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Gender differences in paediatric hospital chief executive officer compensation

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ABSTRACT

Though there is a well-established gender pay gap in medicine, studies on compensation disparities between women and men chief executive officers (CEO) showed mixed results. We conducted a cross-sectional study of children's hospitals in the USA to evaluate whether CEO gender was associated with compensation differences. Nine out of 31 children's hospitals employed a female CEO. There was no significant difference between men and women CEOs in terms of hospital characteristics (location, size or ranking in US News and World report) or CEO characteristics (advanced degrees, tenure or compensation). Gender was not associated with significant differences in CEO compensation.

Though it is well established that there is a gender pay gap in medicine, gender disparities in medical executive compensation have been less demonstrated. For the few women who have been able to obtain the chief executive officer (CEO) position at large business corporations, the results are mixed. Some studies have shown a narrowing, but existent gender pay gap,^{2 3} while others have not shown a significant pay differential compared with men. 4 Though female CEOs at non-profit hospitals were compensated less than men,⁵ the USA health sector is unusual because women hold 76% of all healthcare jobs and 58% of paediatric faculty are female. The aim of this study was to determine whether female paediatric hospital CEOs were compensated differently than men.

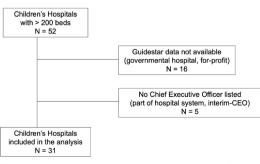


Figure 1 Inclusion and exclusion criteria flow diagram. CEO, chief executive officer.

We conducted a cross-sectional study of children's hospitals to evaluate whether CEO gender was associated with compensation differences. All children's hospitals with 200 or more beds were identified through the Children's Hospital Association directory (https://www.childrenshospitals.org). dren's hospital region was determined by US census bureau. A hospital was considered ranked by US News and World Report if it was listed on the Best Children's Hospitals 2021-2022 Honor Roll (https://www.usnews.com). Identity of each CEO was determined by the children's hospital website. CEO's gender, advanced degrees and tenure was determined by looking at hospital websites and Linkedin profiles (https://www.linkedin.com). As data were publicly available and patients were not included, there was no patient and public involvement in this study. Financial information was extracted using GuideStar (http:// www.guidestar.org) to search for non-profit hospitals' most recent tax returns (2017-2019), which was converted into 2019 US dollars using the Bureau of Labor Statistics Consumer Price Index calculator. Internal revenue service (IRS) form 990, Schedule I, was used to determine CEO base and total compensation. Total compensation included primary organisation and reportable compensation from a related organisation. We excluded organisations without IRS form 990 or if there was no CEO listed by the hospital. χ^2 tests and Wilcoxon rank sum tests were used to compare CEO characteristics and compensation using Stata V.15.0.

Fifty-two children's hospitals were listed as having more than 200 beds in the Children's Hospital Association directory. Sixteen hospitals were excluded because GuideStar data were not available, and 5 hospitals were excluded because there was no CEO listed, for a total of 31 children's hospitals in the final analysis (figure 1). Nine (29%) out of the 31 children's hospitals employed a female CEO (table 1). There was no significant difference



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	All (n=31)	Male (n=22)	Female (n=9)	P value
Location (n, %)				0.556
Northeast	4 (12.9)	2 (9.1)	2 (9.1)	
Midwest	7 (22.6)	6 (27.3)	1 (11.1)	
South	11 (35.5)	7 (31.8)	4 (44.4)	
West	9 (29.0)	7 (31.8)	2 (22.2)	
No of beds (n, %)				0.721
200–299	7 (22.6)	5 (22.7)	2 (22.2)	
300–399	11 (35.5)	9 (40.9)	2 (22.2)	
400–499	6 (19.4)	4 (18.2)	2 (22.2)	
500 or greater	7 (22.6)	4 (18.2)	3 (33.3)	
Hospital ranked in US News (n, %)				0.736
Yes	9 (29.0)	6 (27.3)	3 (33.3)	
Advanced degree (n, %)				0.185
None	3 (9.7)	2 (9.1)	1 (11.1)	
Master's	18 (58.1)	10 (45.5)	8 (88.9)	
Medical Doctorate	7 (22.6)	7 (31.8)	0	
Juris doctorate	2 (6.5)	2 (9.1)	0	
Doctorate in philosophy	1 (3.2)	1 (4.6)	0	
Tenure (years, %)				0.783
0–5 years	10 (32.3)	7 (31.8)	3 (33.3)	
6-10 years	8 (25.8)	5 (22.7)	3 (33.3)	
11-14 years	6 (19.4)	4 (18.2)	2 (22.2)	
15 years or greater	7 (22.6)	6 (27.3)	1 (11.1)	
Base compensation (US\$)			0.891	
US\$0-US\$850000	6 (19.4)	4 (18.2)	2 (22.2)	
US\$850 001-US\$1 000 000	8 (25.8)	5 (22.7)	3 (33.3)	
US\$1 000 001-US\$1 200 000	12 (38.7)	9 (40.9)	3 (33.3)	
>US\$1200000	5 (16.1)	4 (18.2)	1 (11.1)	
Total compensation (US\$)				0.891
US\$0-US\$1300000	6 (19.4)	4 (18.2)	2 (22.2)	
US\$1 300 001-US\$1 700 000	5 (16.1)	4 (18.2)	1 (11.1)	
US\$1 700 001-US\$2 000 000	8 (25.8)	5 (22.7)	3 (33.3)	
>US\$2000000	12 (38.7)	9 (40.9)	3 (33.3)	

between men and women CEOs in terms of baseline hospital characteristics (hospital location, hospital size or ranking in U.S. News and World report) or baseline CEO characteristics (advanced degrees, tenure or compensation).

Gender was not associated with significant differences in CEO compensation. Compared with women holding 76% of all healthcare jobs, women make up less than one third of paediatric hospital CEOs. For those women achieving CEO, they appear to have reached parity in terms of renumeration. Song *et al* found a significant gender pay gap when examining the compensation of non-profit hospitals; however, their study population consisted of both adult and paediatric hospitals and

included non-CEO executives.⁵ Bertrand and Hallock determined that most of the gender pay gap in corporate CEOs was due to women managing smaller companies and not having the CEO title.² In our analysis, we only included CEOs to ensure homogeneous comparisons. Our study is limited by measuring a single year of tax returns, rather than the career trajectory of each of these executives. In addition, this study only focused on paediatric hospitals in the USA; therefore, the findings may not be generalisable to other countries. Another limitation is that only non-profit hospitals are required to publish their IRS form 990 tax returns; therefore, forprofit and public hospitals were excluded from the analysis. Further studies are needed to determine the effect



of paediatric hospital executive characteristics on quality of care and potential barriers for women in healthcare executive tracks.

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REFERENCES

- 1 Whaley CM, Koo T, Arora VM, et al. Female physicians earn an estimated \$2million less than male physicians over a simulated 40year career. Health Aff 2021;40:1856–64.
- 2 Bertrand M, Hallock KF. The gender gap in top corporate jobs. ILR Review 2001:55:3–21.
- 3 Munoz-Bullon F. Gender-Compensation differences among high-level executives in the United States. *Ind Relat* 2010;49:346–70.
- 4 Bugeja M, Matolcsy ZP, Spiropoulos H. Is there a gender gap in CEO compensation? *Journal of Corporate Finance* 2012;18:849–59.
- 5 Song PH, Lee S-YD, Toth M, et al. Gender differences in hospital CEO compensation: a national investigation of not-for-profit hospitals. Med Care Res Rev 2019;76:830–46.
- 6 Day JC, Christnacht C. Women Hold 76% of All Health Care Jobs, Gaining in Higher-Paying Occupations. America Counts: Stories Behind the Numbers, 2019. Available: https://www.census.gov/ library/stories/2019/08/your-health-care-in-womens-hands.html [Accessed 06 Jan 2022].