, Supplemental Digital Content 2, <http://links.lww.com/MS9/A79>).

The aforementioned association between higher likelihood of staying at the Care Hotel and longer distance travelled to the hospital strengthened slightly in multivariable analysis and was almost significant after multiple testing correction [OR (per each doubling)=1.10, *P*=0.007]. Associations with staying at the Care Hotel weakened in multivariable analysis for Charlson comorbidity index [OR (per 1 unit increase)=0.94, *P*=0.068] and for age [OR (per 10-year increase)=1.03, *P*=0.61]. There were no other notable associations between patient or surgical characteristics and staying at the Care Hotel in multivariable analysis (all *P*≥0.17, Table 3). No obvious nonlinear trends were noted when examining

categorized versions of continuous variables (Supplemental Table 2, Supplemental Digital Content 2, <http://links.lww.com/MS9/A79>), and there was not any strong evidence of interactions between variables regarding the association with staying at the Care Hotel (all interaction *P*≥0.058).

Discussion

In this study, we found several factors that correlated with acceptance of the Care Hotel. Overall, our results show high patient acceptance of Care Hotel as an alternative post-procedural environment, with 67% of the patients choosing to stay at the hotel as opposed to the hospital. The most significant factor was surgical service used, with Neurosurgery (or=1.86, *p*=0.004), Otorhinolaryngology (or=2.70, *p*<0.001), and General Surgery (OR=2.75, *P*=0.002) patients all more likely to stay at the Care Hotel in comparison to Urology patients. Several factors may have led to this finding. First, specific surgical services could have more buy-in to the model, resulting in a higher number of referrals of appropriate. Different surgical specialties adopted the Care

Hotel programme at different times with varying change management strategies, which could have led to these variances in buy-in. Second, specific surgical specialties may be able to forecast or predict which patients and surgeries are low risk and which are high risk. They would then only refer their lower-risk patients or those undergoing lower-risk surgeries, thus resulting in a higher utilization of the Care Hotel programme. Previous patient hoteling studies usually involved single surgical service lines, and as such, had no reference service to conduct a comparison to^[2,5,8].

Notably, Orthopaedics had the lowest likelihood of referred patients actually using the Care Hotel programme. We believe that this may be due to the nature of orthopaedic surgeries frequently requiring physical therapy services following the surgery, which can be difficult to coordinate towards the end of the day. Orthopaedic patients receiving elective procedures, such as hip and knee arthroplasties, tend to be older in nature. Lott *et al.*^[2] found a lower rate of telemedicine use in elderly orthopaedic patients during the COVID-19 pandemic. The belief was that their elderly population had lower health literacy and lower confidence in non-traditional care, influencing telemedicine adoption^[2]. We found that patients of all ages accepted our hotel care without a significant decline in acceptance with advancing age. This could be due to our Care Hotel education method which begins in the presurgical assessment and is repeated and carried through the transition, making it easier for elderly patients to understand the process.

While not quite reaching the statistical significance cutoff of P less than 0.0056, the other factor with a strong correlation to Care Hotel use was the patient's distance travelled to the hospital ($P=0.007$). Patients with longer travel distances following their surgery may want to utilize the Care Hotel as it would not require their caregiver or themselves to travel home for an extended period of time. Previous reviews of patient hoteling have presumed that an option for an overnight stay following a procedure shortens the distance travelled on the day of surgery and may diminish stress and fatigue for both patients and caregivers^[5].

Finally, we found no correlation between any of our patient demographic characteristics, Charlson comorbidity index score, length of surgical procedure, or day of the week that surgery was performed with increased acceptance to stay at the Care Hotel. Although a majority of the patients were white (88.1%) and not Hispanic-Latino (95.2%), patients of all races and ethnicities choose to stay at the Care Hotel. This is important as Care Hotel is meant to be inclusive so that all patients can benefit from the previous advantages seen, such as a superior patient experience, increased privacy, better logistical coordination, and increased access to information^[9]. We found that patients with mild, moderate, and severe chronic comorbidities all choose to stay at the Care Hotel. Although different from the Charlson Comorbidity Index, a previous Care Hotel study did find that patients with an ASA PS classification of 1 or 2 were significantly more likely to stay at the Care Hotel compared to those with a classification of 3 or 4^[12]. Differences in these findings could be due to the more subjective nature of ASA PS scoring by anesthesiologists, usually focusing on anaesthesia risk in the immediate surgical setting, when compared to the specific calculations predicting 10-year patient survival based on comorbidities in the Charlson score. Finally, the length or day of the week of the procedure had no impact on the acceptance to Care Hotel.

This again is likely due to the fact that admission to the care hotel is based off of procedure type and patient acceptance, both of which are predetermined prior to surgery/procedure scheduling.

Limitations

Several limitations of our study should be acknowledged. The main limitation is the retrospective design, which introduces biases into the data collection. Second, we cannot conclude that no true association between a given characteristic and staying at the Care Hotel exists simply due to the occurrence of a non-significant p value in this study. Third, this study could be biased due to the fact that not all patient types are appropriate for Care Hotel. There are specific specialties and specific procedures that most appropriately apply to using this Care Hotel model, so this retrospective analysis only includes those patient types and not patients that would have been clinically inappropriate for the Care Hotel model. Fourth, the single-centre design limits the generalizability of our findings. Finally, our analysis used patient demographics and characteristics that were easily retrievable from the electronic health record; we did not collect and compare patient socioeconomic data, patient education level, or patient family dynamics. Future studies comparing these demographics could be worthwhile as time away from work, travel expense, education level, and family preference may all play a role in Care Hotel acceptance.

Conclusions

We found that surgical service is independently associated with staying at the Mayo Clinic Care Hotel in surgical patients. Additionally, there was suggestive evidence that patients who had a longer distance travelled to the hospital were more likely to stay at the Care Hotel. For other organizations who are considering development of post-procedural offerings such as the Care Hotel, focusing efforts on key surgical champions in General Surgery, Otorhinolaryngology, and Neurosurgery as well as on those patients travelling a greater distance for their procedure may yield the highest acceptance. Understanding the factors that promote patient acceptance of the Care Hotel as a suitable alternative for post-procedural care may help hospital operations teams create optimal hospital policies to help drive patient use of this innovative care model.

Ethical approval

This study was approved by the Mayo Clinic Institutional Review Board as a retrospective chart review under protocol number 20-010753 and analyzed the de-identified patient data under protocol number 21-004666. No further ethical review was deemed necessary by the Institutional Review Board.

Consent

All patients give both verbal and written consent to participate in the Care Hotel and all subsequent research and surveys.

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Author contribution

Ryan M. Chadha, Margaret R. Paulson, Antonio J. Forte, and Michael J. Maniaci contributed to the study design, manuscript writing and preparation, and review process. Karla C. Maita, Jacey R. Fazio, Vanessa L. Boyle and Ellen A. Love contributed to the data collection and review, data analysis, manuscript writing, and manuscript editing. Michael G. Heckman and Patrick W. Johnson contributed to the data analysis, statistical analysis, and manuscript writing.

Conflicts of interest disclosure

None of the authors report any conflicts of interest.

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