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DATAWATCH

Hospital Lawsuits Over Unpaid Bills Increased By 37 Percent In Wisconsin From 2001 To 2018

We analyzed Wisconsin court records from the period 2001–18 to document trends in hospital lawsuits to recover patients' unpaid medical bills. These lawsuits increased 37 percent during this period, from 1.12 per 1,000 residents in 2001 to 1.53 per 1,000 residents in 2018, with lawsuits being disproportionately directed at Black patients and patients living in poorer and less densely populated counties.

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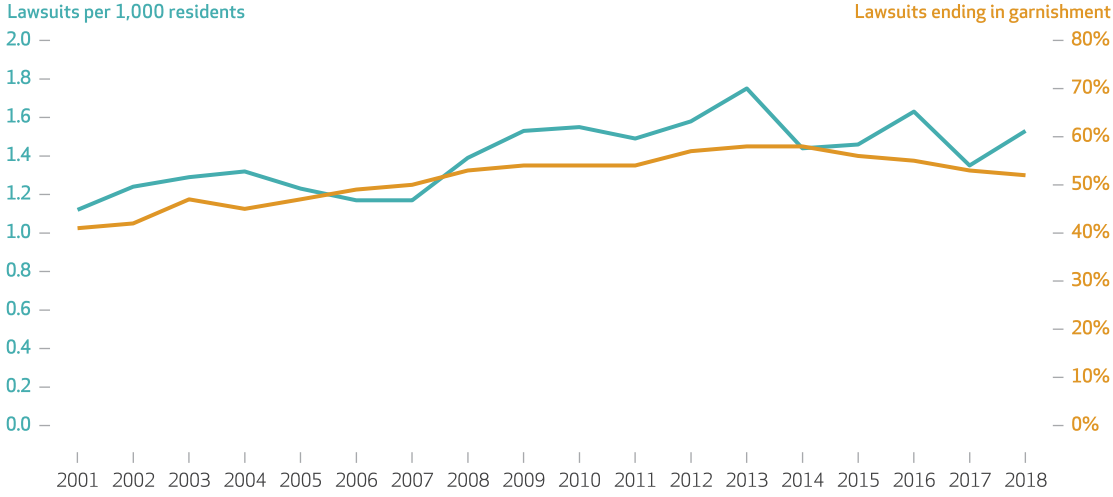
Hospitals' practice of suing patients over unpaid medical bills has received increasing attention, with journalists shining light on aggressive hospital behavior.[1,2] A recent study examined cross-sectional patterns in hospital litigation in Virginia in 2017.[3] Several non-peer-reviewed reports examined hospital lawsuits in Connecticut, Maryland, and selected counties in New York and Texas.[4–7] No study has examined long-term trends in hospital lawsuits, and there is limited understanding of how the incidence of lawsuits varies across patients, regions, and hospitals.

In this study we constructed a new data set of hospital lawsuits from the period 2001–18 for the state of Wisconsin. We used these data to document trends in lawsuits, describe which patients were more likely to be sued, and analyze which hospitals were more likely to sue their patients.

Our main finding, shown in exhibit 1, is that hospital lawsuits increased by 37 percent, from 1.12 per 1,000 residents in 2001 (5,896 total lawsuits) to 1.53 per 1,000 residents in 2018 (8,869 total lawsuits). The majority of the increase occurred between 2006 and 2009, when the number of lawsuits increased from 1.17 to 1.53 per 1,000 residents. The average size of lawsuits was stable over time, with the average lawsuit size varying between $2,522 and $3,939 across years

EXHIBIT 1

Lawsuits per 1,000 Wisconsin residents and share of lawsuits ending in wage garnishment, by year, 2001–18



SOURCE Authors' analysis of lawsuit data from the Wisconsin Circuit Court Access system and state resident counts from the Wisconsin Department of Health Services.

(see online appendix exhibit 1),[8] whereas the share of cases that resulted in wage garnishment increased by 27 percent (from 41 percent in 2001 to 52 percent in 2018) (exhibit 1).

Our 2001–18 time frame is the longest for any study of hospital lawsuits, which is key to understanding long-run trends. Although Wisconsin expanded some state insurance programs, it did not participate in the Affordable Care Act Medicaid expansion and had a smaller increase in coverage than its neighboring states. This allowed us to measure trends in hospital litigation unconfounded by sharp changes in insurance coverage. Our study contributes to an understanding of how the rate of lawsuits varies across patients and hospitals and is the first to examine lawsuits by (inferred) patient race.

Study Data And Methods

The main data we used in this analysis were court records from the Wisconsin Circuit Court Access system. These are publicly available data and include information on small claims, civil claims, and hospital lien cases. To identify relevant cases, we compiled a list of Wisconsin hospitals from the American Hospital Association (AHA) Annual Survey and pulled cases where an AHA-registered hospital was the plaintiff. We constructed a database of cases that were filed over the course of 2001–18 that included information on the plaintiffs and defendants, the filing date, the filing county, the court's decision, the judgment amount, and the court fees. For the 12 percent of cases with multiple plaintiffs, we used the hospital characteristics for the first listed plaintiff.

We inferred defendant race or ethnicity using Bayesian Indirect Surname Geocoding, as outlined by the Consumer Financial Protection Bureau.[9] Bayesian Indirect Surname Geocoding generates probabilistic race or ethnicity scores based on surname and census block and has been highly accurate in assessments.[9] Race or ethnicity was not identified for 17.7 percent of cases because of an inability to match names and addresses with the census data; we coded race and ethnicity on these cases as "missing."

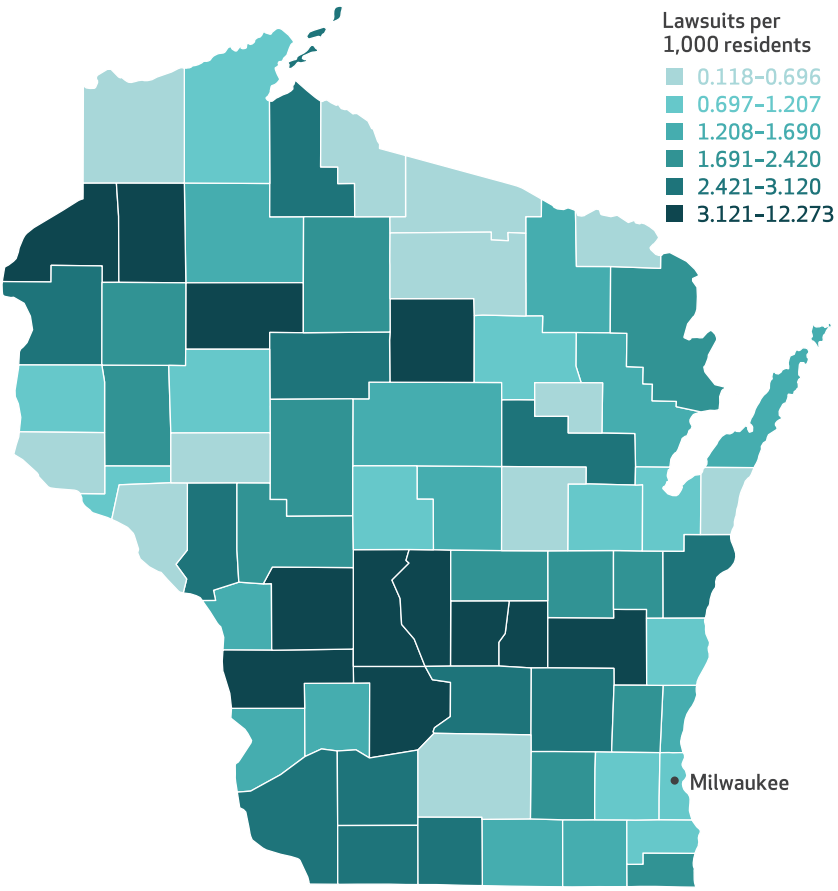
We examined cross-sectional patterns in lawsuits that were filed over the course of 2014–18 (the most recent five years available) by merging the case records with defendants' county characteristics, including population density, median household income, employment rate, and demographics, for the same years. We obtained these data from the Census Bureau's American Community Survey and the Wisconsin Department of Health Services. We merged in hospital characteristics and hospital utilization data from the AHA Annual Survey and the Healthcare Provider Cost Reporting Information System from the Centers for Medicare and Medicaid Services.

All analyses were conducted using Stata 16. This project was deemed exempt by the Yale Social Science Institutional Review Board.

There were several limitations to this study. First, we observed data only from Wisconsin, and we could not assess the extent to which our results can be generalized to other states including those that, unlike Wisconsin, expanded Medicaid. Second, we inferred individuals' races and ethnicities from their names and census blocks, using Bayesian Improved Surname Geocoding. Although this methodology has been shown to be highly accurate, it is not a perfect substitute for observing race and ethnicity directly. Third, we did not observe unpaid medical bills, we only observed hospital lawsuits. As a result, we were unable to determine whether, for example, differential lawsuit rates by race or ethnicity reflected underlying differences in

EXHIBIT 2

Annual number of hospital lawsuits per 1,000 residents in Wisconsin, by county, 2014–18



SOURCE Authors' analysis of lawsuit data from the Wisconsin Circuit Court Access system and county resident counts from the Wisconsin Department of Health Services.

unpaid medical bills or differences even when the amount of unpaid medical debt was controlled for. Fourth, we do not know whether an individual lawsuit was specifically related to an unpaid medical bill. Rather, we know that a hospital sued an individual for a fixed dollar amount, and we inferred that to be a lawsuit over medical debt. Fifth, we did not assess the consequences of hospital lawsuits on patients' financial well-being and health. Measuring these effects, along with the effects of policies to counteract aggressive hospital behavior, is an important area for future work.

Study Results

The 37 percent increase in lawsuits per 1,000 residents shown in exhibit 1 is robust to alternative specifications. Because very few individuals receive multiple lawsuits in a year, the increase was almost identical (36 percent) when we examined the trend in unique individuals receiving lawsuits each year, rather than all lawsuits (data not shown). Hospital lawsuits to recover settlements from, for example, auto accidents or workplace injuries are also rare, and the increase was almost identical (34 percent) when we dropped these hospital liens. The 2001–18 increase was larger (50 percent) in absolute terms (that is, when not expressed per 1,000 residents) and when scaled by inpatient discharges (58 percent) (data not shown). The distribution of lawsuit size is somewhat right-skewed but not excessively influenced by outliers. Additional statistics on lawsuit size are in appendix 1.[8]

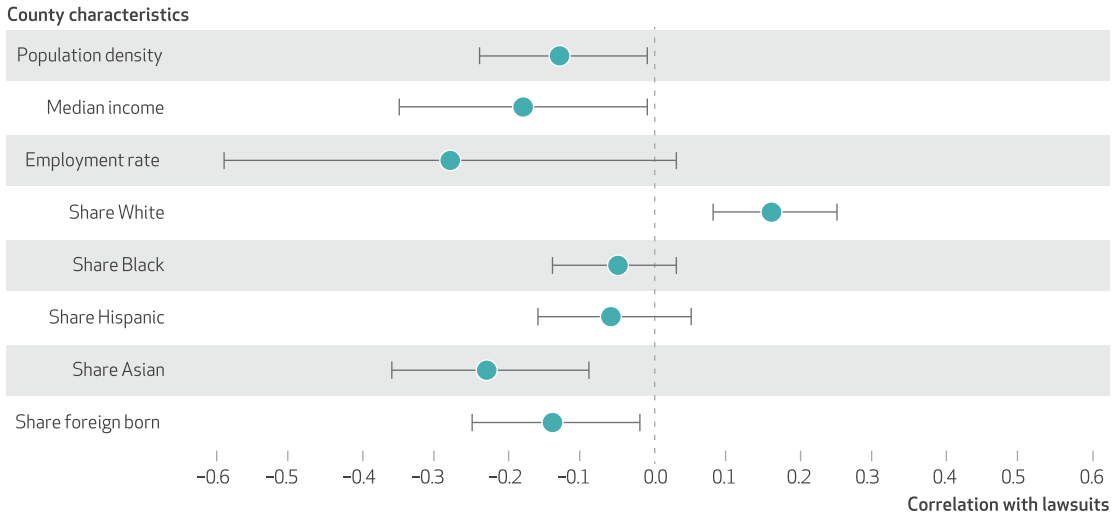
Exhibit 2 is a map of lawsuits per 1,000 residents across the seventy-two counties in Wisconsin, using data from the period 2014–18. Annual lawsuits per 1,000 residents varied from 0.118 per 1,000 residents in Douglas County (urban) to 12.273 per 1,000 residents in Juneau County (rural). In 2018 Milwaukee County—Wisconsin's most populous county and home to the city of Milwaukee—had 0.895 lawsuits per 1,000 residents. As we illustrate in appendix exhibit 2,[8] the ordering of counties in terms of lawsuits per 1,000 residents was stable over the entire 2001–18 study period (that is, counties that had a higher rate of lawsuits in the early 2000s had a higher rate in later years).

In exhibit 3 we present estimates of the bivariate correlation between county-level hospital lawsuits per 1,000 residents during 2014–18 and county-level characteristics. The number of lawsuits per 1,000 residents was negatively associated with population density, median income, and the share of residents who were Asian or foreign born; it was positively associated with the share of White residents.

In exhibit 4 we present trends in hospital lawsuits per 1,000 residents by defendant race or ethnicity. Black patients were most likely to be sued. In 2018 there were 1.86 lawsuits per 1,000 Black residents, 1.32 per 1,000 White residents,

EXHIBIT 3

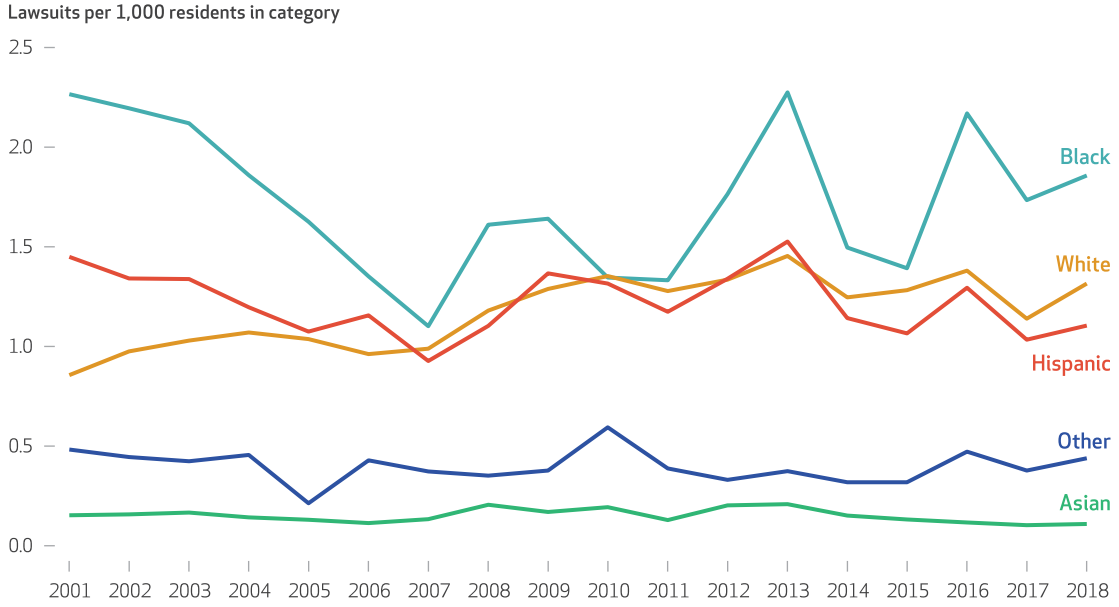
Bivariate correlation between lawsuits per 1,000 residents and county characteristics in Wisconsin, 2014–18



SOURCE Authors' analysis of lawsuit data from the Wisconsin Circuit Court Access system, county resident counts from the Wisconsin Department of Health Services, and county characteristics from the Census Bureau's American Community Survey. **NOTES** Correlations were estimated with bivariate regressions of the number of lawsuits per 1,000 residents on county characteristics, where all variables were standardized by subtracting the mean and dividing by the standard deviation. Observations are county-years ($N = 360$). Bars show the 95% confidence intervals based on standard errors clustered at the county level.

EXHIBIT 4

Hospital lawsuits per 1,000 Wisconsin residents, by defendant race or ethnicity, 2001–18



SOURCE Authors' analysis of lawsuit data from the Wisconsin Circuit Court Access system and state resident counts by race or ethnicity of residents from the Wisconsin Department of Health Services. **NOTES** Lines indicate trends in hospital lawsuits per 1,000 residents by defendant race or ethnicity. Racial probability scores were calculated for each defendant, using Bayesian Improved Surname Geocoding based on the person's home address and surname. For cases with multiple defendants, we took the unweighted average of the probability scores for each race or ethnicity across all defendants. Those probability scores were then summed across all cases by race or ethnicity and year to estimate the total number of lawsuits. "Other" includes biracial, Asian Pacific Islander, and Native American respondents.

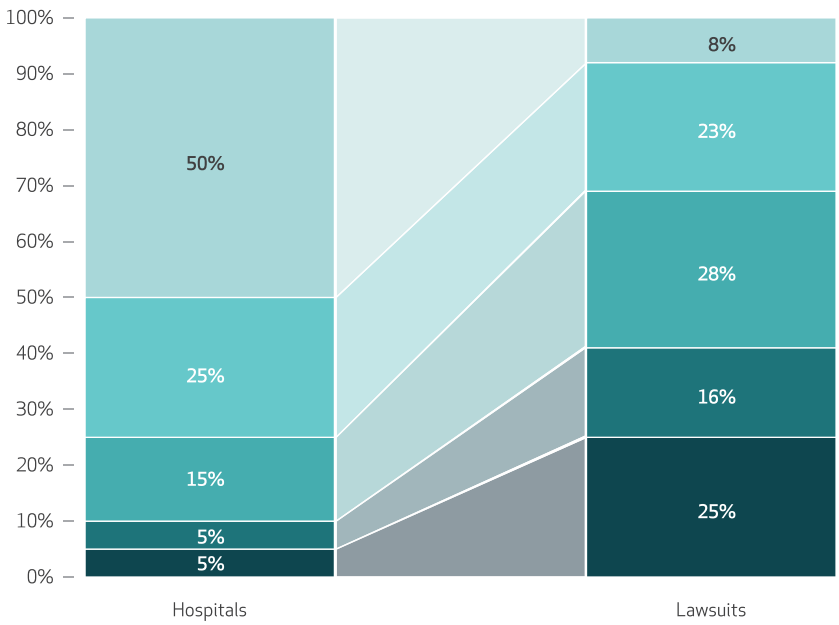
1.10 per 1,000 Hispanic residents, 0.11 per 1,000 Asian residents, and 0.44 per 1,000 residents of other races. Appendix exhibit 3 shows the absolute number of lawsuits by defendant race over time.[8]

Exhibit 5 shows the distribution of lawsuits across the 125 hospitals in Wisconsin over the course of 2014–18. The 10 percent of hospitals that sued the most were responsible for 40.7 percent of lawsuits but only 22.8 percent of inpatient discharges and 21.3 percent of hospital beds (appendix exhibit 4).[8] Additional statistics on the concentration of lawsuits are shown in appendix exhibit 4.[8] In appendix exhibit 5 we list all hospitals in the state by the number of lawsuits they filed between 2014 and 2018.[8]

In exhibit 6 we present bivariate correlations between hospitals' lawsuits per 100 discharges in 2014–18 and hospital characteristics (we normalized the lawsuits by discharges to account for the relationship between the number of lawsuits and hospital volume). These correlations did not control for potential confounders and should not be interpreted causally. Smaller hospitals, as measured by beds, discharges, and full-time personnel, were more likely to sue patients. There was no statistically significant correlation between hospital market concentration—

EXHIBIT 5

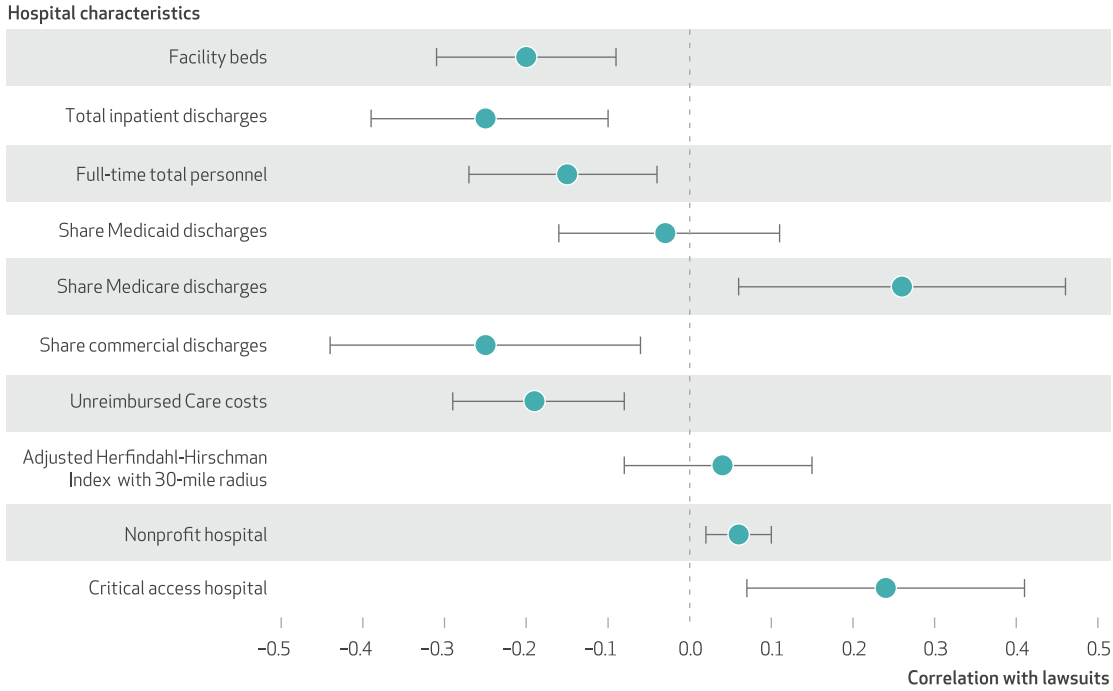
Concentration of lawsuits among hospitals in Wisconsin, 2014–18



SOURCE Authors' analysis of lawsuit data from the Wisconsin Circuit Court Access system. **NOTES** The figure displays the share of lawsuits accounted for by different shares of hospitals. For instance, the bottom segments indicate that 5 percent of hospitals account for 25 percent of lawsuits. There were 125 hospitals and 42,844 lawsuits in this period.

EXHIBIT 6

Bivariate correlation between lawsuits per 100 inpatient discharges and hospital characteristics, 2014–18



SOURCE Authors' analysis of lawsuit data from the Wisconsin Circuit Court Access system, hospital characteristics from the American Hospital Association, and hospital discharge data from the Healthcare Provider Cost Reporting Information System of the Centers for Medicare and Medicaid Services. **NOTES** Correlations were estimated with separate bivariate regressions of the number of lawsuits per 100 discharges on hospital characteristics, where all variables were standardized by subtracting the mean and dividing by the standard deviation. Observations are hospital-years ($N = 485$). Bars show the 95% confidence intervals based on standard errors clustered at the hospital level.

measured by the Herfindahl-Hirschman Index—and lawsuits per discharge. Hospitals with higher shares of Medicare discharges and lower shares of commercial discharges were more likely to sue patients. Nonprofit hospitals were more likely to sue patients than for-profit hospitals (the excluded group). Hospitals designated as critical access hospitals also had a higher rate of lawsuits per discharge.

Discussion

The increase in hospital lawsuits per 1,000 residents that we observed in Wisconsin for the period 2001–18 adds a troubling new element to a growing body of evidence of financial hardship caused by the US health care system, complementing evidence on trends in medical debt in collections and the prevalence of surprise bills from out-of-network physicians practicing at in-network hospitals.[10–12]

The higher rates of lawsuits per capita among Black patients and patients living in poorer counties contributes worrying new evidence of disparities in financial hardship across racial and income groups. The higher rates of lawsuits for small hospitals and in less densely populated counties points to an important rural-urban divide in hospital litigation. The finding that nonprofit hospitals had higher lawsuit rates reinforces existing evidence of the mixed relationship between hospital ownership and hospital behavior.[13]

Conclusion

From 2001 to 2018 the rate at which hospitals sued patients increased 37 percent, with lawsuits disproportionally affecting Black patients and people living in poorer and less densely populated counties. To the extent that these lawsuits negatively affect patients' financial well-being and health, policies that reverse these trends may be warranted. ■

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NOTES

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8 To access the appendix, click on the Details tab of the article online.

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