L E A P F R O G HOSPITAL SURVEY

Bibliography: ICU Physician Staffing

- Hoffman J. Nightmares after the ICU. The New York Times (Well Blog). 7/22/2013. Available at: http://well.blogs.nytimes.com/2013/07/22/nightmare s-after-the-i-c-u/?_php=true&_type=blogs&_r=0
- 2. Logani S, Green A, Gasperino J. Benefits of highintensity intensive care unit physician staffing under the affordable care act. *Crit Care Res Pract.* 2011;1:1-7.
- McCambridge M, Jones K, Paxton H, Baker K, Sussman E, & Etchason J. Association of health information technology and teleintensivist coverage with decreased mortality and ventilator use in critically ill patients. Arch Intern Med. 2010; 170(7):648-653.
- Fifer S, Everett W, Adams M, Vincequere J. Critical care, critical choice: The case for teleICUs in Intensive Care. Massachusetts Technology Collaborative and New England Healthcare Institute, 2010.
- 5. Gajic O, Afessa BB. Physician staffing models and patient safety in the ICU. *CHEST Journal*. 2009. 135.4:1038-1044.
- 6. Lwin AK, Shepard DS. Estimating Lives and Dollars Saved from Universal Adoption of the Leapfrog Safety and Quality Standards: 2008 Update. *The Leapfrog Group.* Washington, DC: 2008.
- 7. Sapirstein A, Needham DM, Pronovost, PJ. 24-hour intensivist staffing: Balancing benefits and costs. *Critical Care Medicine*. 2008. Vol 36 (1):367-368.
- Pronovost PJ, Holzmueller CG, Clattenburg L, Berenholtz S, Martinez EA, Paz JR, Needham DM. Team care: beyond open and closed intensive care units. *Curr Opin Crit Care*. 2006. 12: 604-608.
- Pronovost PJ, Needham DM, Waters H, Birkmeyer CM, Calinawan JR, Birkmeyer JD, Dorman T. Intensive care unit physician staffing: Financial modeling of the Leapfrog standard. *Critical Care Medicine*, 2004. June 32(6): 1247-1253.
- 10. Birkmeyer JD, Dimick JB. Leapfrog safety standards: potential benefits of universal adoption. *The Leapfrog Group*. Washington, DC: February 2004.

- Breslow MJ, Rosenfeld BA, Doerfler M, Burke G, Yates G, Stone DJ, Tomaszewicz P, Hochman R, Plocher DW. Effect of a multiple site intensive care unit telemedicine program on clinical and economic outcomes: An alternative paradigm for intensivist staffing. *Critical Care Medicine*. 2004. January 32(1):31-38.
- 12. Rockeymoore MB, Holzmueller CG, Milstein A, Dorman T, Pronovost PJ. Updating the leapfrog group intensive care unit physician staffing standard. *J Clin Outcomes Manage*. 2003: Jan10; (1):31-37.
- 13. Pronovost PJ, Angus DC, Dorman T, Robinson KA, Dremsizov TT, Young TL. Physician Staffing Patterns and Clinical Outcomes in Critically III Patients: A Systematic Review, *JAMA*, 2002; 288: 2151-2162.
- 14. Agency for Healthcare Research and Quality. *HCUPnet, Healthcare Cost and Utilization Project*. Rockville, MD; 2001.
- Baldock G, Foley P, Brett S. The impact of organizational change on outcome in an intensive care unit in the United Kingdom. *Intensive Care Medicine*. 2001; 27:865-872.
- 16. Birkmeyer JD, Birkmeyer CM, Skinner JS. Economic implications of the Leapfrog Safety Standards. *The Leapfrog Group*, Washington, DC. 2001.
- 17. Dimick JB, Pronovost PJ, Heitmiller RF, Lipsett PA. Intensive care unit physician staffing is associated with decreased length of stay, hospital cost, and complications after esophageal resection. *Crit Care Medicine*. 2001; 29: 753-758.
- Goh AY, Lum LC, Abdel-Latif ME. Impact of 24 hour critical care physician staffing on case-mix adjusted mortality in pediatric intensive care. *The Lancet* 2001; 357:445-446.
- 19. Agnus DC, Kelly M, Schmitz R, White A, Popovich J. Current and projected workforce requirements for care of the critically ill and patients with pulmonary disease: can we meet the requirements of an aging population? *JAMA*. 2000; 284:2762-2770.



- 20. Blunt MC, Burchett KR. Out-of-hours consultant cover and case-mix-adjusted mortality in intensivist care. *Lancet*. 2000; 356:735-736.
- 21. Birkmeyer JD, Birkmeyer CM, Wennberg, DE, Young MP. Leapfrog safety standards: potential benefits of universal adoption. *The Leapfrog Group*. Washington, DC: 2000.
- 22. Dimick JB, Pronovost PJ, Lipsett PA. The effect of ICU physician staffing and hospital volume on outcomes after hepatic resection [abstract]. *Critical Care medicine*. 2000; 28:A77.
- 23. Rosenfeld BA, Dorman T, Breslow MJ, et al. Intensive care unit telemedicine: alternate paradigm for providing continuous intensivist care. *Critical Care Medicine*. 2000; 28:3925- 3931.
- Ghorra S, Reinert S, Cioffi W, Buczko G, Simms HH. Analysis of the effect of conversion from open to closed Surgical Intensive Care Unit. *Ann Surgery*. 1999; 229(2):163-171.
- 25. Hanson CW, Deutschman CS, Anderson HL, et al. Effects of an organized critical care service on outcomes and resource utilization: A cohort study. *Critical Care Medicine*. 1999; 27:270-274.
- Pronovost P, Jenckes MW, Dorman T, et al. Organizational characteristics of intensive care units related to outcomes of abdominal aortic surgery. *JAMA*. 1999; 281(14):1310-1317.
- Pronovost PJ, Young T, Dorman T, Robinson K, Agnus DC. Association between ICU physician staffing and outcomes: a systematic review. *Critical Care Medicine*. 1999; 27:A43.
- Multz AS, Chalfin DB, Samson IM, et al. A "closed" medical intensive care unit (MICU) improves resource utilization when compared with an "open" MICU. *Am J Respir Crit Care Med.* 1998; 157:1468-73.
- 29. Pollack MM, Cuerdon TC, Getson PR. Pediatric intensive care units: results of a national survey. *Critical Care Medicine*. 1998; 26:1317-26.
- 30. Zimmerman JE, Wagner DP, Draper EA, Wright L, Alzola C, Knaus WA. Evaluation of acute physiology

Bibliography: ICU Physician Staffing

and chronic health evaluation III predictions of hospital mortality in an independent database. *Critical Care Med.* 1998; 26:1317-26.

- Manthous CA, Amoateng-Adjepong Y, Al-Kharrat T, et al. Effects of a Medical Intensivist on patient care in a community teaching hospital. *Mayo Clin Proc.* 1997; 72:391-399.
- Pollack MM, Patel KM, Ruttimann UE. The Pediatric Risk of Mortality III – Acute Physiology Score (PRISM III – APS): a method of assessing physiologic instability for pediatric intensive care unit patients. *Journal of Pediatrics*. 1997; 131:575-581.
- 33. Carson SS, Stocking C, Podsadecki T, et al. Effects of organizational change in the medical intensive care unit of a teaching hospital. A comparison of 'open' and 'closed' formats. *JAMA*. 1996; 276:322-328.
- 34. Pollack MM, Patel KM, Ruttimann UE. PRISM III: an updated Pediatric Risk of Mortality score. *Critical Care Medicine*. 1996; 24:743-752.
- Mallick RM, Strosberg M, Lambrionos J, Groeger JS. The intensive care unit medical director as manager. Impact on performance. *Medical Care.* 1995; 33:611-624.
- 36. Shortell SM, Zimmerman JE, Rousseau Dm, et al. The performance of intensive care units: does good management make a difference? *Medical Care*. 1994; 32:508-25.
- 37. Knaus WA, Wagner DP, Zimmerman E, Draper EA. Variations in mortality and length of stay in intensive care units. *Ann Int Med*. 1993; 118:752-61.
- Groeger JS, Strosberg MA, Halpern NA, et al. Descriptive analysis of critical care units in the United States. *Critical Care Medicine*. 1992; 20:846-63.
- 39. Brown JJ, Sullivan G. Effect on ICU mortality of a fulltime critical care specialist. *Chest*. 1989; 96:127-29.
- 40. Pollack MM, Katz RW, Ruttimann UE, Getson PR. Improving the outcome and efficiency of intensive care: The impact of an intensivist. *Critical Care Med*. 1988; 11-17.



Bibliography: ICU Physician Staffing

- 41. Reynolds HN, Haupt MT, Thill-Baharozian MC, Carlson RW. Impact of critical care physician staffing on patients with septic shock in a university hospital medical intensive care unit. *Journal of the American Medical Association*. 1988; 260:3446-3450.
- Li TCM, Phillips MC, Shaw L, Cook EF, Natanson C, Goldman L. On-site physician staffing in a community hospital intensive care unit. *JAMA*. 1984; 252(15):2023-27. 3:61-2, 65.
- Maclaren A, Bond J, Martin J, Fike J. Clinical and economic outcomes of involving pharmacists in the direct care of critically ill patients with infections. *Critical Care Medicine*. 2008;36(12):3184-3189. doi:10.1097/CCM.0b013e31818f2269
- Preslaski CR, Lat I, Maclaren R, Poston J. Pharmacist contributions as members of the multidisciplinary ICU team. *Chest*. 2013;144(5):1687-1695. doi:10.1378/chest.12-1615
- 45. Kim MM, Barnato AE, Angus DC, Fleisher LF, Kahn JM. The effect of multidisciplinary care teams on intensive care unit mortality.(Clinical report). *Archives of Internal Medicine*. 2010;170(4):369-376. doi:10.1001/archinternmed.2009.521