


# Emergency Department Quality, Physician Calibre and Hospital and Community Involvement among Physician-led Democratic Emergency Medicine Practice Groups: A Cross-sectional Survey with Comparisons to a Nationwide Performance Measure Report

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## ABSTRACT

**Introduction:** Delivering high-quality healthcare extends beyond individual provider factors. Groups delivering medical care track metrics and develop processes on a system level to improve these measures. Few comparisons of the quality of healthcare, community involvement and group characteristics exist between healthcare systems and physician-owned organisations.

**Methods:** This is a cross-sectional survey study quantifying group practice characteristics, Emergency Department (ED) quality metrics, physician calibre and hospital and community involvement among democratic, physician-led emergency medicine practice groups. Where possible, these findings were compared with the Emergency Department Benchmarking Alliance (EDBA) 2021 performance measures report.

**Results:** Survey respondents, all of whom were democratic emergency medicine practice groups, showed high rates of physician retention, exceptionally very high rates of board certification, more favourable ED throughput metrics when measured against the EDBA report, lower staffing ratios and high levels of hospital and community involvement.

**Conclusion:** This cross-sectional survey highlights the value of democratic, physician-owned and physician-led emergency medicine groups. The survey respondents were democratic, physician-owned emergency medicine practice groups, and they showed overall better ED throughput metrics, high rates of physician retention and board certification, and high levels of hospital and community involvement compared to the EDBA 2021 performance measures report.

**Keywords:** Democratic, Door-to-decision, Hospital committee, Hospital leadership, Left before completing treatment, Physician-led, Physician retention, Staffing ratio.

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## INTRODUCTION

Delivering high-quality healthcare to patients goes beyond individual provider factors. Groups delivering medical care track metrics and develop processes at a system level to improve these measures. Quality improvement committees and conferences are increasingly being utilised at almost every occupational level of medicine. This trend is likely to continue as deficiencies in healthcare quality continue to be identified.<sup>1</sup>

Hospital and healthcare systems represent most healthcare delivery in the emergency medicine space, and physician-owned organisations make up a smaller proportion. However, physician-owned groups have strong potential for growth in the healthcare enterprise.<sup>2</sup> Differences in performance measures have rarely been compared between these two healthcare delivery entities. This cross-sectional survey aims to compare group practice characteristics, quality metrics, physician calibre and hospital and community involvement between a coalition of democratic, physician-owned emergency medicine practice groups and a nationwide benchmark databank.

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## METHODS

### Study Design and Participants

This is a cross-sectional survey conducted in the United States from January 23rd 2023 to March 13th 2023. The objective was to quantify group practice characteristics, Emergency Department (ED) quality metrics, physician calibre and hospital and community involvement among democratic emergency medicine practice groups.

The Emergency Medicine Business Coalition (EMBC) is a coalition of democratic emergency medicine practice groups that collaborate to achieve modern business solutions for their members, share economies of scale, exchange best practices and provide an amplified voice in the emergency medicine community. A democratic emergency medicine practice group is defined as a group in which full-time physician members have an equal voice and vote, with the majority vote ruling. Emergency Medicine Business Coalition is comprised of over 30 member groups. At the time of this survey, member groups were queried as the study participants.

### Survey Design

The survey, which was distributed electronically to EMBC members, is included in the appendix. Valmont Research, Ventura, CA, USA, organised the survey after EMBC members developed its methodology. Valmont Research created the electronic template and reported the survey results to the EMBC. It was designed to quantify group practice characteristics, ED quality metrics, physician calibre and hospital and community involvement. Practice characteristics were measured by the number of individuals working both clinically and non-clinically, the number of full-time and part-time physicians employed by each group, the total number of ED visits for each group and the total number of EDs staffed. Total ED visits included in-person ED visits, in-person urgent care visits and telemedicine visits over a 1-year period. Emergency Department quality metrics were measured by length of stay, door-to-provider time, the percentage of patients who left before treatment was complete, the staffing ratio for physicians defined as average visits per day divided by staffing hours per day and staffing ratio for physicians plus advance practice providers (APP). Staffing ratios were determined by the average number of ED encounters per day divided by the average number of clinician staffing hours per day. Physician calibre was measured by the percentage of physicians who were board-certified or board-eligible, the number of years the group has been in business, the number of partners per group, physician retention, the number of physicians who have left their respective group and the utilisation of annual physician performance evaluations. Hospital and community engagement was measured by the number of physicians that live locally with respect to their primary practice location, the frequency of the group facilitating volunteer activities, physician involvement in medical staff leadership, the percentage of physicians active in clinical process improvement projects, the average number of hospital committees the physicians are involved in, and ED metric tracking and sharing with the contracted hospital in order to prioritise improvement in these metrics.

Similar survey responses were collected from the 2021 ED performance measures report through the Emergency Department Benchmarking Alliance (EDBA) to be used as comparators. The survey wording and answer options for EMBC members were based on the EDBA 2021 ED performance measures report.

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**Conflict of interest:** The following authors have executive leadership roles in EMBC: HB, MD; JM; LM; JTh; KM; and JH. All authors have no financial conflicts of interest to disclose.

### Statistical Analysis

For parametric data, mean values are reported, while for nonparametric data, median values are reported. When survey questions for EMBC data matched those from EDBA data, we performed direct comparisons of mean or median values.

## RESULTS

Email invitations were sent, and out of 25 invitations sent for the survey, a total of 23 responses were received, equating to a 92% response rate. Two surveys were excluded due to incomplete responses. Twenty-one completed survey responses were included in the final analysis.

This report provides a comprehensive graphical summary of the survey results with graph descriptions included (Supplementary Figs 1 to 6; full tabular data available in the supplemental document). Some survey results apply only to EMBC members, while others include comparisons with the EDBA 2021 Performance Measures Report.

## DISCUSSION

This cross-sectional survey examines characteristics of physician-led independent democratic emergency medicine practice groups, regarding group practice characteristics, ED quality metrics, physician calibre and hospital and community engagement. The survey was conducted by EMBC, a coalition of physician-led independent democratic emergency medicine practice groups. Comparisons, when possible, were made against data from the EDBA 2021 ED Performance Measures Report.

The EDBA was founded in 1994 by ED leaders seeking opportunities to collaborate on both local and national scales. They maintain a database of demographic and performance metrics. This database, as of January 2022, has over 1,900 hospitals (Supplementary Figs 7 to 26).

This survey compiled data from 21 respondents from EMBC membership. Seven respondents (33%) staff EDs with volumes totalling less than 100,000 annual patient visits. Eight respondents (38%) staff EDs with total annual volumes of 100,000–199,999 visits, and 6 respondents (29%) staff EDs with 200,000 or more patient visits per year.

Fifty-three percent of EMBC member groups have less than 75 physicians, while 48% have 75 or more physicians. The majority of EMBC members (57%) cover between two and five EDs, 14% covered one ED, and 28% covered six or more EDs. Twenty-four per cent of respondents have been in business for less than 25 years, 52% have

been in business for 25–49 years, and 24% have been in business for 50 or more years.

Over the past 5 years, 15% of EMBC member groups successfully retained all partner physicians, while another 60% indicated that 90–99% of partner physicians were retained by the group. The average number of years that partners have been in their group varies, most reporting 10–14 years (68%). This survey question did not consider the duration of the group's business, which may lead to underestimates of physician retention rates. Forty-three per cent of EMBC groups report that 100% of their physicians are board-certified or board-eligible by the American Board of Emergency Medicine or the American Osteopathic Board of Emergency Medicine. A high rate of board certification has been widely valued by healthcare systems for decades.<sup>3</sup> Additionally, high physician retention rates suggest job satisfaction and have been associated with overall reduced costs and optimal revenues among healthcare groups.<sup>4,5</sup>

Fifty-seven per cent of EMBC groups report that 100% of their physicians live locally to the EDs where they primarily practice. Emergency Medicine Business Coalition group physicians are closely involved with the hospitals they serve, with 62% of respondents reporting an average of six or more hospital committees per hospital in which their physicians participate. Eighty-six per cent of EMBC respondents report that 100% of their physicians serve in medical staff leadership positions other than ED chair or director. These statistics are particularly favourable in current times as healthcare quality improvement imperatives are emphasised on all levels of medicine.<sup>1</sup>

Overall, when compared against the EDBA 2021 ED Performance Measures Report, EMBC-staffed EDs performed more favourably than similarly sized EDs across the country on length of stay, door-to-decision, and the percentage of patients who left before treatment was complete. Door-to-provider times were comparable to EDBA findings, except in paediatric EDs and EDs with patient volumes ranging from 20,000 to 79,000 patients per year. Emergency Medicine Business Coalition staffed EDs experienced marginally longer times in these categories. Emergency Medicine Business Coalition groups experienced higher productivity from their providers, reporting lower staffing ratios for physicians only and physicians combined with advanced practice providers compared to EDBA comparators nationwide.

Democratic, physician-led groups have numerous advantages when compared to hospital-led or Contract Management Group-led physician employment and care. In general, the market potential for growth is stronger for physician-led groups compared to health systems. They have done better at achieving improved quality scores despite less access to capital and, at times, less experience in risk management.<sup>2,6</sup>

Coalitions, whether among physician groups or other collaborative entities, have been utilised to improve general outcomes and care for decades. Healthcare emergency preparedness was utilised during World War II as communities prepared for potential nuclear attacks and mass casualties. Relationships have been developed among healthcare partners to contribute to community resilience.<sup>7,8</sup> Therefore, it is not surprising that collaborative efforts among physician and healthcare groups likely lead to improved medical care and metrics. This data highlights the value of physician-owned, democratic practice groups.

### Limitations

Given that this survey study involved EMBC, a coalition formed by motivated, physician-led groups, participated in this survey,

it is possible that sampling bias is present. The response rate and inclusion rate for this survey was favourable, therefore limiting but not eliminating the possibility of nonresponse bias.<sup>9</sup> Due to the lack of available raw data from the study and comparator groups, analytic statistics was not done. Therefore, the evaluation of statistical significance was not possible, which limits conclusions made based on this data.

### CONCLUSION

This cross-sectional survey study examines the group practice characteristics, ED quality metrics, physician calibre, and hospital and community involvement among democratic emergency medicine practice groups. Emergency Medicine Business Coalition emergency physicians, a cohort that represent nationwide physician-led democratic groups, have high retention rates of their physician partners, have very high rates of physicians being board certified or board eligible, and are often closely involved in hospital committees, process improvement projects and hospital leadership. Their performance data in terms of length of stay, door-to-decision, rates of patients leaving before treatment completion and door-to-provider times in this cohort are more favourable when compared to data collected by the EDBA. Staffing ratios also are lower. This highlights the high-quality performance and overall care provided by physician-led groups.

### AUTHORS' CONTRIBUTIONS

HB: Conception and design of work, drafting work, final approval and agreement to being fully accountable for all aspects of work. JM: Conception and design of work, analysis and data, final approval and agreement to being fully accountable for all aspects of work interpretation, drafting work, substantial critical review, final approval and agreement to being fully accountable for all aspects of work. LM: Conception and design of work, drafting work, final approval, and agreement to being fully accountable for all aspects of work. JTe: Analysis and data interpretation, substantial degree of effort regarding drafting work, substantial critical review, final approval, and agreement to being fully accountable for all aspects of work. JTh: Conception and design of work, drafting work, final approval, and agreement to being fully accountable for all aspects of work. AC: Conception and design of work, drafting work and agreement to being fully accountable for all aspects of work. KP: Conception and design of work, drafting work, final approval, and agreement to being fully accountable for all aspects of work. KM: Conception and design of work, drafting work, final approval, and agreement to being fully accountable for all aspects of work. JH: Conception and design of work, drafting work, final approval, and agreement to being fully accountable for all aspects of work.

### Data Sharing Statement

The authors agree to share all available data pertaining to this publication upon reasonable request. The entire dataset is available from the date of article publication by contacting John Tejjido, MD at john.tejjido@gmail.com.

### SUPPLEMENTARY MATERIALS

The supplementary figures from 1 to 26 are available online on the journal's website [www.njem.org.in](http://www.njem.org.in).

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**REFERENCES**

1. Kizer KW. The emerging imperative for health care quality improvement. *Acad Emerg Med* 2002;9(11):1078–1084. DOI: 10.1111/j.1553-2712.2002.tb01561.x.
2. Muhlestein D, Tu T, Colla CH. Accountable care organizations are increasingly led by physician groups rather than hospital systems. *Am J Manag Care* 2020;26(5):225–228. DOI: 10.37765/ajmc.2020.43154.
3. Lipner RS, Hess BJ, Phillips RL Jr. Specialty board certification in the United States: Issues and evidence. *J Contin Educ Health Prof* 2013;33(S1):S20–S35. DOI: 10.1002/chp.21203.
4. Straume K, Shawb DM. Effective physician retention strategies in Norway's northernmost county. *Bull World Health Organ* 2010;88(5):390–394. DOI: 10.2471/BLT.09.072686.
5. Scott K. Physician retention plans help reduce costs and optimize revenues. *Healthc Financ Manag* 1998;52(1):75–77. PMID: 10175112.
6. Bleser WK, Muhlestein DB, Saunders RS, et al. Half a decade in, Medicare accountable care organizations are generating net savings: Part 1. *Health Aff Forefront*. DOI: 10.1377/hblog20180918.957502.
7. Kim DH. Emergency preparedness and the development of health care coalitions: A dynamic process. *Nurs Clin North Am* 2016;51(4):545–554. DOI: 10.1016/j.cnur.2016.07.013.
8. Waugh WL Jr, Streib G. Collaboration and leadership for effective emergency management. *Publ Admin Rev* 2006;66:131–140. DOI: 10.1111/j.1540-6210.2006.00673.x.
9. Ponto J. Understanding and evaluating survey research. *J Adv Pract Oncol* 2015;6(2):168–171. PMID: 26649250.