FROM SURVIVING TO THRIVING: Keeping the doors of a rural maternity care center open

KELLY HOLDER, DO, FACOG, FASAM

MATERNITY CARE CENTER MEDICAL DIRECTOR

UNC CHATHAM HOSPITAL

CHAIR OF OBSTETRICS & GYNECOLOGY

CAMPBELL UNIVERSITY SCHOOL OF OSTEOPATHIC MEDICINE

OBJECTIVES

1. Discuss the landscape of maternity care access in rural areas and the associated outcomes.
2. Describe challenges, strategies and innovations of re-opening a rural maternity care center in North Carolina.
3. Review of outcomes from a rural maternity care center in North Carolina
4. Summary of strategies for on-going success in rural maternity care

DISCLOSURES

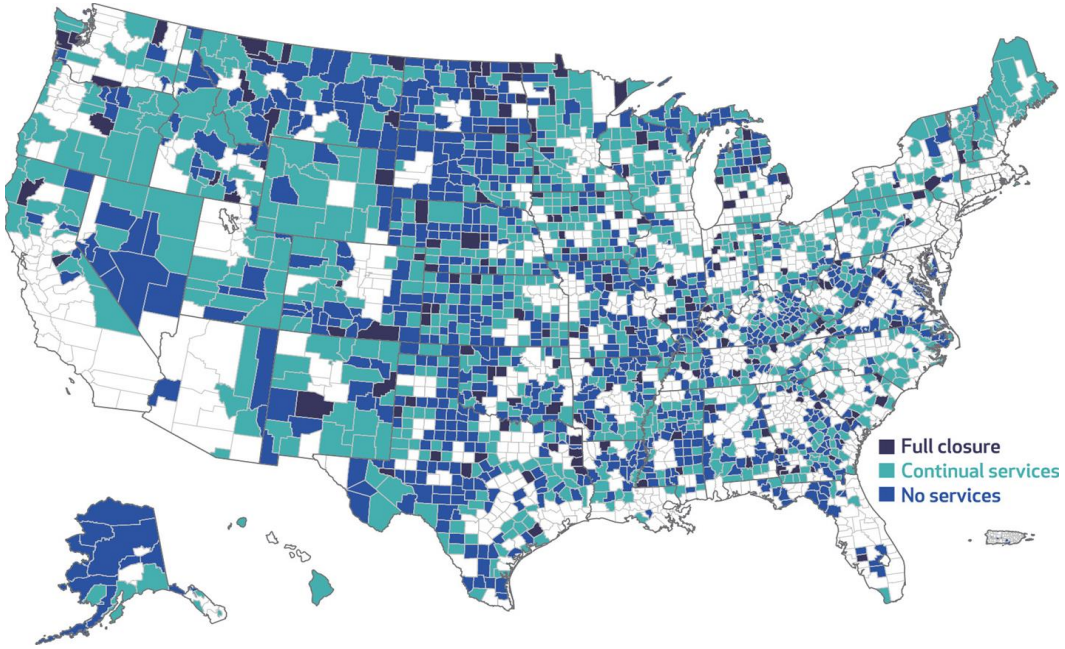
I have no financial relationships related to the content of this activity.

“We’re in a maternity care crisis. We’ve got mothers and babies at risk. It takes vision. It takes commitment. It takes an openness to finding creative, individual ways that it can work in various communities — it is not cookie cutter.”

Ellen Chetwynd, PhD MPH BSN IBCLC
Adjunct Assistant Professor
UNC Chapel Hill, Department of Family Medicine

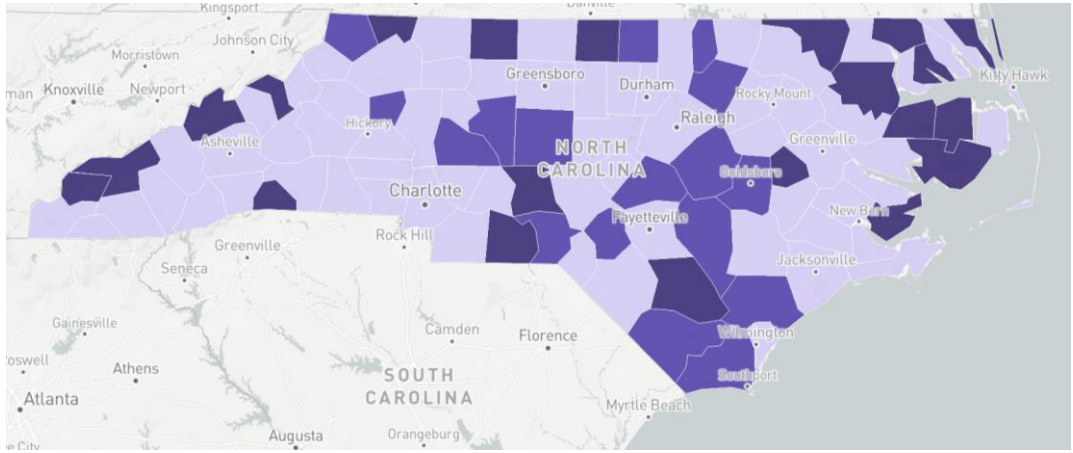
RURAL MATERNITY CARE IN THE US

- Fewer than half of all US rural counties have a hospital with obstetric services
- More than 200 rural hospital maternity care units have closed since 2005 (most of these since 2010) with a disproportionate share in the US south



NORTH CAROLINA MATERNITY CARE "DESSERTS"

- **21%** of NC counties are defined as maternity care deserts compared to 32.6% in the US
- **13.4%** of women have no birthing hospital within 30 minutes compared to 9.7% in the US
- In rural areas across NC, ***60.1% of women live over 30 minutes*** from a birthing hospital compared to 11.8% of women living in urban areas
- **EIGHT** Maternity Unit closures in Eastern NC
- **SIX** closures in Western NC since 2015
- There are NO providers or delivering facilities in 35 counties in North Carolina



PURPLE
Dark = No access (mat care desert)
Med = limited access (1L&D/county)
Light = full access (1 OB/10K births)

March Of Dimes Maternity Care Deserts. Accessed 1.12.24 at https://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/march-of-dimes-maternity-care-deserts-dashboard.html

WHAT HAPPENS?

WHEN MATERNITY UNITS *CLOSE*

INCREASED RISK OF

- Very short or prolonged duration of labor
- Cesarean and operative deliveries
- Postpartum hemorrhage
- Unplanned out of hospital births
- Induction of labor
- Preterm delivery and low birth weight
- NICU admissions and higher cost of neonatal care
- Late prenatal care and decreased postpartum care
- Maternal anxiety
- Financial and social costs
- Overall maternal and infant morbidity and mortality

WHEN MATERNITY UNITS *STAY OPEN*

IMPROVED

- Access to care
- Care coordination
- Social Support
- Renewed investment in the community
- Maternal and neonatal outcomes

REBIRTH OF MATERNITY CARE AT CHATHAM HOSPITAL

1933
Chatham Hospital Opens in a physician's Home

1953
Became a county hospital

1991
Maternity services are discontinued in Chatham County

2008
Acquired by the University of North Carolina Healthcare System

Labor Day, Sept 2020
Maternity Care Center Opens

Fall 2022
Partial closure of the MCC due to concerns about sustainability

March 2023
MCC is operational 24/7

3-Year Timeline

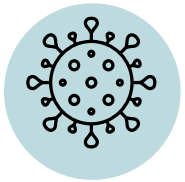
Opening

Chatham Hospital MCC opened during COVID in September of 2020 after 2 years of preparation

Staffing

Collaborations built with PHS (FQHC). RN turnover high. RN pay elevated to system standard.

COVID



COVID accentuated existing difficulties in staffing . MCC closed on weekends.

QI Adaptions

MD model of coverage expanded to full hospital. Nitrous oxide introduced, Risk criteria modified

Rebuilding

A new anesthesia contract begins. The unit opens fulltime. Nursing leadership is rededicated to the unit. A new MCC Medical Director is hired. UNC initiates local marketing.

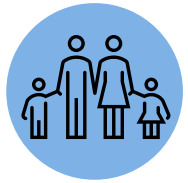
Hardship

MCC Medical Director steps down. MCC leadership covering multiple hospital departments . UNC anesthesia discontinues coverage.

Community

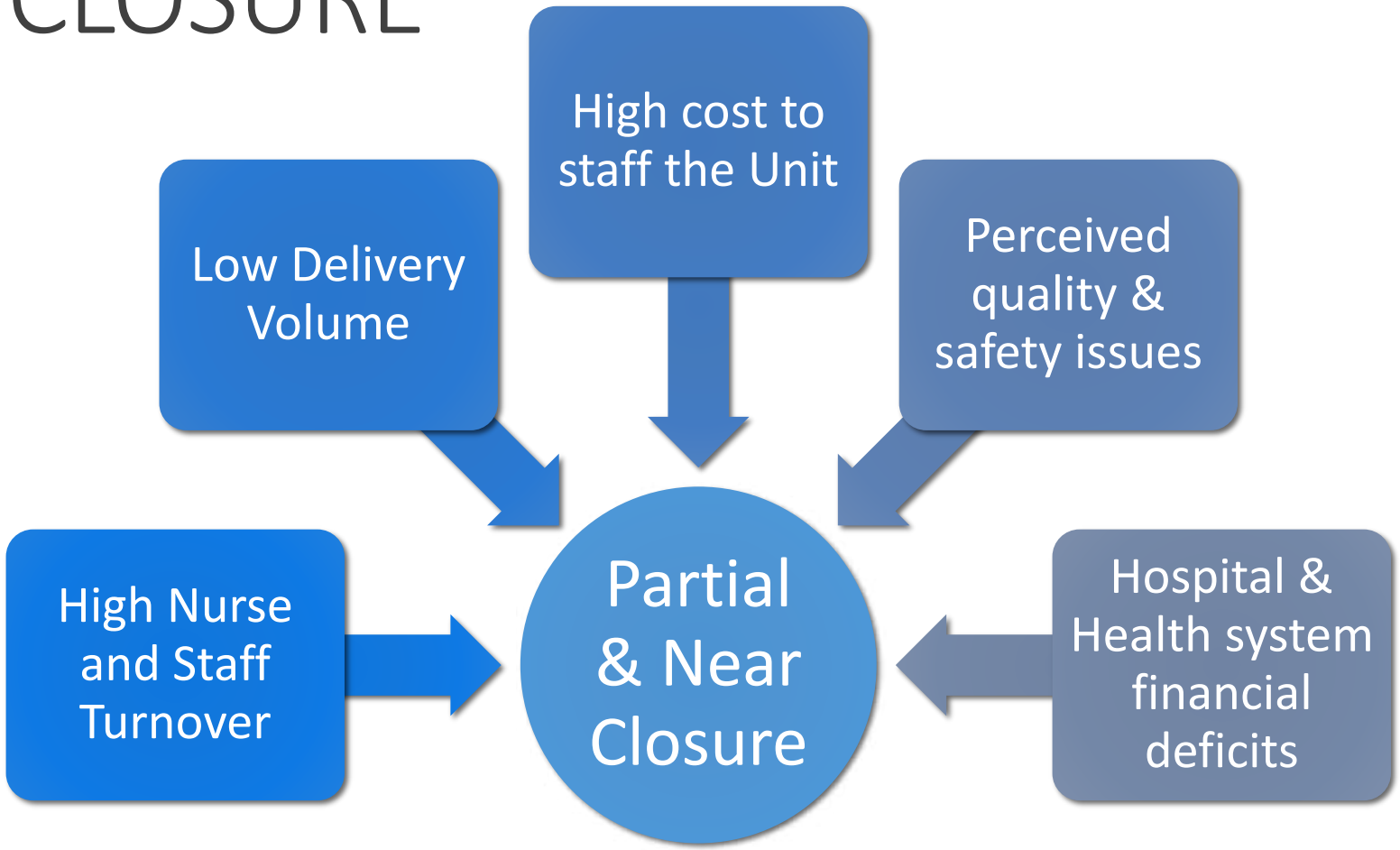
Fear of closure of the MCC looms. A community advocacy group forms . A Community Task Force is initiated facilitated by DFM and UNC DEI. MCC struggles covered by news outlets

Value



At 3 years of age, the MCC is open 24/7, collaborations continue, grants bring funding and innovation to the MCC and maternity care, and DEI continue s to lead workgroup initiatives.

NEAR CLOSURE



COMMUNITY RESPONSE & ENGAGEMENT

Community Advocacy Group Forms

- Community participation in community and health system board meetings to advocate for the maternity care center
- EMBRACE (Equity for Moms and Babies Realized Across Chatham)
  - Program to assess the needs of the community through listening sessions with women and community partners

MCC Taskforce

- Co-Chaired by Chatham Community Member, UNC Department of Family Medicine Chair and UNC Health Equity and Inclusion
- UNC Department of Family Medicine
- Piedmont Health Services
- Chatham County Public Health Department
- The people of Chatham County
- Support of The Duke Endowment

UNC Health re-commitment to Chatham Hospital

UNIQUE STAFFING MODELS

- **Multi-Disciplinary Team:** Primarily staffed by Family Medicine, Family Medicine-OB and CNMs
- **Cross-coverage:** Physicians covering both inpatient adult/peds and the maternity center
- **Shared Staffing:** Shared lactation consultant and physicians with the community health center
- **Anesthesia:** Use of CRNA as primary anesthesia coverage
- **Nursing:** Elevated pay to the health system standard and improved ongoing recruitment and retention efforts.
- **Education:** Support and training for family medicine residents, medical students and nursing students

FINANCIAL SUPPORT & SUSTAINABILITY

UNC Health System Support

- Use of financial risk sharing across UNC Health system
- Access to larger pool of resources
- UNC Health Foundation provided $250,000 to fund the necessary staffing resources

Collaboration and Partnerships

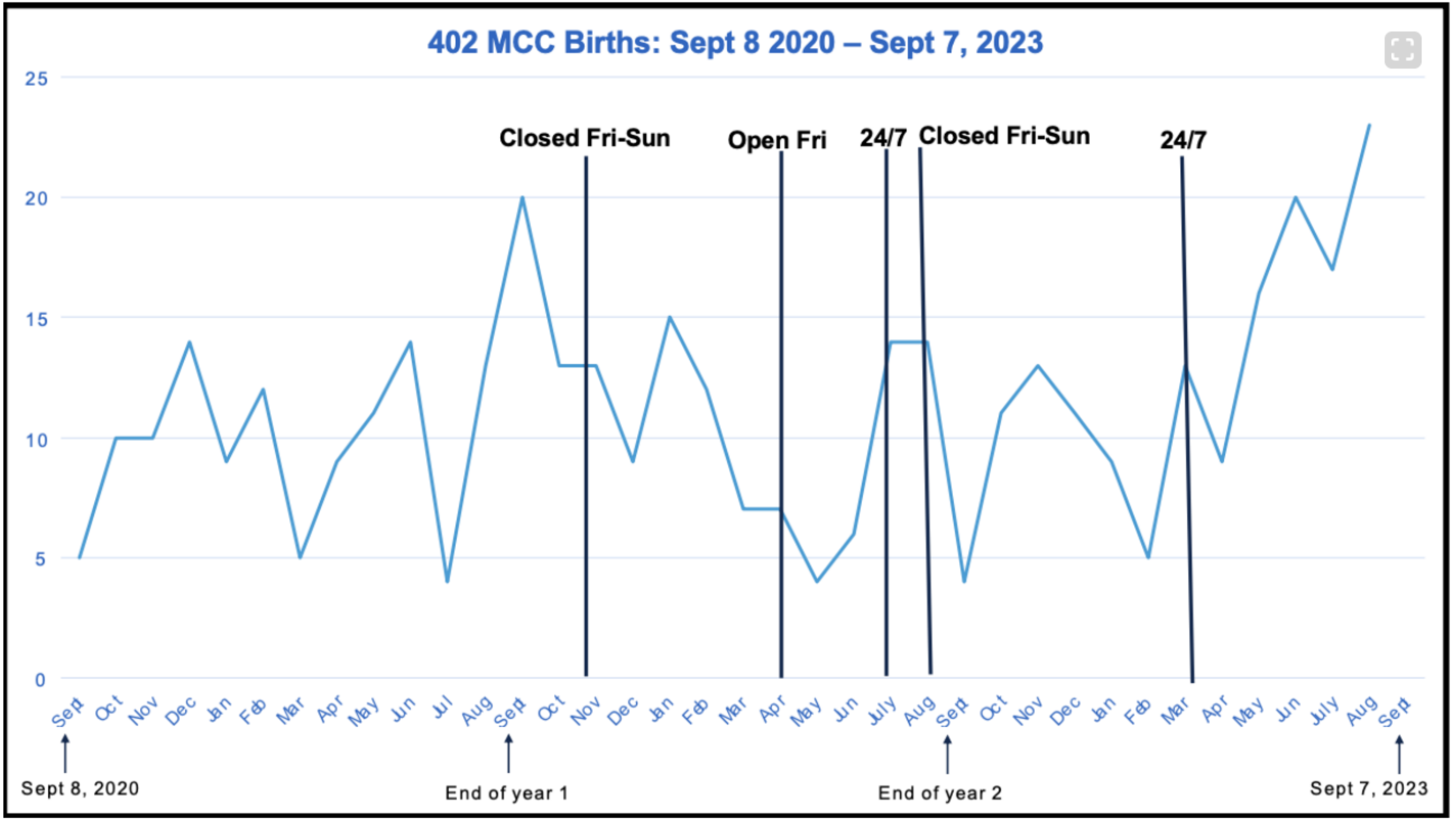
- FQHC
- State and Legislative support
- Educational programs
- Community public health programs

Optimizing resources

- Use of unique staffing models*
- Technology to improve operational efficiency and patient care

TASK FORCE RECOMMENDATIONS

Strengthen	Strengthen Community Transparency and Trust
Promote	Promote UNC Chatham Maternity Care Center Internally & Externally to Increase Birth volume
Recruit & Retain	Recruit & Retain Nursing Staff
Quality & Safety	Maintain Quality & Safety at UNC CHT MCC with Focus on Training

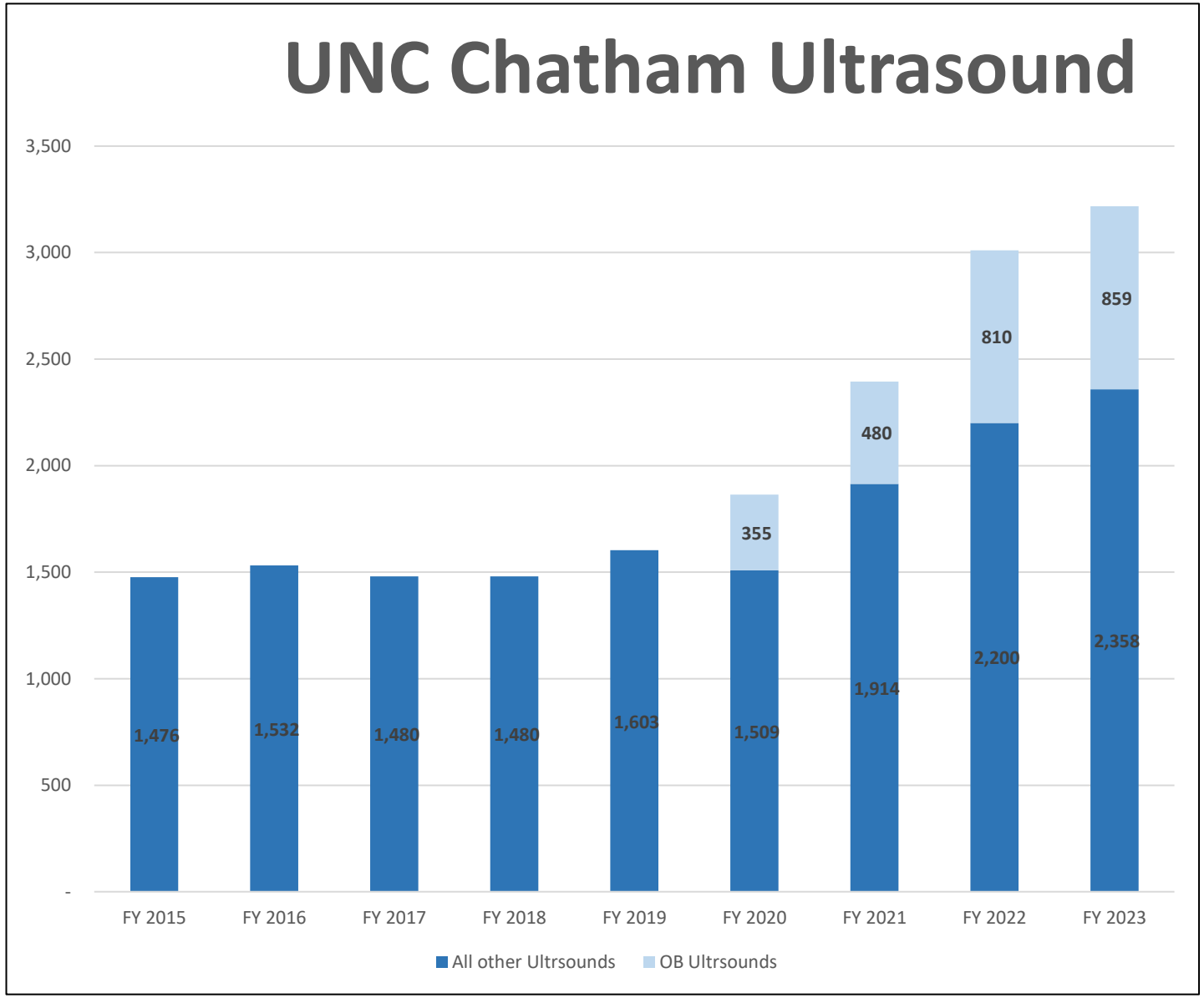


Credit: Courtesy of UNC Chatham Hospital Maternity Care Center Evaluation

	Chatham MCC Level 1 MCC	Women's Birth and Wellness Birth Center	UNC Chapel Hill Level 4 MCC
Induction Rate	35%	22%	39%
Primary C/S Rate	8%	7.8%	18%
Total C/S Rate	12%	9.4%	24% (FM); 28% (OB)
PPH Rate	8%	15%	18%
Breastfeeding	90%	>95%	85%
Postpartum follow-up care	81%	100%	National Avg 60% in rural areas, and lower for uninsured and Medicaid only patients per CDC, 2017

We are improving the care of smaller communities across North Carolina.
Delivering Provider at Chatham Hospital

EXAMPLE of OTHER HOSPITAL OUTCOMES



SUMMARY OF STRATEGIES & INNOVATIONS

Community engagement and advocacy

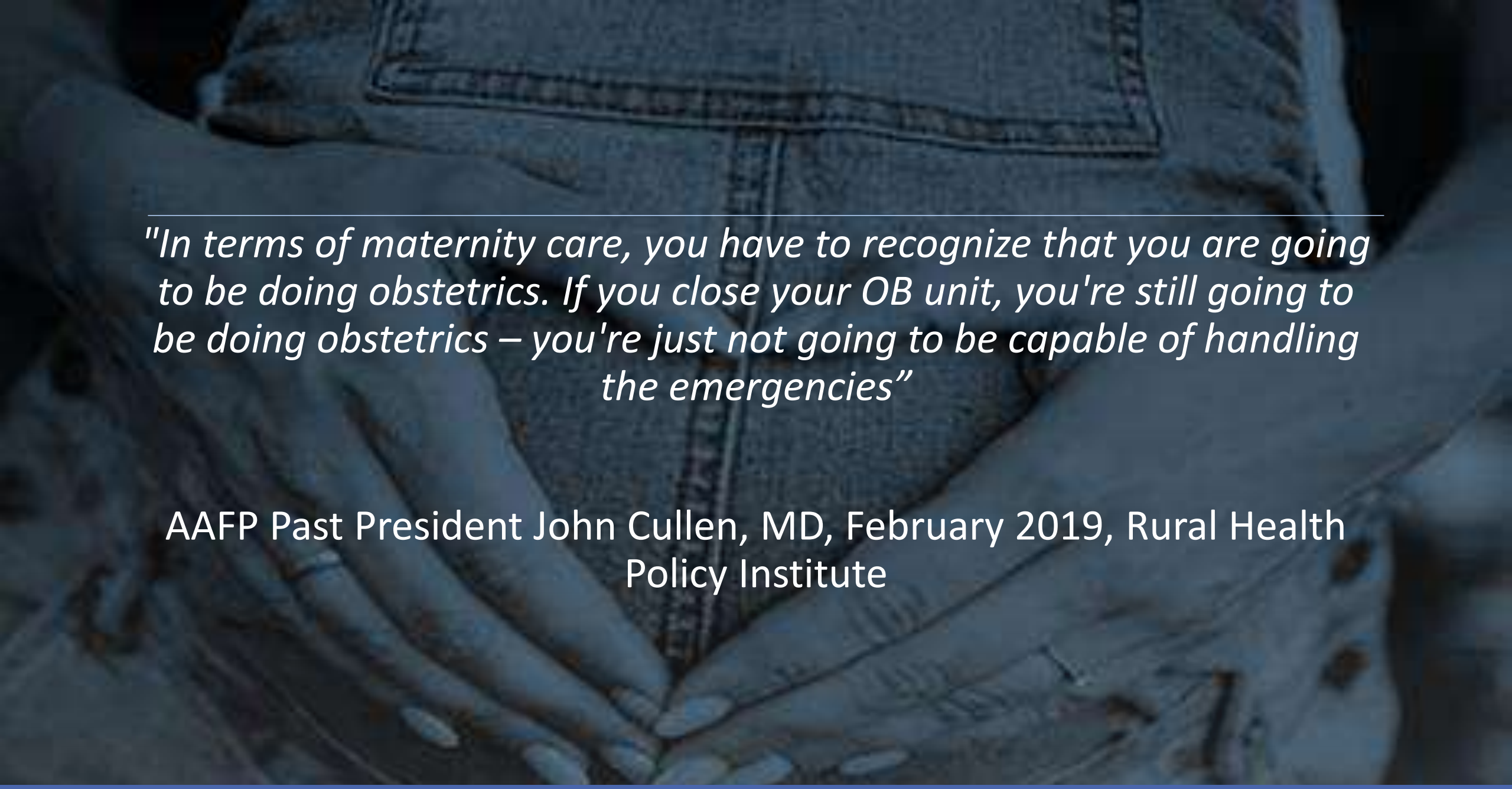
Transparency and accountability

Adaptability and flexibility

Innovation and continuous improvement

Collaboration and teamwork

Sustainability and strategic financial management



"In terms of maternity care, you have to recognize that you are going to be doing obstetrics. If you close your OB unit, you're still going to be doing obstetrics – you're just not going to be capable of handling the emergencies"

AAFP Past President John Cullen, MD, February 2019, Rural Health Policy Institute

QUESTIONS?

Contact Information:

Kelly Holder

Kelly.holder@unchealth.unc.edu

kholder@campbell.edu