

# Considerations When Evaluating Studies on Birth Settings



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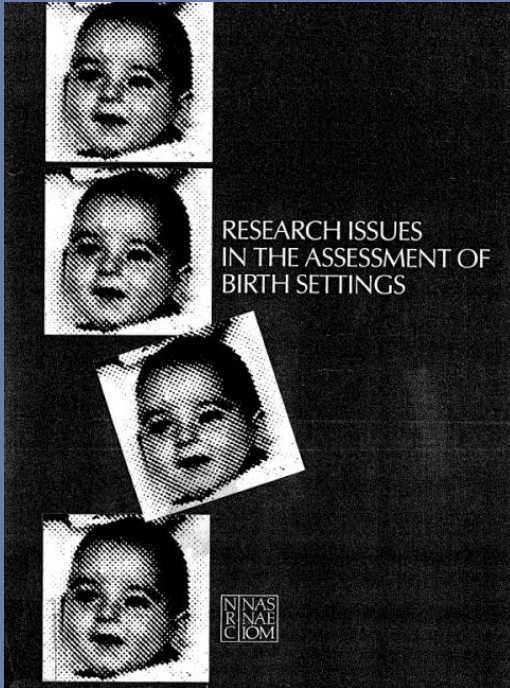
**Research Issues in the Assessment of Birth Settings  
Washington DC**



# 1982 IOM-NRC report

## *Research Issues in the Assessment of Birth Settings*

- Organizational models of care delivery
- Workforce requirements
- Patient and provider satisfaction levels
- Birth outcomes



# Panel 3: Birth Settings and Health Outcomes: State of the Science

- Alternative vs Conventional settings
- UK Collaborative Group Studies
- Process of Care
- Effect of Built environment



# Panel 3: Birth Settings and Health Outcomes: State of the Science Alternative vs Conventional Settings



- Alternative settings impact (reduce) interventions
- *Considerations:*
  - Institutional norms and policies
  - Caregiver staffing/roles
  - Types of patients studied



# Panel 3: Birth Settings and Health Outcomes: State of the Science

## UK Collaborative Group Studies



- Low Risk women: adverse perinatal outcome rare
  - Increased in nulliparous women planning to give birth at home
- Interventions increased in hospital settings
- *Considerations:*
  - Choice of birth setting & patient bias
  - Caregiver staffing/roles

# Panel 3: Birth Settings and Health Outcomes: State of the Science: Process of Care

- Goal: fewer interventions
- *Considerations:*
  - Institutional policies
  - Caregiver staffing/roles
  - Selection bias
  - Outcomes measured



# Panel 3: Birth Settings and Health Outcomes: State of the Science: Effect of Built Environment



- Environment affects
  - neuroendocrine immune interactions and physiologic response(s)
  - mental and physical health
- *Considerations:*
  - Data from non-obstetric populations

# *Considerations: Selection Bias*



## Women planning home births:

- Lower obstetric risk
- Later gestational age
- Desire less interventions
- Prefer specific care model(s)





# Considerations: Study Design



- Few RCTs
- Inclusion/exclusion criteria
  - Definition of “low risk” & “normal”
- Timing of “delivery decision”
- Cohort and historical studies
  - Selection bias of population(s) studied
  - Outcomes measured
  - Institutional policies



# Considerations: Outcomes



- Most report short-term outcomes
  - Apgar scores, mortality, hospital discharge
- Need long-term outcomes
  - Impact on reproductive health, gynecologic health, family and childhood outcomes



# *Considerations: Other*



- Studies include women at low obstetric risk
  - Implications for those at increased risk unknown
- Availability of obstetrical services limited for some conditions (eg VBAC, vaginal breech)
- Understanding neural immune connections in obstetric populations
- Implications on workforce and settings

# Considerations When Evaluating Studies on Birth Settings

**Patient  
populations**

**Study  
Design**

**Outcomes**

- Evaluation of data must take into account limitations of available data
  - Patient selection bias
  - Study design(s)
  - Outcomes studied



# Additional Considerations



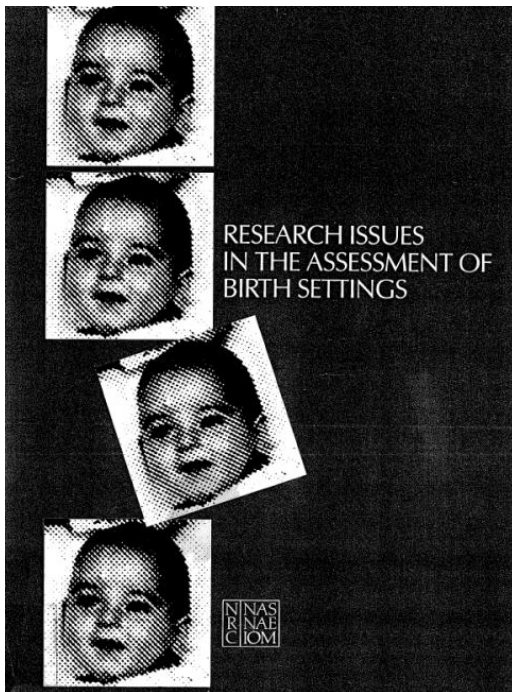
**Generalizability  
of findings**

**Many questions remain  
unanswered**

- Limitations of generalizability of findings
  - Women at increased obstetrical risk
  - Unavailable obstetric services
- Organizational models of care
- Implications on workforce
- Many unanswered questions



# Considerations When Evaluating Studies on Birth Settings



 INSTITUTE OF MEDICINE AND  
NATIONAL RESEARCH COUNCIL  
OF THE NATIONAL ACADEMIES

*The Board on Children, Youth, and Families*

## Research Issues in the Assessment of Birth Settings: A Workshop

March 6-7, 2013

The National Academies Keck Center  
500 Fifth Street, NW, Room 100  
Washington, DC

### AGENDA

#### DAY 1

- 8:30 AM **REGISTRATION**
- 9:00 **Welcoming Remarks**  
*Maxine Hayes*  
*Workshop Moderator and Planning Committee Chair*  
*Washington State Department of Health*
- 9:05 **Perspectives from the Sponsor**  
*Patrick S. Simpson, W. K. Kellogg Foundation*
- 9:15 **Perspectives from the Maternal, Child, and Health Bureau**  
*Isadora Hare, Division of Healthy Start and Perinatal Services*  
*Maternal, Child, and Health Bureau*

