Current Commentary

Definitions of Obstetric and Gynecologic Hospitalists

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The obstetric hospitalist and the obstetric and gynecologic hospitalist evolved in response to diverse forces in medicine, including the need for leadership on labor and delivery units, an increasing emphasis on quality and safety in obstetrics and gynecology, the changing demographics of the obstetric and gynecologic workforce, and rising liability costs. Current (although limited) research suggests that obstetric and obstetric and gynecologic hospitalists may improve the quality and safety of obstetric care, including lower cesarean delivery rates and higher vaginal birth after cesarean delivery rates as well as lower liability costs and fewer liability events. This research is currently hampered by the use of varied terminology. The leadership of the Society of Obstetric and Gynecologic Hospitalists proposes standardized definitions of an obstetric hospitalist, an obstetric and gynecologic hospitalist, and obstetric and gynecologic hospital medicine practices to standardize communication and facilitate program implementation and research. Clinical investigations regarding obstetric and gynecologic practices (including hospitalist practices) should define inpatient coverage arrangements using these standardized definitions to allow for fair conclusions and comparisons between practices.

(Obstet Gynecol 2016;127:393–7)
DOI: 10.1097/AOG.0000000000001235

The Society of Obstetric and Gynecologic Hospitalists is a 501(c)(3) nonprofit professional organization established in 2011 and dedicated to enhancing the safety and quality of obstetric and gynecologic hospital medicine by promoting excellence through education, coordination of hospital teams, and collaboration with health care delivery systems.[1] Further information on the Society can be obtained at www.societyofobgynhospitalists.org. This document was developed by board members of the Society of Obstetric and Gynecologic Hospitalists (all of whom are practicing obstetric hospitalists or obstetric and gynecologic hospitalists) and was endorsed at a strategic planning retreat of the Board and the Society in November 2014 and reaffirmed by the Board in October 2015. The definitions proposed describe the Society's vision of obstetric hospitalists, obstetric and gynecologic hospitalists, and obstetrics and gynecologic hospital medicine practices. The Society of Obstetric and Gynecologic Hospitalists is independent from, but has collaborative relationships with, the Society of Hospital Medicine, the American College of Obstetricians and Gynecologists, and the Society for Maternal-Fetal Medicine.

OBSTETRIC AND GYNECOLOGIC INPATIENT CARE MODELS

Obstetrician–gynecologists (ob-gyns) must provide medical care for their patients (especially obstetrics patients) 24 hours a day, 7 days a week. The time obstetrics–gynecologic physicians dedicate to inpatient care

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The authors thank Cate Stika, MD for her editing efforts.

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Financial Disclosure
The authors are current or former board members of the Society of Obstetrics and Gynecologic Hospitalists (2012–2015). Dr. Olson is a consultant for obstetric and gynecologic hospitalist programs.

ISSN: 0029-7844/16

is often referred to as "call" time or being "on-call." A solo obstetrics–gynecologic physician is "on-call" for his or her patients continuously and juggles hospital and office responsibilities, often leaving a busy office to perform hospital-based surgeries or deliveries. Given the burden of this call coverage, solo obstetrics–gynecologic physicians often seek call or coverage assistance from colleagues through reciprocal billing agreements or pay-for-coverage contracts.

In response to the competing demands of solo obstetrics and gynecology practices and the difficulties of a single individual sustaining 24–7 availability, group models currently predominate in obstetrics and gynecology. In these practices, hospital inpatient coverage is usually assigned on a rotating basis to an "on-call" ob-gyn from the group. This physician is typically assigned to care for the entire group's hospitalized patients for a limited and defined time period (such as 24 hours or one weekend). During the assigned call shift, he or she may or may not have reduced office responsibilities to accommodate the assigned hospital tasks. Depending on the practice, the on-call physician may cover multiple hospitals and may take call from home, although larger and busier groups may require their on-call physician to remain in the hospital for their call shift.

The primary responsibility of an "on-call" ob-gyn is to care for the hospitalized patients who are enrolled in their own practice. Broader hospital responsibilities such as coverage of another physician's labor and delivery emergencies, unassigned patients who present to the hospital or emergency department and inpatient obstetric or gynecologic consultations are often secondary. Generally, hospitals make arrangements through the medical staff for rotating obstetrics and gynecology coverage of these responsibilities (voluntary or paid). These coverage arrangements may be contentious and stressful in today's environment when hospital margins are tight and physician time is at a premium. Hospitals that recognize these conflicts as well as the potential for sudden catastrophic changes in the clinical status of obstetric patients often arrange and pay for in-hospital obstetrics–gynecologic coverage.

A 24–7 in-hospital, contracted obstetrics and gynecology coverage model (voluntary or paid) ensures that an ob-gyn is immediately available for obstetric emergencies, thus allaying hospital concerns for safety and liability risk. Generally, these ob-gyns are active members of the medical staff who otherwise practice on a day-to-day basis with an obstetrics and gynecology group that admits patients to the same hospital. While agreeing to remain at the hospital and take responsibility for obstetric emergencies if there is no other ob-gyn available, or while the patient's ob-gyn is en route, the in-hospital ob-gyn may simultaneously care for patients from his or her own practice and may or may not cover hospital unassigned patients, the emergency department, or provide surgical or emergency assistance to colleagues.

LIMITATIONS OF CURRENT MODELS

The designation of a dedicated in-hospital ob-gyn provides a measure of safety in obstetrics, but can result in conflict between physicians over clinical priorities (especially when covering both hospital and private call responsibilities for their own group's patients), competition for patients (if asked to cover urgently or emergently for patients who are otherwise enrolled with a competing obstetrics and gynecology group), and possibly resentment over increased responsibilities and liability with perceived inadequate compensation.

The triage of obstetric outpatients is another problematic process for hospitals. It is commonplace in the United States for pregnant patients who present to an obstetric triage unit (regardless of complaint) to be evaluated and treated by a registered labor nurse and discharged to home or admitted to the hospital after phone consultation with the managing physician. In fact, the obstetric triage unit is the only acute patient care area of the hospital in which patients are not routinely examined and managed by physicians or advanced practitioners such as certified nurse midwives.[2] This registered labor nurse triage and treat model is incongruous with a culture of improved quality and safety of obstetric care in the hospital setting (including outpatient areas within the hospital such as the emergency department or the obstetric triage unit).

Finally, the Joint Commission expects certified hospitals to make changes such as adoption of evidence-based practice protocols, use of standardized team-oriented communication tools, and simulation to maximize a coordinated response to patient emergencies.[3] Hospital and physician reimbursement is increasingly tied to quality metrics such as appropriate use of prophylactic preoperative antibiotics and venous thromboembolism prevention. Furthermore, low-volume, high-stress skill sets such as operative vaginal delivery, vaginal delivery of twins, and timely recognition and response to postpartum hemorrhage must be maintained within a department to reduce maternal and fetal morbidity and mortality. These activities may be promoted by medical staff or hospital or nursing leaders, but often are not the first

priority of otherwise clinically busy ob-gyns who are members of the hospital medical staff and may or may not participate in the in-hospital obstetrics and gynecology coverage model of care. Obstetrician–gynecologists who practice primarily in an office setting and intermittently cover labor and delivery at the hospital may lack the time, opportunities, skills, and relationships to effect meaningful clinical and cultural change in the hospital setting.

ADULT HOSPITAL MEDICINE

The specialty of adult hospital medicine evolved in response to similar pressures such as the need for 24–7 inpatient coverage, comanagement opportunities, and the plea for physician leadership on inpatient units to standardize care and positively affect patient safety and quality.[4] After the release of the Institute of Medicine report "To Err Is Human: Building a Safer Health System,"[5] leadership of the Society of Hospital Medicine encouraged hospitalist medicine physicians to begin to focus on quality and patient safety as a central hospitalist physician mission.[6] The development of Core Competencies for Hospitalist Medicine Physicians (including those focused on quality and safety) enabled hospitalists to demonstrate their mastery of this mission.[7] Obstetric and obstetric and gynecologic hospitalists have the opportunity to serve in similar hospital leadership capacities, moving beyond the current predominant expectations as an emergency "shift workers" or back-up physicians to further the primary goal of the highest level of quality and safety of obstetric and gynecologic care with a resulting reduction in maternal and neonatal morbidity and mortality.

OBSTETRIC HOSPITALISTS AND OBSTETRIC AND GYNECOLOGIC HOSPITALISTS

The definitions of various practice patterns and job descriptions, as defined by the Society of Obstetric and Gynecologic Hospitalists, follows. An obstetric hospitalist is an ob-gyn who specializes in the practice of hospital obstetrics. This may include (but is not limited to) the obstetric triage unit, labor and delivery, the antepartum unit, and the postpartum unit. An obstetric hospitalist has no gynecologic or gynecologic surgery responsibilities (Box 1). An obstetric and gynecologic hospitalist is an ob-gyn who specializes in the practice of hospital obstetric and gynecologic care. This may include (but is not limited to) the obstetric triage unit, labor and delivery, the antepartum unit, the postpartum unit, the emergency department, emergent gynecologic surgery, inpatient medical and critical care units, and consultative inpatient obstetric and gynecologic services (Box 1). The term "obstetric and gynecologic hospitalist" is the broader term and, like nonhospitalist ob-gyns, may encompass physicians who practice only obstetrics (obstetric hospitalists). An obstetric hospitalist or obstetric and gynecologic hospitalist might have additional fellowship training in maternal–fetal medicine, critical care medicine, or obstetric and gynecologic hospitalist medicine, but fellowship training is not required.[8]

Laborist is a poorly defined term that, to date, has been used to describe a broad range of inpatient obstetric and obstetrics and gynecology coverage models. By strictest definition, one would assume that a laborist is a physician who cares only for women who are in labor. In fact, there are few (if any) obstetric hospitalist or obstetric and gynecologic hospitalist medicine practices where this is the case.

Box 1. Definitions

- An on-call obstetrician–gynecologist (ob-gyn) is an ob-gyn who is assigned for a limited and defined time period (ie, 24 hours or one weekend) to manage the obstetric and gynecologic inpatient care of patients who are enrolled in his or her practice. An on-call ob-gyn may or may not be in the hospital for the duration of their call shift.
- An in-hospital ob-gyn is an ob-gyn with whom the hospital contracts (either voluntarily or on a paid basis) to stay in the hospital to ensure immediate availability for an obstetric emergency. An in-hospital ob-gyn may or may not have additional responsibilities to the hospital (such as care for unassigned obstetric patients) or to the simultaneous care of patients from their own practice (on-call for that practice).
- A hospitalist is a physician who specializes in the practice of hospital medicine.[9]
- An obstetric hospitalist is an ob-gyn who specializes in the practice of hospital obstetrics. This may include (but is not limited to) the obstetric triage unit, labor and delivery, the antepartum unit, and the postpartum unit. An obstetric hospitalist has no gynecologic or gynecologic surgery responsibilities.
- An obstetric and gynecologic hospitalist is an ob-gyn who specializes in the practice of hospital obstetric and gynecologic care. This may include (but is not limited to) the obstetric triage unit, labor and delivery, the antepartum unit, the postpartum unit, the emergency department, emergent gynecologic surgery, inpatient medical and critical care units, and consultative inpatient obstetric and gynecologic services.
- Laborist is a poorly defined term and should be replaced by the term obstetric hospitalist.
- An obstetric or obstetric and gynecologic hospital medicine practice is a practice that uses hospitalists to provide patient care and minimizes the use of nonhospitalist ob-gyns.

Most obstetric hospitalists or obstetric and gynecologic hospitalists practicing today have included in their scope of care (at a minimum) obstetric triage, labor and delivery unassigned patients, and labor and delivery emergencies. For this reason, the term obstetric hospitalist is recommended and preferred to describe an ob-gyn who specializes in inpatient obstetrics and has no gynecologic responsibilities (Box 1).

OBSTETRIC AND GYNECOLOGIC HOSPITAL MEDICINE PRACTICES

The Society of Obstetric and Gynecologic Hospitalists endorses the Society of Hospital Medicine definition of hospital medicine and has modified that definition to apply to our own specialty.[9] Obstetric and gynecologic hospital medicine is a medical and surgical specialty dedicated to the delivery of comprehensive obstetric and gynecologic care to patients in a hospital setting (including hospital outpatient areas such as the emergency department and the obstetric triage unit). Obstetric and gynecologic hospitalists engage in clinical care, teaching, research, or leadership in the field of obstetric and gynecologic hospitalist medicine. In addition to their core expertise of managing the obstetric and gynecologic care of patients at the hospital, obstetric and gynecologic hospitalists and hospital medicine practices work to enhance the performance of hospitals and health care systems by:

- Prompt and complete attention to all patient-care needs including diagnosis, treatment, and the performance of medical and surgical procedures (within their scope of practice)
- Using quality- and process-improvement techniques
- Collaboration, communication, and coordination with other physicians and health care personnel caring for hospitalized patients
- Safe transitioning of patient care within the hospital and from the hospital to the community
- Efficient use of hospital and health care resources.

In both community and academic settings, the responsibilities of an obstetric hospitalist or obstetric and gynecologic hospitalist are broad and varied and are itemized in Box 2.

Box 2. Roles and Responsibilities of an Obstetric or Obstetric and Gynecologic Hospitalist

- Respond to emergencies in obstetric triage, labor and delivery, antepartum, and postpartum units
- Respond to gynecologic consultative requests and emergencies (including gynecologic surgeries) in the emergency department or other inpatient units*
- Promote unit-based physician leadership, team-oriented communication, situational awareness across disciplines, mutual support among team members, and conflict resolution
- Lead debriefing and organizational change after patient safety events or near-miss events
- Endorse and disseminate evidence-based best practices in obstetrics and gynecology by researching, developing, and implementing protocols and order sets and facilitating the use of the electronic medical record
- Develop and maintain competence in low-volume, high-stress clinical skills (such as operative vaginal delivery or breech delivery of the second twin) to offer 24–7, in-hospital clinical expertise to colleagues as needed
- Maintain knowledge of the most current quality reporting metrics to ensure that department colleagues succeed in meeting the metrics and that reporting is timely and accurate
- Provide continuous supervision, education, and mentorship for nurses, students, residents, and peers
- Facilitate simulations of obstetric and gynecologic emergencies
- Collaborate, comanage, or accept transfer of patient care from certified nurse midwife or family medicine providers, ensuring seamless care coordination for patients who develop complex obstetric or gynecologic conditions
- Support a maternal–fetal medicine service and neonatal intensive care unit by collaboratively managing high-risk obstetric patients
- Support nonhospitalist colleagues (ie, private practice colleagues) by covering their patients when requested and when acuity of the hospitalist's responsibilities allow
- Coordinate outpatient follow-up with nonhospitalist colleagues, to limit competition and promote collaboration while ensuring seamless care coordination for patients

*This is practice-specific and excludes obstetric hospitalists.

The American College of Obstetricians and Gynecologists and Society for Maternal-Fetal Medicine Obstetric Care Consensus guidelines regarding Levels of Maternal Care[10] do not specifically address the role(s) of obstetric or obstetric and gynecologic hospitalists, but do make recommendations for roles a hospitalist could fill. Level 1 (basic care) facilities are expected to have an "obstetric provider with privileges to perform emergency cesarean available to attend all deliveries," whereas level 2 (specialty care) facilities are expected to have an "ob-gyn available at all times" and levels 3 (subspecialty care) and 4 (regional perinatal care) are expected to have an "ob-gyn available onsite at all times." It is additionally recommended for levels 2–4 that the director of the obstetric service (be) a board-certified maternal–fetal medicine specialist or ob-gyn with special interest and

experience in obstetric care. These are roles that could be held by an obstetric or obstetric and gynecologic hospitalist.

Obstetric and gynecologic hospital medicine practices use obstetric and gynecologic hospitalists to provide patient care (Box 1) and minimize the use of nonhospitalist ob-gyns. These obstetric and gynecologic hospitalist physicians are committed to the unique roles and responsibilities of a hospitalist as itemized previously and described in Box 2.

Hospital practices that use on-call ob-gyns for 24-hour coverage should not be called obstetric and gynecologic hospitalist medicine practices. In-hospital obstetric and gynecologic care models that do not use obstetric and gynecologic hospitalists should also not be considered obstetric and gynecologic hospitalist medicine practices. Research methodologies that ask questions such as "do you have an ob-gyn in the hospital 24–7" are not sensitive enough to differentiate hospitalist practices from nonhospitalist practices.[11]

Certified nurse midwife models, which employ in-hospital certified nurse midwives to manage patients in the obstetric triage area and on labor and delivery, should not be considered obstetric and gynecologic hospitalist medicine models.

Programs may have an obstetric hospitalist or obstetric and gynecologic hospitalist limited to certain shifts (ie, nocturnists, weekendists). The ob-gyns who work these shifts may be hospitalists, but the practice should not be considered a 24–7 obstetric and gynecologic hospitalist medicine practice. All obstetrics–gynecologic coverage models (including hospitalist models) should be clearly defined and disclosed in clinical investigations to allow for fair conclusions and comparisons.

DISCUSSION

Obstetric and obstetric and gynecologic hospital medicine practices require dedication and investment to ensure ongoing quality and sustainability. Recent studies suggest these investments are warranted, because some research shows that obstetric and obstetric and gynecologic hospital medicine practices may reduce the risk of cesarean delivery, increase rates of vaginal births after cesarean delivery, and, as part of a comprehensive safety program, reduce adverse events and malpractice claims and payments.[12–16] The use of standardized definitions will clarify interpretation of these investigations. The Society of Obstetric and Gynecologic Hospitalists supports all efforts to improve the quality and safety of inpatient women's health care. We offer these universal definitions to standardize communication, support program implementation and research, and promote best practices.

REFERENCES

1. Society of OB/GYN Hospitalists. Available at: societyofobgynhospitalists.org. Retrieved October 7, 2015.
2. Swain C, Simon M, Monks B. Organizing an effective obstetric/gynecologic hospitalist program. Obstet Gynecol Clin North Am 2015;42:519–32.
3. Joint Commission on Accreditation of Healthcare Organizations. Sentinel event alert. Oak Brook (IL): Joint Commission on Accreditation of Healthcare Organizations; 2004.
4. Wachter RM. The hospitalist field turns 15: new opportunities and challenges. J Hosp Med 2011;6:E1–4.
5. Stelfox HT, Palmisani S, Scurlock C, Orav EJ, Bates DW. The 'To Err is Human' report and the patient safety literature. Qual Saf Health Care 2006;15:174–8.
6. Whitcomb WF, Nelson JR. President's column. The Hospitalist. 1999;3:3.
7. The core competencies in hospital medicine: a framework for curriculum development by the society of hospital medicine. J Hosp Med 2006;1(suppl 1):2–95.
8. Vintzileos AM. Obstetrics and Gynecology Hospitalist Fellowships. Obstet Gynecol Clin North Am 2015;42:541–8.
9. Society of Hospital Medicine. Definition of a Hospitalist and Hospitalist Medicine. Available at: http://www.hospitalmedicine.org/Web/About_SHM/Hospitalist_Definition/About_SHM/Industry/Hospital_Medicine_Hospital_Definition.aspx. Retrieved October 17, 2015.
10. American College of Obstetricians and Gynecologists. Levels of maternal care. Obstetric Care Consensus No. 2. Obstet Gynecol 2015;125:502–15.
11. Feldman DS, Bollman DL, Fridman M, Korst LM, El Haj Ibrahim S, Fink A, et al. Do laborists improve delivery outcomes for laboring women in California community hospitals? Am J Obstet Gynecol 2015;213:587.e1–13.
12. Iriye BK, Huang WH, Condon J, Hancock L, Hancock JK, Ghamsary M, et al. Implementation of a laborist program and evaluation of the effect upon cesarean delivery. Am J Obstet Gynecol 2013;209:251.e1–6.
13. Nijagal MA, Kuppermann M, Nakagawa S, Cheng Y. Two practice models in one labor and delivery unit: association with cesarean delivery rates. Am J Obstet Gynecol 2015;212:491.e1–8.
14. Rosenstein MG, Nijagal M, Nakagawa S, Gregorich SE, Kuppermann M. The association of expanded access to a collaborative midwifery and laborist model with cesarean delivery rates. Obstet Gynecol 2015;126:716–23.
15. Pettker CM, Thung SF, Lipkind HS, Illuzzi JL, Buhimschi CS, Raab CA, et al. A comprehensive obstetric patient safety program reduces liability claims and payments. Am J Obstet Gynecol 2014;211:319–25.
16. Grunebaum A, Chervenak F, Skupski D. Effect of a comprehensive obstetric patient safety program on compensation payments and sentinel events. Am J Obstet Gynecol 2011;204:97–105.