

## POSITION STATEMENT

### Appropriate Use of Technology in Childbirth

The American College of Nurse-Midwives (ACNM) maintains that every individual has the right to safe, satisfying health care that accommodates human and cultural variations and that the normal processes of pregnancy, labor, and birth can be enhanced through education, health care, and supportive intervention.<sup>1</sup> The practice of midwifery encourages continuity of care; emphasizes safe, evidence-based, competent clinical management; advocates for non-intervention in normal processes; promotes health education throughout the childbearing cycle; and supports individuals and families as partners in health care choices.<sup>2</sup>

To achieve these goals, ACNM supports

1. The availability and provision of non-technological interventions for comfort in labor for all people, such as continuous labor support and water immersion, that have demonstrated efficacy and safety.<sup>3</sup>
2. Appropriate use of technological interventions when the benefits of such technology outweigh the risks and when the intervention is warranted to improve the health and/or well-being of the individual and/or infant.
3. A framework wherein use of technology is based on evidence of benefit. Often however, there is a lack of evidence in favor of or against the use of certain procedures. In these circumstances, judicious use of technology should be based on assessment of individual benefits and risks using shared decision making with pregnant people and their families.<sup>4</sup>
4. Fully informed decision-making about the use of technology, during which the benefits, risks and alternatives are clearly explained to the person receiving care.
5. Use of socially and culturally appropriate interventions at every opportunity.

### BACKGROUND

Medical technology is defined as any application of science to health issues, including but not limited to laboratory tests, imaging, medication, and surgical intervention.<sup>5</sup> The widespread use of technology is a major contributor to the rising cost of health care.<sup>5</sup> Currently, the United States has the highest cost of birth worldwide.<sup>6</sup> While evidenced-based intervention should not be withheld because of cost, the certified nurse-midwife/certified midwife (CNM®/CM®) should be cognizant of these costs and avoid the use of technologic intervention when there is no demonstrated benefit.

CNM/CMs should be aware of the current evidence or lack thereof regarding the technology they use. Routine use of technology during labor, such as continuous electronic fetal monitoring for a woman with an uncomplicated pregnancy, has not been shown to improve outcomes and is associated with an increased incidence of further intervention such as instrumental vaginal birth and cesarean.<sup>7</sup> The use of technology should be evidence-based, and technology should not be used in an attempt to avoid litigation.

Practices of care and use of technology may be influenced by a person's preferences, and in the absence of clear evidence for use or avoidance of a certain intervention, their choice should prevail. For example, if a laboring patient desires epidural analgesia, additional intervention with technology such as continuous fetal monitoring may be necessary to assure safety.<sup>8</sup> Additionally, place of birth (home, birth center, or hospital) and patient risk factors may influence the availability and use of technology during labor and birth. It is also important to note that having a voice to express a preference for, or against, technology during pregnancy and birth is not equally applied to all patients. Underserved populations such as racial and ethnic minorities often lack access to needed services such as ultrasound.<sup>9</sup>

ACNM recognizes the role of the CNM/CM as a member of the collaborative health care team that cares for women at all levels of risk and supports the provision of midwifery care for all women in conjunction with appropriate use of technology.

## REFERENCES

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*Note.* Midwifery as used throughout this document refers to the education and practice of certified nurse-midwives (CNMs) and certified midwives (CMs) who have been certified by the American Midwifery Certification Board, Inc. (AMCB).

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