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Insurance coverage and respiratory morbidities in bronchopulmonary dysplasia

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Abstract

Introduction: Preterm infants and young children with bronchopulmonary dysplasia (BPD) are at increased risk for acute care utilization and chronic respiratory symptoms during early life. Identifying risk factors for respiratory morbidities in the outpatient setting could decrease the burden of care. We hypothesized that public

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insurance coverage was associated with higher acute care usage and respiratory symptoms in preterm infants and children with BPD after initial neonatal intensive care unit (NICU) discharge.

Methods: Subjects were recruited from BPD clinics at 10 tertiary care centers in the United States between 2018 and 2021. Demographics and clinical characteristics were obtained through chart review. Surveys for clinical outcomes were administered to caregivers.

Results: Of the 470 subjects included in this study, 249 (53.0%) received employer-based insurance coverage and 221 (47.0%) received Medicaid as sole coverage at least once between 0 and 3 years of age. The Medicaid group was twice as likely to have sick visits (adjusted odd ratio [OR]: 2.06; $p = 0.009$) and emergency department visits (aOR: 2.09; $p = 0.028$), and three times more likely to be admitted for respiratory reasons (aOR: 3.04; $p = 0.001$) than those in the employer-based group. Additionally, those in the Medicaid group were more likely to have nighttime respiratory symptoms (aOR: 2.62; $p = 0.004$).

Conclusions: Children with BPD who received Medicaid coverage were more likely to utilize acute care and have nighttime respiratory symptoms during the first 3 years of life. More comprehensive studies are needed to determine whether the use of Medicaid represents a barrier to accessing care, lower socioeconomic status, and/or a proxy for detrimental environmental exposures.

KEYWORDS
bronchopulmonary dysplasia, insurance, Medicaid, rehospitalizations, respiratory morbidities, socioeconomic

1 | INTRODUCTION

Bronchopulmonary dysplasia (BPD) is the most common respiratory complication of preterm birth, impacting nearly 50,000 infants per year, and contributing to chronic respiratory disease.[1] Despite advances in neonatal care, the incidence of BPD has remained constant.[2] Infants and young children with BPD are subject to a significant burden of disease, including prolonged initial neonatal intensive care unit (NICU) hospitalizations, frequent outpatient visits to general and subspecialty providers, and an increased risk for readmission, particularly for respiratory exacerbations.[3] Home treatment regimens may include respiratory medications, supplemental oxygen, and modes of respiratory support including noninvasive or invasive ventilation. Emerging data suggest that early life events can affect long-term lung function.[4] For example, a history of radiologically diagnosed pneumonia during early childhood can result in lower lung function in young adulthood.[5] It is likely that BPD may adversely affect long-term lung function trajectories,[6–8] thus there is an impetus to identify factors that may impact disease severity in early childhood when long-term trajectories are most malleable.[9]

Environmental contributions play an important role in long-term pulmonary outcomes for preterm children, including second-hand tobacco smoke exposure,[10] daycare attendance,[11] and proximity to traffic pollution.[12] Socioeconomic factors may also affect health outcomes in BPD, though the interplay with environmental and other factors is complex.[13] One of the socioeconomic factors that can affect disease outcomes is health insurance coverage, which can reflect issues related to access to care or may serve as a proxy for additional social and environmental exposures influencing health status.

Infants and young children with BPD may have significant health care expenditures both during and after the initial NICU hospitalizations.[14] Costs are typically covered by third party payers in the United State, and a substantial portion of preterm infants (45%) have public insurance as their primary means of coverage.[15] Very preterm infants insured through Medicaid incur higher costs than those covered by commercial insurance due to higher rates of morbidity and readmission after the birth hospitalization.[16]

Prior studies examining whether insurance status is associated with poor respiratory outcomes include two single center studies from Brown University in which Medicaid coverage was associated with an approximately twofold increased risk for readmission within 90 days of NICU discharge.[17,18] However, it should be noted that another single center study reported that lower rates of readmission were associated with public insurance within the first 3 years of life.[19] In terms of multicenter studies, a study of 3574 infants with BPD based on Pediatric Hospital Information System data reported that private insurance was associated with 30% lower risk of

readmissions within the first year of life,[20] and investigators from the Prematurity and Respiratory Outcomes Program (PROP) reported that public insurance was associated increased respiratory morbidity, a composite measure which included readmissions.[21]

In this study we hypothesized that public insurance (Medicaid) coverage would associate with readmissions, other acute care utilization (e.g., emergency department visits), and prolonged chronic respiratory symptoms in childhood. We also sought to estimate risk of these adverse outcomes for different age groups within the first 3 years of life to better understand the potential influences of socioeconomic status on respiratory outcomes in BPD. To achieve these goals, we utilized a multicenter outpatient registry of infants and children with BPD.

2 | METHODOLOGY

2.1 | Study population

Participants were drawn from the BPD Collaborative Outpatient Registry on the basis of a diagnosis by the 2001 NHLBI workshop definition, at least one clinical visit before 3 years of age, and documentation of insurance coverage before 3 years of age.[22,23] Ten tertiary care centers recruited subjects through outpatient BPD clinics and contributed data to the registry, including Arkansas Children's Hospital, Lucille Packard Children's Hospital Stanford, Johns Hopkins Children's Center, Boston Children's Hospital, University of Massachusetts Memorial Children's Medical Center, Children's Mercy Hospital Kansas City, Nationwide Children's Hospital, Children's Hospital of Philadelphia, Monroe Carell Jr. Children's Hospital at Vanderbilt, and Intermountain Primary Children's Hospital at the University of Utah. Participating centers obtained local review board approval and data use agreements were completed between institutions for compiling anonymized data. Caregivers gave informed consent in accordance with local review board policies.

2.2 | Data collection

Data collection instruments were generated by the BPD Collaborative as previously described.[23] At the time of recruitment (September 2018 to July 2021), participant demographics, birth history, and NICU history were collected via questionnaire and chart review. At the time of recruitment and subsequent encounters in clinic, data on secondhand smoke exposure, clinical characteristics, acute care use for respiratory reasons (since NICU discharge or the last clinic visit), and respiratory symptoms (reported in the past 4 weeks) were collected via questionnaire and chart review. The term "sick visits" refers to urgent ambulatory care visits for respiratory reasons; data were not collected about routine visits to respiratory clinics. Employer-based insurance was defined as having any private health insurance or Tricare (healthcare coverage for members of the US military and their dependents). Although Tricare coverage is funded through the US federal government, it was treated as employer-based coverage based on a recent study of young children with cystic fibrosis with Tricare coverage having respiratory outcomes more akin to those with private insurance as opposed to other forms of public insurance coverage, including Medicaid.[24] Subjects were classified into one of two groups based on all available data: (1) always having employer-based insurance or (2) any period of time having public insurance (Medicaid) as sole coverage. Individuals with employer-based insurance and back-up public insurance were included in the employer-based group. Pulmonary hypertension was defined as its presence on either echocardiography or cardiac catheterization after 36 weeks corrected gestational age.[25] Home respiratory support was defined as any use of supplemental oxygen, tracheostomy, or invasive/noninvasive positive pressure ventilation within the home setting. Pulmonary vasodilator medications included any documented outpatient use of phosphodiesterase-5 inhibitors, endothelin receptor antagonists, or prostanoids. Feeding tubes included nasogastric, gastrostomy, gastrojejunostomy, and jejunostomy tubes.

2.3 | Data analysis

Demographic and inpatient characteristics (before 3 years of age; sorted by insurance status) were compared by *t*-tests and χ^2 tests (Table 1) as were outpatient characteristics at the time of recruitment (Table 2). To test for associations between insurance status and acute care use/chronic respiratory symptoms, odds ratios were generated through logistic regression mixed models with clinic visits nested within subjects nested within BPD centers to account for longitudinal data obtained at follow-up clinic visits and to account for any center-specific variation (Table 3). All multivariate regressions were adjusted for age at the time of each clinic visit, race/ethnicity, birth weight, smokers in the home, and receipt of human milk at the time of the visit. STATA IC 15.0 (StataCorp) was used for all analyses. *p* values less than 0.05 were considered significant.

3 | RESULTS

3.1 | Demographics and inpatient characteristics

Of the 470 subjects who met inclusion criteria in the BPD Collaborative Outpatient Registry, 249 (53.0%) were reported to always be on employer-based insurance coverage and 221 (47.0%) were reported to have been covered by Medicaid as sole coverage for at least one clinical outpatient encounter between 0 and 3 years of age (Table 1). Of the 221 subjects reported to have been covered by Medicaid for at least one encounter, 211 were reported to never have had employer-based insurance, while the remaining 10 had periods on employer-based insurance. The percentage of subjects on Medicaid coverage ranged from 11.6% to 73.6% by center

TABLE 1 Demographics and inpatient characteristics.

Mean ± SD[range]	Entire study population(n = 470)	Always employer insurance(n = 249)	Any period with Medicaid as sole coverage(n = 221)	p Value
Sex (% female)	43.7 (n = 467)	42.7 (n = 248)	44.8 (n = 219)	0.66
Race (% non-white)	43.4 (n = 463)	32.9(n = 246)	55.3 (n = 217)	**<0.001**
Ethnicity (% Hispanic)	10.9 (n = 466)	4.9 (n = 246)	17.7 (n = 220)	**<0.001**
Gestational age (weeks)	26.7 ± 2.4 [22.3–33.9]	26.9 ± 2.3 [22.3–33.7]	26.6 ± 2.6 [22.3–33.9]	0.19
Birth weight (g)	907 ± 357 [370–2890] (n = 469)	940 ± 370 [370–2890] (n = 248)	871 ± 340 [370–2100]	**0.038**
Length of initial admission (months)	4.8 ± 2.8 [1.0–18.0] (n = 459)	4.6 ± 2.5 [1.0–14.5] (n = 244)	5.1 ± 3.1 [1.0–18.0] (n = 215)	0.06
BPD severity (%)				
Mild	8.9	11.2	6.3	0.14
Moderate	21.5	19.7	23.5	
Severe	69.6	69.1	70.1	
Cerebrospinal fluid shunt (% yes)	6.7 (n = 463)	5.3 (n = 247)	8.3 (n = 216)	0.19
Pulmonary hypertension after 36 weeks (% yes)	21.5 (n = 465)	19.8 (n = 248)	23.5 (n = 217)	0.33
Cyanotic heart disease (% yes)	1.1 (n = 469)	1.2	0.9 (n = 220)	0.76
Congenital anomaly or syndrome (% yes)	8.7 (n = 458)	9.5 (n = 243)	7.9 (n = 215)	0.61

Note: Bold values are significant at $p < 0.05$.

Abbreviations: BPD, bronchopulmonary dysplasia; SD, standard deviation.

($p < 0.001$). While there were no differences by sex between the health insurance groups ($p = 0.66$), those in the Medicaid group were more likely to be non-white (55.3% vs. 32.9%; $p < 0.001$) and/or Hispanic (17.7% vs. 4.9%; $p < 0.001$) than those in the employer-based insurance group. The mean gestational age for the study population was 26.7 ± 2.4 weeks and did not differ by insurance group ($p = 0.19$). However, those in the Medicaid group had a lower mean birth weight (871 ± 340 g) than those in the employer insurance group (940 ± 370 g; $p = 0.038$). Overall, 8.9% of the study population was diagnosed with mild BPD, 21.5% with moderate BPD, and 69.6% with severe BPD, and the frequencies were similar between health insurance groups ($p = 0.14$). There was a trend toward longer initial NICU admissions (0.5 months; $p = 0.06$) within the Medicaid group. There were no differences between the groups in terms of the presence of cerebrospinal fluid shunts, pulmonary hypertension after 36 weeks postmenstrual age, cyanotic heart disease, or congenital anomalies or syndromes.

3.2 | Outpatient characteristics

The mean age of recruitment into the registry was 0.9 ± 0.7 years of age, which did not differ by health insurance group ($p = 0.19$) (Table 2). Similar to the demographic and inpatient characteristics, the two groups did not differ by most outpatient characteristics at the time of recruitment. There were no differences in the use of the following home therapies by insurance status: nasal cannula oxygen, tracheostomy, home ventilation, use of inhaled steroids, medications for pulmonary hypertension, or feeding tubes. There were some differences in important home environment factors. Specifically, those in the Medicaid group were 7.3 times more likely to be exposed to secondhand smoke (23.5% vs. 3.2%; $p < 0.001$) and 61% less likely to be receiving human milk (13.1% vs. 33.7%; $p < 0.001$) than those in the employer-based insurance group. There were no differences in daycare attendance ($p = 0.46$) or number of children living in the home ($p = 0.09$).

TABLE 2 Outpatient clinical characteristics at time of recruitment.

Mean ± SD [range]	Entire study population(n = 470)	Always employer insurance(n = 249)	Any period with Medicaidas sole coverage(n = 221)	p Value
Age at recruitment (years)	0.9 ± 0.7 [0.1–3.0]	0.9 ± 0.7 [0.2–3.0]	0.8 ± 0.6 [0.1–3.0]	0.19
Children in the home (#)	2.0 ± 1.2 (1–7) (n = 457)	1.9 ± 1.2 (1–6) (n = 243)	2.1 ± 1.3 (1–7) (n = 214)	0.09
Daycare (% yes)	19.9 (n = 462)	18.6 (n = 247)	21.4 (n = 215)	0.46
Secondhand smoke (% yes)	12.8	3.2	23.5	**<0.001**
Nasal cannula oxygen (% yes)	42.3	41.0	43.9	0.52
Tracheostomy (% yes)	13.0	12.1	14.0	0.52
Home ventilator (% yes)	10.0	11.3	8.8	0.37
Inhaled steroids (% yes)	50.4	48.2	52.9	0.30
Pulmonary hypertension medications (% yes)	8.5	7.6	9.5	0.47
Feeding tube (% yes)	37.1 (n = 469)	34.1	40.5 (n = 220)	0.16
Any human milk (% yes)	24.0	33.7	13.1	**<0.001**

Note: Bold values are significant at $p < 0.05$.

Abbreviation: SD, standard deviation.

3.3 | Clinical outcomes

We examined acute care use, respiratory symptoms, and medication use by insurance status using mixed logistic regression models (Table 3). After adjusting for factors that differed between the two health insurance groups, we found that those in the Medicaid group were twice as likely to have sick visits (urgent ambulatory care visits; aOR: 2.06; $p = 0.009$) and emergency department visits (aOR: 2.09; $p = 0.028$) and three times more likely to be admitted for respiratory symptoms (aOR: 3.04; $p = 0.001$) than those in the employer-based insurance group. There were no differences in antibiotic ($p = 0.79$) or systemic steroid use ($p = 0.14$). Additionally, those in the Medicaid group were more likely to have nighttime respiratory symptoms (aOR: 2.62; $p = 0.004$) than those in the employer-based insurance group. There were no differences in any of the other chronic respiratory symptoms or medication use by health insurance group.

4 | DISCUSSION

In this multicenter registry-based study of infants and young children with BPD, we found that Medicaid coverage was associated with a threefold risk for hospital admission within the first 3 years of life after adjusting for potential confounders. Our findings extend results from previous studies where increased rates of readmission were seen within the first year of life[17,18,20,21] to the first 3 years of life, and add to them to observing associations between insurance status and other modalities of acute care, specifically a twofold increased risk for both sick visits and emergency department visits. We found that nighttime respiratory symptoms were associated with Medicaid coverage. Our data do not indicate whether poorer outcomes associated with Medicaid coverage are a function of decreased access to care or whether insurance status is a proxy for reduced socioeconomic status or other environmental factors.

We found that subjects with Medicaid coverage accessed the primary care provider for acute sick visits and visited the emergency department at twice the rate of those with employer-based coverage. These increased rates of acute care use could stem from difficulties in accessing preventative care (e.g., local providers may not take Medicaid, travel considerations, absence of caregiver job flexibility). A 2019 single center study found that only 53% of 107 preterm children received care through a medical home (defined as having a personal doctor/nurse, a usual place for care, effective care coordination, family-centered care, and getting referrals when needed) with lower rates were observed among those with lower socioeconomic status.[26] An interdisciplinary medical home for preterm infants with severe BPD has been recommended by experts.[3] Additionally, those with public insurance may have been sicker as a result of delays in accessing care. This is supported by our observation that public insurance was associated with a threefold risk for hospital readmission, as compared to a twofold risk for sick visits or emergency department visits as compared to those with employer-based insurance.

TABLE 3 Clinical outcomes with lack of employer-based insurance.

OR ± SE[a] [95% CI]		Unadjusted odds ratio with no employer insurance	*p* Value	Adjusted odds ratio with no employer insurance	*p* Value
Acute care	Sick visits (urgent ambulatory care visits)	1.87 ± 0.48 [1.13–3.09] (*n* = 463 with 965 visits)	**0.015**	2.06 ± 0.57 [1.20–3.53] (*n* = 458 with 948 visits)	**0.009**
	Emergency department visits	2.36 ± 0.73 [1.29–4.31] (*n* = 461 with 964 visits)	**0.006**	2.09 ± 0.70 [1.08–4.02] (*n* = 456 with 947 visits)	**0.028**
	Hospital readmissions	2.98 ± 0.92 [1.62–5.47] (*n* = 462 with 964 visits)	**<0.001**	3.04 ± 1.03 [1.56–5.91] (*n* = 457 with 947 visits)	**0.001**
	Antibiotics	1.02 ± 0.29 [0.58–1.78] (*n* = 460 with 960 visits)	0.94	1.09 ± 0.34 [0.59–2.02] (*n* = 455 with 943 visits)	0.79
	Systemic steroids	2.04 ± 0.75 (1.00–4.18) (*n* = 455 with 954 visits)	0.05	1.79 ± 0.70 [0.83–3.86] (*n* = 450 with 937 visits)	0.14
Chronic symptoms and medication use	Trouble breathing	1.53 ± 0.35 [0.98–2.40] (*n* = 465 with 958 visits)	0.06	1.56 ± 0.40 [0.94–2.58] (*n* = 459 with 940 visits)	0.08
	Nighttime respiratory symptoms	2.36 ± 0.71 [1.30–4.27] (*n* = 466 with 959 visits)	**0.005**	2.62 ± 0.87 [1.37–5.02] (*n* = 460 with 941 visits)	**0.004**
	Activity limitations	1.48 ± 0.47 [0.79–2.75] (*n* = 461 with 952 visits)	0.22	1.62 ± 0.57 [0.82–3.23] (*n* = 455 with 934 visits)	0.17
	Rescue medication use	1.35 ± 0.39 [0.77–2.37] (*n* = 463 with 954 visits)	0.30	1.05 ± 0.34 [0.56–1.97] (*n* = 457 with 936 visits)	0.89

Note: Bold values are significant at $p < 0.05$.

Abbreviations: BPD, bronchopulmonary dysplasia; OR, odd ratio; SE, standard error.

[a]Odds ratios were generated through multivariate nested mixed logistic regression models with clinic visits (before 3 years of age) nested within subjects nested within BPD centers. Exposure (Medicaid coverage) and outcomes were coded as no = 0 and yes = 1. Adjusted regression models were adjusted for age at the time of clinic visit, birthweight, race/ethnicity (coded as non-Hispanic White = 1 and all others = 1), smokers in the home, and receipt of human milk at the time of visit.

Conversely, insurance status may be solely a marker for other social or economic disparities, rather a true detriment to health. For example, a study in pediatric patients with cystic fibrosis demonstrated that differential use of health services or prescription of chronic therapy was not explained by insurance status.[27] We observed in our population that Medicaid status was associated with an increased likelihood of a smoker residing within the home and a decreased likelihood of receiving human milk, both of which have been associated with poor respiratory outcomes in preterm infants.[10,28] In a larger context, these potential exposures that were correlated in our study (Medicaid coverage, secondhand smoke, and decreased human milk intake) may be general markers for reduced socioeconomic status, and in turn other exposures such as increased exposure to pollution from traffic, industrial sites, crowded living situations with increased sick contacts, etc. Some of these detrimental exposures may be responsible for the increased nighttime symptoms seen within the Medicaid group.

We also observed that birth weights were lower within the Medicaid group as compared to the employer-based insurance group despite having similar gestational ages. The etiology for this is likely multifactorial and may include decreased access to prenatal care, reduced maternal nutrition, and increased maternal exposure to tobacco smoke. Although there was a trend toward longer admissions within the Medicaid group ($p = 0.06$), this was not significant in a regression model after adjusting for birth weight ($p = 0.24$).

4.1 | Limitations

One of the limitations of our study is that insurance coverage is not static. Recent data from children and young adults with cystic fibrosis suggests that a large fraction of the population may transition between employer-based insurance and Medicaid coverage over a

multiyear period with effects on respiratory outcomes.[29,30] The resolution of our data does not allow for accurate assessment of insurance as a time-varying exposure. Additionally, while our centers are geographically diverse, eligibility criteria for Medicaid varies by state and we may have state or regional biases for Medicaid coverage in our study population. Our study population is recruited from patients who access specialized BPD care at academic medical center, and is also enriched for more severe BPD compared to the general preterm population,[31] which may limit the generalizability of our findings. Also, there may be disparities associated with both the exposure and outcomes in our study as we observed that Medicaid coverage was associated with both non-white race and Hispanic ethnicity; our adjustments in the regression models may not completely adjust for confounding secondary to race and ethnicity due to race being coded as a dichotomous variable. Thus, while we did not collect data on racism or discrimination, it may be possible that some part of the association we observed between insurance status and respiratory outcomes could be secondary to racism, based on other studies of maternal and preterm child health.[32–34] We also did not assess caregiver education level, which may impact the ability to recognize and act on respiratory symptoms early to decrease the likelihood of acute care use. Lastly, we did not assess specific financial considerations for accessing care such as copays and deductibles or household income, which may incentivize or disincentivize particular modalities of care.

5 | CONCLUSIONS

In summary, we observed increased acute care utilization among those covered by Medicaid in a multicenter population of infants and young children with primarily severe BPD. This may have short-term ramifications for health care utilization and costs for state and federal funding agencies as well as quality of life for families. Increased acute care use for preterm infants and children with BPD is associated with lower quality of life for caregivers.[35] More problematically, the associations we observed may be part of a worse longer-term trajectory among preterm individuals, receiving Medicaid coverage. A 2018 study of 882 preterm infants born at less than 28 weeks gestation found that maternal Medicaid coverage among preterm infants was associated with a 1.8-fold risk of later development of asthma at 10 years of age[36]; asthma being more common among preterm individuals in general.[1] Further work is also needed to determine whether insurance coverage directly impacts outcomes (i.e., is insurance coverage associated with access to medications, therapies, and care?). If insurance is only a marker of other disparities or inequities, including access to a medical home, more comprehensive studies of socioeconomic and environmental factors affecting infants with postprematurity respiratory disease are needed to identify risk factors and the complex interplay between social, economic, and medical factors. Although clinical interventions (e.g., standardization of care based on evidence-based guidelines)[37,38] may decrease some of the disparate outcomes observed with insurance status, changes in social and economic policies are also needed.[39]

AUTHOR CONTRIBUTIONS

Joseph M. Collaco: Conceptualization (equal); Methodology (equal); Formal Analysis (equal); data curation (equal); resources (equal); writing—original (equal). **Michael C. Tracy**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Jessica L. Rice**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Catherine A. Sheils**: Conceptualization (equal); funding acquisition (equal); resources (equal); writing—review and editing (equal). **Lawrence M. Rhein**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Leif D. Nelin**: Conceptualization (equal); data curation (equal); funding acquisition (equal); project administration (equal); resources (equal); writing—review and editing (equal). **Paul E. Moore**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Winston M. Manimtim**: Conceptualization (equal); resources (equal); writing—Review and editing (equal). **Jonathan C. Levin**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Khanh Lai**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Lystra P. Hayden**: Conceptualization (equal); funding acquisition (equal); resources (equal); writing—review and editing (equal). **Julie L. Fierro**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Eric D. Austin**: Conceptualization (equal); funding acquisition (equal); resources (equal); writing—review and editing (equal). **Stamatia Alexiou**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Amit Agarwal**: Conceptualization (equal); resources (equal); writing—review and editing (equal). **Natalie Villafranco**: Conceptualization (equal); writing—review and editing (equal). **Roopa Siddaiah**: Conceptualization (equal); writing—review and editing (equal). **Antonia P. Popova**: Conceptualization (equal); writing—review and editing (equal). **Ioana A. Cristea**: Conceptualization (equal); writing—review and editing (equal). **Christopher D. Baker**: Conceptualization (equal); writing—review and editing (equal). **Manvi Bansal**: Conceptualization (equal); writing—review and editing (equal). **Sharon A. McGrath-Morrow**: Conceptualization (equal); Methodology (equal); data curation; resources (equal); writing—review and editing (equal); supervision (equal).

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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