Barriers to Providing Rural OB Services

- low Medicaid reimbursement and the high cost of malpractice insurance
- 2010, Medicaid funded 51% rural and 39% urban births
- Medicaid (51% of rural women compared to 39% of urban).
- Medicaid's reimbursement for childbirth is about half that of private insurers.
- Malpractice premiums to cost as much as \$85,000 to \$200,000



Workforce Shortages

- Quality of Care and Birth Outcomes
- Workforce Shortages
 - family practice physicians (declining number of physicians)
 - Malpractice lawsuits
 - Inability to keep up
 - Associated with low volume hospitals
 - Obstetricians
 - Certified nurse midwives
 - General surgeons

The unpredictable nature of obstetrical care results in a demanding lifestyle on providers!

Workforce Costs (OB Hospitals)

- large stream of overhead costs associated with the OB's practice
- Incentive-based compensation is not typically a consideration in contracts (buy providers.)
- Must have more than one provider to cover call and to assist in Csections
- Anesthesia support is also required
- market competitive for wages, guarantees that approach or even exceed median compensation (usually must be higher)

Fixed workforce cost may make it difficult or impossible to break even!

Compensation for Providers

- Compensation for obstetriciangynecologists physicians has grown 10%,
- Must have more than one provider
- CAH to provide 24/7 (Increased by \$92,000/5 years)



Telemedicine Reimbursement

 Parity provisions for reimbursement of telemedicine-provided physician services

- Patients stay local
- Rural community retains revenue
- Reimbursement by
 - Private health insurance carriers
 - Medicare
 - Medicaid



Institute for Digital Health and Innovation 2019

Academic Education

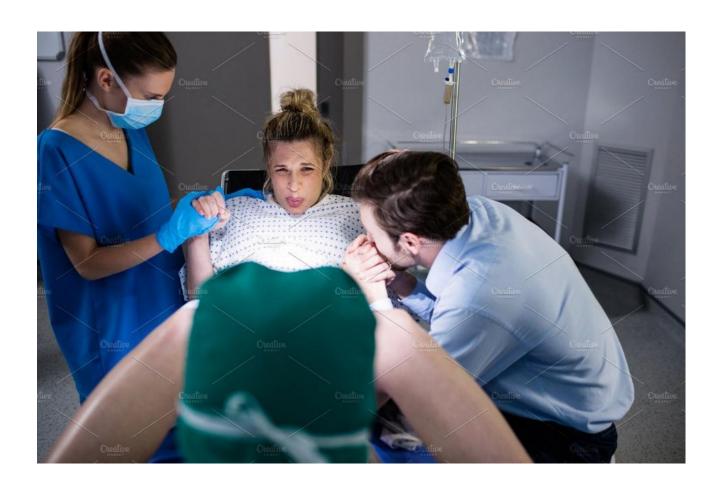
- AAMC training competencies: AAMC committee to develop student digital health competencies.
- Will apply competencies to training at UAMS
- UAMS COM
 - Senior elective
 - Honors Program development
 - Early training (first 2 years exposure)
- School of Nursing
- School of Pharmacy

Clinical Training

- Clinical Training: UAMS faculty and Nursing service (ICE) (should be embedded in new hires)
- Online education modules have been developed
- Imbedding Education in training (students and residents)
- State wide education of providers

Online Deliveries

Of course no one will ever deliver a baby online?



Digital Health

- Maximizes healthcare resources
- Provides increased opportunities to engage clinicians
- Patients self-manage their care
- Uses technology available to consumers to deliver patient care outside of the hospital or doctor's office

Links: patients + doctors + hospitals = System of Care

Care is delivered anywhere, anytime, and by anyone!

Health Care Experts

•There is broad consensus that fee-forservice (FFS) reimbursement distorts care provision away from the social optimum and incentivizes encourages overtreatment.

McGuire, T. (2011). Physician Agency and Payment for Primary Medical Care. The Oxford Handbook of Health Economics.

Identified Waste

10.0110111001	
Problem	Savings
Variation in the intensity of medical and surgical services	\$600 Billion
Misuse of drugs and treatments	\$52.2 Billion
ED overuse	\$55 Billion
Underuse controller med's	\$2.5 Billion
Generic antihypertensives	\$3 Billion
Antibiotic overuse	1.1 Billion

At least 30% waste in healthcare!



Fee for Service

Reduction in payment may encourage increase in volume!



The Death of Fee For Service

Decreasing Fees

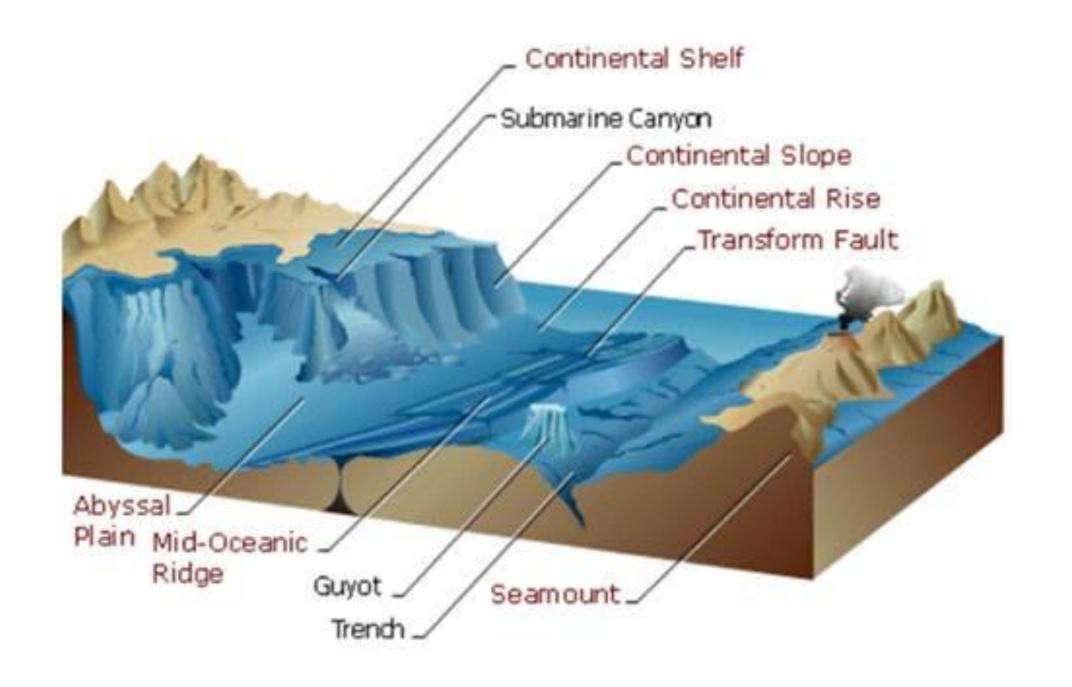
Burnout and Safety issues

Increasing Number of Procedures

Layoff of Personnel & Cuts

Further Decreases in Fees

Further Volume Increases



Shifting Risk



Consumers
Employers
Health Plans
Government Payors
Risk Shift

Physicians
Medical Groups
Hospitals
Other Providers

Shifting Risk

Systems Engineering

Systems Engineering integrates all the disciplines and specialty groups into a **team effort** forming a structured development process that proceeds from concept to production to operation.

Systems Engineering considers both the business and the technical **needs of all customers** with the goal of providing a **quality product** that meets the user needs.