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I. Statement of Purpose

This paper evaluates the sustainability of the Labor & Delivery unit at Lincoln Hospital, with a focus on the complex challenges it is currently facing. The unit clearly delivers meaningful value to the community, the hospital, and the families it serves. At the same time, it continues to confront significant pressures, particularly related to workforce stability and low birth volume.

Given the challenging situation in which we find ourselves, this paper assesses options related to the availability of Labor & Delivery services to meet the needs of the communities served by Lincoln Hospital. It does so in the context of the relative proximity of higher-volume birthing facilities, and the importance of sustaining prenatal and postnatal care, while expanding gynecologic services at a time when Labor & Delivery services are struggling.

This paper also explores the broader national and local challenges associated with staffing and maintaining high-quality Labor & Delivery services in rural settings. For Lincoln Hospital in particular, it outlines both the obstacles facing the unit and the significant role it plays within the community, the hospital, and the families it serves. Most importantly, it presents an analysis of three potential paths forward:

> **Scenario I**: This scenario considers the continuation of inpatient Labor & Delivery services at Lincoln Hospital with a single provider team. It identifies and evaluates potential strategies to stabilize staffing, increase patient volume, and mitigate safety risks associated with low delivery volumes.
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> **Scenario II:** This scenario explores partnering Mid Coast and Lincoln providers in a one practice, two-site integrated team to deliver a full scope of obstetric and gynecologic services at both Lincoln and Mid Coast Hospitals. It outlines and evaluates strategies to extend provider coverage across both sites, support workforce sustainability, and maintain access to comprehensive care for patients within the region.
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> **Scenario III:** This scenario explores partnering Mid Coast and Lincoln providers in a one practice, two site integrated team to deliver gynecologic care and outpatient perinatal services at Lincoln, while consolidating Labor & Delivery at Mid Coast Hospital. It identifies and assesses strategies to ensure continuity of care, optimizes staffing resources, and enhances safety and quality outcomes through the centralization of delivery services.

II. Introduction: The Challenges Facing Rural Obstetric Care

Maintaining a Labor & Delivery unit in rural areas across our nation is a complex endeavor, requiring significant resources and sustained effort across multiple areas of care. These units play a crucial role in providing highly desired maternal and child healthcare close to home. The presence of a delivery hospital in a community can attract young families and serve as a source of economic stability for rural communities. The capacity to offer comprehensive perinatal, reproductive, and birthing care is often a source of pride and confidence for community members, and birthing services are frequently viewed as foundational to sustaining pediatrics and primary care services.[i]

Loss of birthing services in a community is cause for grief and concern. Discontinuation can generate feelings of anger and mistrust toward hospital leadership, particularly when closures occur after long periods of community investment in these services.

Rural hospitals face substantial challenges in sustaining inpatient obstetric care, most notably resource limitations, workforce shortages, and declining birth volumes that make it increasingly difficult to maintain clinical competency. Nationally, hospital-based obstetric services continue to decline. From 2010 to 2022, more than 500 U.S. hospitals discontinued obstetric services, including approximately 240 rural hospitals. By 2022, over half (52%) of rural hospitals no longer provided obstetric care, an increase from 43% in 2010.[ii] [iii]

Earlier research identifying 89 rural obstetric unit closures between 2015 and 2019 remains directionally accurate but significantly understates the magnitude of subsequent losses, which accelerated during and following the COVID-19 pandemic. [iv] [iii]

When obstetric units close in communities without reasonably proximate alternatives, adverse outcomes increase. Multiple studies have demonstrated higher rates of unplanned out-of-hospital births, increased deliveries in hospital Emergency Departments without obstetric units, and higher rates of preterm birth in counties that lose hospital-based obstetric services, particularly in non-adjacent rural areas. [v]

A decision to close a rural obstetric unit must be made with extreme care and deliberation.

A. Maine and New England

In Maine, obstetric service closures have accelerated. Between 2015 and 2025, 11 hospital birthing units closed, representing approximately two in five of the state's delivery units, leaving 17 hospitals statewide currently offering obstetric services. [vi]

Approximately 40% of Maine's population lives in rural counties, and 22% of residents live more than 30 minutes from a delivery hospital.[vii] Rural Mainers whose closest hospital lacks obstetric services now drive an average of 45 minutes one-way to access hospital-based maternity care. [vi]

Maine's rural communities also tend to be older than the state as a whole. Lincoln County has the oldest median age in Maine at 51.9 years and is already among the oldest counties in the United States. Demographic projections indicate these trends will become more pronounced over time. By 2035, approximately 39% of Lincoln County residents are expected to be age 65 or older, compared to 31% statewide and 22% nationally. At the same time, the proportion of residents in prime working and childbearing years is expected to decline. These demographic shifts reduce demand for obstetric services while increasing demand for other healthcare services, creating significant challenges for maintaining local Labor & Delivery programs. [viii]

Maine already has one of the lowest birth rates in the nation at approximately 8.3 births per 1,000 population compared to approximately 11 per 1,000 population nationally. Lincoln County's birth rate is even lower at 7.8 births per 1,000 population, among the lowest in Maine. Current projections suggest both Maine and Lincoln County will continue to experience declining birth rates over the coming decade. These trends are expected to further reduce demand for inpatient obstetric services independent of provider recruitment efforts or changes in local service delivery models. [viii]

In 2023, 11% of Maine births occurred to individuals receiving inadequate prenatal care, as measured by the Adequacy of Prenatal Care Utilization index. While this rate remains below the national average (approximately 15%), it represents a concerning upward trend.[ix]

Among Maine's 14 rural hospitals that continue to offer delivery services, 2024 data indicate that four delivered fewer than 200 babies per year, and one delivered fewer than 100, placing the majority of Maine's rural obstetric units in the "very low-volume" category. [vi]

By contrast, Vermont experienced no hospital obstetric service closures between 2010 and 2022, and no Vermont hospital delivers fewer than 100 babies per year. New Hampshire reported only one hospital with fewer than 100 annual births, and two with fewer than 200.

B. Challenges of Providing Safe Care in Low Volume Sites

The relationship between delivery volume and infant mortality is multifactorial and influenced by social, economic, and medical variables. However, updated vital statistics show that Maine's infant mortality rate in 2023 was 5.6 deaths per 1,000 live births, higher than both New Hampshire and Vermont, and comparable to the U.S. average of 5.6.[x] [xi]

Low birth volume complicates reliable assessment of quality and safety due to statistical instability, rare but high-risk events, and limited exposure to obstetric emergencies. While no definitive safety threshold exists, annual birth volumes below 200 are widely classified as "very low" in national obstetric quality research. [i] [ii]

Contemporary, multi-state analyses demonstrate a strong association between low birth volume and adverse maternal outcomes in rural hospitals. Rural hospitals delivering 10-110 births per year experience approximately 65% higher rates of severe maternity morbidity compared with rural hospitals delivering more than 460 births per annually. [xii]

This association is even more pronounced among low-risk pregnant patients. Low-risk individuals delivering at rural hospitals with 10-110 births per year have more than double the risk of severe maternal morbidity compared to similar patients delivering at higher-volume rural hospitals (adjusted risk ratio 2.32; 95% CI 1.32-4.07). xii

C. Workforce Challenges Contribute to Safety Concerns

Low birth volume exacerbates challenges in recruitment, retention, and skill maintenance among obstetric providers and nursing staff. At low-volume hospitals, small numbers of clinicians must provide 24/7 coverage 365 days per year, creating high call burdens and increasing burnout. Experienced obstetric nurses often experience prolonged periods without deliveries, frequent floating to other units, and reduced job satisfaction. [xiii]

Low delivery volume can also complicate physician recruitment. New obstetrician-gynecologists (OB/GYNs) seeking board certification must demonstrate sufficient volume, diversity, and complexity of cases to meet certification requirements. While accommodations exist for physicians practicing in rural, low-volume settings, demonstrating the required breadth and depth of practice may be more difficult in very low-volume hospitals. As a result, some newly trained physicians view higher-volume practices as more attractive environments for developing and maintaining their skills. This challenge has been

observed locally, where low birth volume has been identified by prospective candidates as a factor influencing employment decisions.

Every Labor & Delivery unit must maintain immediate readiness to perform emergent cesarean delivery and neonatal resuscitation in the event significant maternal or fetal compromise. [xiv] [xvi] Meanwhile, pregnancy complexity is increasing in rural communities, driven by higher rates of obesity, chronic disease, substance use disorders, and advanced maternal age. These trends place additional demands on an already limited rural obstetric workforce and increase the importance of maintaining stable staffing, ongoing clinical experience, and access to specialty support in very low-volume settings. [xv]

D. Maternal and Infant Health Requires a Continuum of Care

Maternal and infant health outcomes are influenced by far more than the location of delivery. Access to prenatal care, postpartum care, mental health services, substance use disorder treatment, social supports, and care coordination all play an important role in the health of pregnant individuals and their infants. Maine's Maternal, Fetal and Infant Mortality Review (MFIMR) process has repeatedly identified mental health, substance use disorder, and barriers related to stigma, culture, language, and social circumstances as recurring themes associated with adverse maternal and infant outcomes.

Review of recent Maine maternal mortality data also demonstrates that many pregnancy-associated deaths occur during the postpartum period rather than during Labor & Delivery itself. This underscores the importance of ensuring sustained access to care throughout pregnancy and the first year after birth, including mental health services, substance use treatment, lactation support, and primary care follow-up.

Similarly, the majority of infant deaths in Maine occur among very preterm or very low birth weight infants. These infants often require advanced neonatal resources and specialty services that are available only at higher-level regional centers. As a result, a portion of high-risk pregnancies will continue to require consultation, transfer, or delivery at larger hospitals regardless of the availability of local labor and delivery services.

Taken together, these findings highlight that improving maternal and infant health requires a comprehensive continuum of care. While safe and timely access to delivery services remains important, long-term improvements in outcomes also depend on the availability of prenatal, postpartum, mental health, substance use, and other supportive services within the community.[xvi]

III. Current State of Labor & Delivery Care at Lincoln Hospital

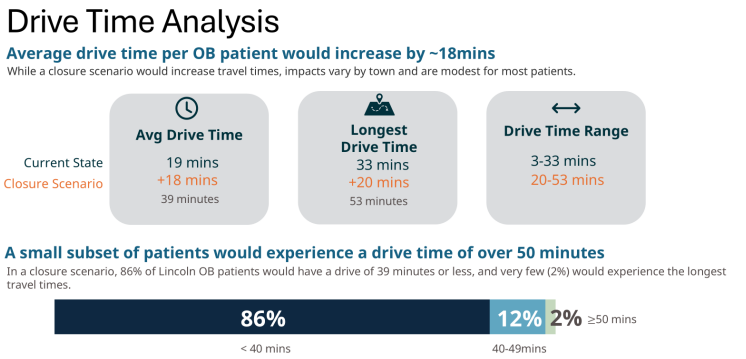
Fifteen years ago, a consultant recommended that the program be closed. Since then, we have made significant efforts to stabilize and strengthen the service. Despite those efforts, the departure of two full-time and one part-time OB/GYN physicians in 2012 created a staffing gap that was only has been partially remedied by one full-time OB/GYN, with a reliance on part-time providers, per diems and locums. Since the loss of that full-time OB/GYN provider in 2020, ongoing recruitment challenges have prevented us from securing a permanent full-time replacement. To ensure continuity of care, we have depended on a combination of part-time providers, locum tenens, and per diem staff.

As difficult as this review of services has been to initiate and conduct, it is imperative that we do so. The participation of those involved in providing care at Lincoln Hospital has been essential to this review process.

A. Location of Lincoln Hospital and Distances to Alternative Sites of Care

Drive time to the nearest OB unit is a critical consideration for hospitals providing care in rural settings. Obstetric emergencies such as placental abruption, severe pre-eclampsia, or cord prolapse require immediate medical attention, and increased travel time to a birthing center has the potential to increase adverse outcomes.

Unlike many rural hospitals with birthing units at risk of closure, Lincoln Hospital has several alternative hospital delivery sites available. The hospital is located approximately 24 miles (37 minutes) from Mid Coast Hospital; 29 miles (45 minutes) from Pen Bay Hospital; and 36 miles (55 minutes) from MaineGeneral. These three hospitals have a significantly higher volume of deliveries that supports stable staffing and a higher level of care. Currently, patients delivering at Lincoln Hospital travel between 3 and 33 minutes to reach the hospital, with an average drive time of 19 minutes. This does not factor in high traffic or adverse weather which have the potential to increase drive times.



While it is crucial to consider how any future changes to service delivery might impact patient drive times, the availability of multiple nearby options mitigates some of the risks associated with potential closure or service changes at Lincoln Hospital.

B. Volume and Demographic Trends

One hundred thirty-one deliveries occurred at Lincoln Hospital in 2025, up from 111 births in 2021. During the same period, births across Maine decreased by 3%, and national projections indicate inpatient deliveries are likely to continue declining over the next decade. Although portions of the broader service area may experience modest short-term growth in women of childbearing age, Lincoln County's overall population is projected to remain essentially flat while becoming substantially older. Between 2026 and 2035, the share of residents age 65 and older is projected to increase from 33% to 39%, while the proportion of residents ages 18-64 declines from 52% to 47%. Concurrently, birth rates are expected to continue declining. As a result, while Lincoln Hospital has experienced modest volume growth in recent years, it remains among the lowest-volume birthing hospitals in Maine and is the lowest-volume birthing hospital within MaineHealth. Taken together, these trends suggest that substantial long-term growth in obstetric demand is unlikely.

In fiscal year 2025, 32% of families living in the Lincoln service area gave birth at Lincoln Hospital. This is up slightly from 30% in 2021. In the same year, 24% of families in the service area gave birth at Mid Coast Hospital, with the remaining deliveries occurring at Maine Medical Center Portland, MaineGeneral, and other hospitals. [xvii]

Overall market share patterns have remained relatively stable over time, with births distributed across multiple hospitals rather than concentrated at a single location. Growth in market share at Maine Medical Center Portland and MaineGeneral suggests that families increasingly access delivery care across several hospitals based on geography, clinical needs, and personal preference.[xviii]

	Market Share		
Hospital	**FY23**	**FY24**	**FY25**
Lincoln Hospital	32%	33%	32%
Mid Coast Hospital	30%	25%	24%
Maine Medical Center Portland	16%	17%	18%
MaineGeneral Medical Center Augusta	14%	17%	17%
Pen Bay Hospital	6%	5%	5%
Other	2%	3%	4%
Grand Total	100%	100%	100%

The reasons for low birth volume and market share at Lincoln are multifactorial. Birth volumes have declined in part because of demographic shifts, including population aging, declining fertility rates, and a shrinking proportion of residents in their childbearing years.

Currently, Lincoln Hospital refers certain higher-risk patients to other hospitals for delivery based on clinical needs and available services. These include patients with BMI >50, complicated pregnancy with twins, patients requesting vaginal birth after a previous c-section (VBAC), fetal anomalies identified in antenatal testing, preterm gestation, or the need to access subspecialists for other types of clinical services. As a result, some patients receiving prenatal care through Lincoln Hospital ultimately deliver at hospitals with higher levels of maternal and neonatal care, limiting the number of deliveries that occur locally.

The proportion of pregnancies requiring consultation, co-management, or delivery at higher levels of care is likely to increase over time. Delayed childbearing is expected to continue, and older obstetric patients are at greater risk for complications requiring specialty care. More broadly, Lincoln County has the oldest median age in Maine and experiences a substantial burden of chronic disease. As the population ages and medical complexity increases, a growing proportion of pregnancies may require

services that are not available locally. This combination is likely to limit growth in local obstetric volume while increasing the proportion of patients who require higher levels of maternal and neonatal care.

Geography and family choice play an important role as well. Data indicates that 68% of women living in Lincoln County who are pregnant, deliver at hospitals other than Lincoln Hospital. Many women without identified medical risk factors deliver at larger centers like Maine Medical Center, which has a neonatal intensive care unit. Also, families often simply choose to deliver at the closest hospital, which in many cases in this service area is not Lincoln Hospital.

Finally, there is a notable population of families in the area who choose to deliver their babies at home. From 2020-2024, 5.2% of births in Lincoln County were planned for home births, compared to 2.7% statewide. [xix]

Taken together, these demographic, clinical, and geographic factors help explain why a majority of births among Lincoln service area residents already occur outside Lincoln Hospital and why significant growth in local delivery volume is unlikely.

C. Provider Staffing

Lincoln Hospital currently employs two Certified Nurse Midwives (CNMs), one Family Medicine physician with obstetric privileges, one Family Medicine physician with obstetric and C-section privileges, and utilizes approximately four regularly scheduled per diem OB/GYN physicians. The pediatric team includes three pediatricians and one Internal Medicine/Pediatrics physician. Anesthesia services are contracted through Spectrum and supported by two Certified Registered Nurse Anesthetists (CRNAs).

From a provider standpoint, the most significant strain relates to limited OB/GYN physician coverage, resulting in a high call burden and an ongoing inability to recruit into these roles for more than five years. Similarly, recruitment of CRNAs to support anesthesia services has been challenging, with vacancies persisting for over three years.

Other low volume delivery hospitals within MaineHealth have been able to sustain and recruit into well-established groups of four OB/GYN physicians. The absence of an employed OB/GYN has proven to be a critical factor in our inability to recruit.

The current coverage model has been sustained through significant efforts by the existing provider team; however, recruitment has remained unsuccessful despite extensive and ongoing investment.

MaineHealth Recruitment has worked diligently on efforts including job posting locations, candidate activity monitoring, and external recruitment events. The position has been advertised across multiple association-specific job boards, including the American College of Obstetricians and Gynecologists (ACOG) and other OB/GYN-focused professional career centers.

In addition to traditional postings, recruitment has involved proactive sourcing strategies. Hundreds of physicians have been identified and directly contacted through platforms such as ZoomInfo and LinkedIn. Further outreach has occurred through physician recruitment platforms including Doximity, Betterleap, and PracticeLink.

Recruitment representatives also attended the ACOG Annual Clinical and Scientific Meeting, including the associated career fair. While additional conferences were evaluated, they were not pursued due to limited anticipated return on investment and lack of demonstrated candidate engagement at similar events.

Despite these comprehensive efforts, recruitment has remained challenging due to several key factors. Primary barriers include a demanding call schedule, low birth volume, and the instability of a practice largely comprised of part-time or per diem providers.

Lower birth volume has also presented a challenge. Many interested candidates are recent graduates who require higher procedural volumes and greater clinical support to achieve board certification than the current model can provide. While there has been some interest from Family Medicine with OB (FMOB) and FMOB with c-section candidates, they have declined due to the instability of the practice.

Compensation has also occasionally been a limiting factor. To remedy that issue, in fiscal year 2025, beginning October 1, 2024, OB/GYN salaries were standardized in the MH Coastal Region.

We have had success in bringing MaineHealth per diem providers to our hospital, but they are full-time providers in other MH regions and have limited flexibility with their schedules to meet our demand.

In summary, recruitment has undertaken significant and multifaceted efforts to attract OB/GYN candidates through targeted advertising, direct sourcing, professional platforms, and conference participation. The ongoing challenges appear to be driven less by recruitment activity and more by factors, including low birth volumes, call burden, market conditions, practice structure, candidate qualifications and preferences, and care delivery model.

D. Nurse Staffing

Nurse staffing at the Lincoln Hospital Family Birth Center (FBC) aligns with the Maine Perinatal and Neonatal Level of Care Guidelines. In accordance with these guidelines, two RNs with comprehensive training in obstetric care delivery and neonatal resuscitation are scheduled to provide care on the unit on a 24/7 basis, with some adjustment based on patient volume and acuity.

Nurses on the unit care for antepartum, intrapartum, and postpartum patients, neonates, and post-surgical GYN patients. In addition, overflow medical surgical patients and non-chemotherapy infusion patients also receive care on the unit when needed. FBC nurses also provide outpatient checks for pregnant and postpartum patients, such as non-stress tests, pre-eclampsia evaluations, obstetric triage, and lactation support. Childbirth education and prenatal breastfeeding classes are offered monthly. When census is low, FBC nurses float to other hospital units to help with behavioral watches and general tasks when needed.

Recruiting, training, and maintaining the nursing staff required to provide this care is challenging. On average, it takes nine months to train a nurse into the specialty of obstetrics at Lincoln Hospital. Among those new hires, over the last several years about 20-30% have left the unit within a month of being off orientation. One of the most common reasons for departure includes the stress and fear associated with the responsibility of caring for a laboring and birthing patient. The emotional toll of families requiring DHHS intervention may also be a factor for those who chose to leave the field of obstetric nursing. A third challenge which is common across other areas of nursing is the expectation to work

nights, holidays, and weekends. Other newly trained FBC nurses wish to use their skills more regularly than the opportunities provided to them at Lincoln, so they transfer to a hospital with a higher volume of births in order to nourish and develop these new skills and knowledge.

Due to the low volume of births at the FBC, a unit secretary/nurses aid has typically not had enough work and been routinely reallocated to other departments. The required administrative tasks, such as scanning all medical records, filing newborn blood spot specimen results, making postpartum appointments, completing birth certificate and paternity verification forms, are absorbed by the RNs. Performing these administrative tasks is a dissatisfier for the RN as they do not feel they are operating at the top of their license.

These responsibilities require significant staff time and may contribute to administrative workload and job dissatisfaction.

Leadership has refined the hiring process in an attempt to meet these challenges. More difficult questions are asked up front to identify a candidate's ability to navigate challenging emotional situations. Each candidate spends time on the unit with team members who are able to further discuss the challenges of being an obstetric nurse in a critical access hospital. The team has an opportunity to communicate to the candidate the responsibilities beyond obstetric nursing that will be required, such as floating to other units, and occasionally taking care of non-obstetric patients. In addition, leadership has assessed and redesigned the training program. For the last two years, all nurses have participated in a regional obstetric nursing fellowship program. At the end of orientation, they spend two weeks at MMC in Portland to gain exposure to obstetric care in a tertiary care setting. Once off orientation, they are "padded" with the availability of an extra nurse for several months, if possible, to enhance their feeling supported, and to encourage their continued commitment to obstetric nursing.

While these measures have led to less turnover, it remains challenging to balance meeting core staffing needs, making a team feel safe, having enough depth to adequately cover planned and unplanned PTO, and keeping everyone busy, engaged, and committed.

E. Quality and Safety

The quality and safety of care on inpatient obstetric units across the MaineHealth system are monitored through multiple mechanisms. These include, among others, monthly performance reports on quality measures; routine review, evaluation, and response to care team–reported safety events; and both formal and informal assessments of patient safety culture.

Based on these monitoring processes, there is no indication of clear or persistent quality or safety concerns at the Lincoln Hospital Family Birthing Center. However, these systems do not fully capture the unique risks associated with low-volume obstetric units in rural settings. Recognizing this gap, OB/GYN experts within MaineHealth are committed to identifying improved data sources and, in the future, will explore metrics that are more meaningful and appropriate for low-volume environments.

Monthly quality performance data is derived from the MaineHealth Epic electronic medical record and reported through the Midas quality reporting system. These reports include comparative performance on publicly reported measures, nationally recognized patient safety indicators, mortality and readmission measures, as well as metrics aligned with MaineHealth's strategic priorities. Each clinical area across MaineHealth is assessed using a standardized set of measures.

To date, performance at the Lincoln Hospital Family Birthing Center on these measures has been strong, indicating the safe delivery of care. The table below summarizes publicly reported quality data from 2024 to the present:

Measure	Definition	Target	FY24	FY25	FYTD26
PC02	Nulliparous woman (defined as a female who has never delivered a live child) with a term, singleton baby in a vertex position delivered by cesarean birth.	≤23.9%	29.5%	13.7%	21.9%
PC06	Unexpected complications among full term newborns with no preexisting condition	<5%	3.4%	1.0%	4.6%
IQI22*	Vaginal Birth after Cesarean, Uncomplicated	≥4.41%	0%	0%	27.3%
IQI21	Cesarean Delivery, Uncomplicated	≤25.1%	25.4%	14.7%	19.1%
IQI33**	Primary Cesarean - TSV, Uncomplicated (subset of PC02)	≤14.7%	17.0%	7.4%	13.1%

*Procedure performed for the first time at Lincoln in FY 2026.
**Reflective of one case.

Additional insight into quality and safety was obtained through an independent analysis of reported risk events related to inpatient obstetric care between January 1, 2024, and May 30, 2026. This analysis concluded that Lincoln Hospital delivers care that meets established standards; however, it also identified challenges related to on-call demands and overall unit stability. Three key themes emerged:

1. Communication challenges related to diversion status and on-call providers
   Diversion is a complex process that requires multiple layers of clear communication to ensure information is shared quickly and effectively. Key considerations include coordinating on-call physician coverage, communicating with patients, ensuring receiving hospitals are aware and prepared, and managing the operational systems that support the Emergency Department. Given this complexity, challenges can arise, and the team remains vigilant in identifying and addressing issues as they occur. Ongoing reliance on per diem and locum tenens providers and diversion due to limited provider coverage remains a concern.

2. OB nurses caring for non-OB overflow patients
   Obstetric nurses were at times assigned to care for patients outside their typical scope, including IV therapy and medical-surgical patients. These situations led to discomfort and concern among staff due to unfamiliarity with the required care, raising potential safety risks for both patients and nurses.

3. Equipment availability and functionality
   Concerns were identified regarding the availability of backup equipment when primary equipment required repair, as well as access to appropriate equipment needed to care for non-obstetric patients accommodated on the unit.

MaineHealth also administers an annual Patient Safety Culture and Engagement Survey to assess staff perceptions of safety, teamwork, communication, and leadership support. In 2025, the Lincoln Hospital Family Birthing Center received a Patient Safety Culture and Engagement Index score of 3.82 out of 5. This compares to an overall Lincoln Hospital score of 4.08 and a MaineHealth system-wide score of 3.93.

IV. Scenario Assessment

The remainder of this paper examines three scenarios, with a review of the resource requirements, benefits, risks, and feasibility of each.

These scenarios were discussed in depth over the course of several months by a steering committee convened to assist in this review of services. Members of the steering committee included practicing OB/GYN, Family Medicine, Pediatric and Emergency Physicians, nursing, MaineHealth Medical Group leadership, hospital leadership, and MaineHealth OB/GYN Service Line leadership.

Scenario I: This scenario explores continued sole recruitment & provider coverage at Lincoln while maintaining full scope of services.

Scenario II: This scenario explores partnering the Mid Coast and Lincoln provider teams in a one practice, two site integrated team, providing a full scope of obstetric and gynecologic services at both Lincoln and Mid Coast Hospitals.

Scenario III: This scenario explores partnering the Mid Coast and Lincoln provider teams in a one practice, two site integrated team, providing gynecology care and outpatient perinatal services at Lincoln while consolidating Labor & Delivery at Mid Coast.

The following considerations were examined in each scenario:

Low Birth Volumes: One hundred thirty-one births occurred at Lincoln Hospital in 2025, an increase from 111 births in 2021. Despite this improvement, Lincoln Hospital remains among the lowest-volume birthing hospitals in Maine and is the lowest-volume birthing hospital within MaineHealth (see Appendix A). Down East Community Hospital has the lowest volume hospital with 87 annual births. While there is no universally accepted birth-volume threshold below which care becomes unsafe, annual births below 200 are commonly classified as “very low volume” in the obstetric literature, and rural hospital leaders have identified approximately 200 annual births as a threshold associated with long-term safety and sustainability. [xx]

Recruitment & Retention: As noted above, provider recruitment — particularly obstetrician gynecologists — has provided an ongoing challenge to stability of delivery services at Lincoln. While there have been sustained, exceptional ongoing efforts to hire full-time OB/GYNs, the lack of current OB/GYNs continues to make this recruitment difficult. Call models both within and outside of MaineHealth support four covering physicians as the number needed to improve chances of successful recruitment and long-term group stability. Current delivery and outpatient volumes do not necessitate four full-time providers. This low volume has been a deterrent to potential recruits, along with the inability to provide evidence of program and call coverage stability.

Provider Complement (Expansion of Family Medicine-OB): Historically, Lincoln has employed a mixture of OB/GYN physicians, family medicine physicians, and midwives to provide delivery services. While the complement of delivery providers has varied, alternative staffing models were explored during the evaluation process. Based on MaineHealth's operational experience and provider recruitment efforts, a sustainable Labor & Delivery program generally requires approximately four physicians capable of performing cesarean deliveries in order to support a manageable call schedule, adequate coverage for planned and unplanned absences, and long-term workforce stability. Family medicine physicians with additional obstetric training and the ability to perform cesarean deliveries provide an alternative to OB/GYNs in coverage models, but they do not provide the full scope of surgical gynecologic care offered by OB/GYN physicians. As noted above, delivery volume at Lincoln is unlikely to increase substantially, while the need for gynecologic services is expected to grow. Alternative staffing models exist, but they do not guarantee recruitment success or long-term stability, nor do they address the need for expanded gynecologic services within an aging community.

Service Area Demographics: Overall births decreased 11% in the service area between 2022 and 2024.[xxi] While the reproductive-aged (18-44 years) female population is projected to remain relatively stable in the short term (+2% over 5 years), longer-term demographic projections are unfavorable for obstetric volume growth. Lincoln County's population is expected to remain flat while continuing to age substantially. By 2035, nearly 39% of county residents are projected to be age 65 or older, while birth rates are expected to decline further. In contrast, the population of women age 45+ is projected to continue growing, increasing demand for gynecologic and menopausal care services.

Gynecologic Service Offerings: OB/GYN physicians are essential in the provision of gynecologic care, as they are trained surgical specialists and offer a skill set that family medicine physicians and certified nurse midwives do not. Their extensive medical and surgical training in the female reproductive system allows them to diagnose and treat complex gynecologic conditions such as, but not limited to endometriosis, fibroids, ovarian cysts, pelvic floor disorders, and menopausal conditions. Family medicine physicians and certified nurse midwives play an important role in the provision of common obstetric and gynecologic services and provide high-quality care to patients. However, patients with complex conditions or conditions requiring surgical management must be referred to an OB/GYN. Without an employed OB/GYN at Lincoln Hospital since 2020, access to comprehensive gynecologic care has been limited. This challenge is particularly important given the age profile of the service area and projected growth in the population of women age 45+, who are more likely to require evaluation and treatment for abnormal uterine bleeding, pelvic floor disorders, menopause-related concerns, ovarian cysts, endometriosis, and gynecologic cancers. The impact of this limited access can be seen in utilization patterns. For women age 45+, gynecologic utilization in the Lincoln service area is 141 visits per 1,000 women, compared with 300 visits per 1,000 women in the Mid Coast service area and 488 visits per 1,000 women in the Stephens service area, another MaineHealth rural critical access hospital location. The inability to recruit and retain an employed OB/GYN at Lincoln has limited local access to comprehensive gynecologic care and requires many patients to seek care outside the community.

One Provider Team, Two Locations: An integrated obstetric and gynecology care model allows one provider team to cover multiple locations with a coordinated, collaborative team of physicians, advance practice professionals and certified nurse midwives, rather than having a separate team for each location. A single physician leader oversees care at both locations, supporting a unified care delivery

approach, by standardizing training and protocols, and focusing on quality. Staffing resources are shared between both locations, supporting the ability to optimize patient access in both locations. In an integrated practice, a single phone number and point of entry allows patients a seamless experience, more timely access, and greater patient choice.

Labor & Delivery Capacity at Mid Coast Hospital: Mid Coast Hospital was built in 2001, at a time when annual birth volumes exceeded six hundred. The Mid Coast Labor & Delivery unit consists of 11 beds with an additional five beds for surge capacity, an in-unit operating room, and follows an LDRP model of care. As births have declined across the state, so have births at Mid Coast Hospital. In 2025 Mid Coast Hospital birth volumes were 483.

Scenario I: Maintain Current State (Labor & Delivery at Lincoln w/ single provider team)

Low Birth Volumes & Service Area Demographics: Lincoln Hospital has been successful at increasing market share slightly over the past several years. Thoughtful consideration was given to opportunities to increase marketing of the services and enable the unit to care for higher-risk patients that are currently referred to larger centers. Lincoln's geographic position and declining birth rate make it unlikely that marketing efforts, or expanding services, will result in the birth volume threshold needed for sustainability. The Lincoln community is positioned between several hospitals that provide delivery services and proximity is a factor influencing patient choice. Communities in the northern and western parts of the region show strong alignment with MaineGeneral and Mid Coast, while coastal communities often utilize Mid Coast and Maine Medical Center Portland. Those delivery hospitals are already equipped with the specialty resources needed to deliver higher-risk pregnancies.

Even under optimistic assumptions regarding market share growth, demographic trends limit the potential for substantial increases in total births. Population aging, declining fertility rates, and a shrinking working-age population are expected to continue reducing underlying demand for obstetric services throughout the service area.

Recruitment and Retention: Physician compensation is a factor in successful provider recruitment. The OB/GYN base compensation was reviewed and increased throughout the course of the past year. Additionally, per diem compensation increases were made, helping to support a broader pool of physicians to cover call at Lincoln, but neither of these efforts resulted in the successful recruitment of a stable, core OB/GYN complement. We explored potential partnerships that would enable new graduates to spend part of their clinical time in a higher-volume setting to satisfy board certification case volume requirements. Despite these efforts, the lack of mentorship opportunities in a low-volume setting remains a significant deterrent to recruitment.

Provider Complement: Increasing the complement of certified nurse midwives or obstetric-trained family medicine physicians was explored, but there is concern for OB/GYN backup call requirements to ensure access to surgical deliveries when clinically needed. Increasing the number of c-section trained family medicine physicians was also reviewed but would require a diversion plan for gynecologic emergencies, and neither plan addresses the gap in gynecologic care services without stable OB/GYN coverage.

Gynecology Service Offerings: While suggestions were reviewed to support increased certified nurse midwife training in gynecologic care, and to continue the partnership with Mid Coast for urogynecology care, these do not result in improved access to the specialized gynecologic care currently lacking in the Lincoln service area resulting from an inability to recruit an OB/GYN onto the care team.

Potential Risks Associated with Scenario I

The most significant risk is workforce instability. Lincoln has not recruited a full-time permanent OB/GYN since 2020 and continues to rely heavily on per diem providers with utilization of locum tenens physicians when needed. Recruitment challenges are expected to persist due to the low-volume environment and demanding call requirements.

A second risk is operational fragility. The service requires a minimum of four OB/GYN physicians to support a sustainable call rotation. The organization has struggled to recruit and maintain physicians to cover that call rotation. Without four physicians it could result in less patient access or diversions.

Reliance on locum tenens and per diem providers, combined with inconsistent service coverage, makes it more difficult to ensure coordinated, cohesive communication and jeopardizes consistent use of clinical and facility protocols, ultimately increasing the risk to patient safety.

Additionally, the community is at risk for not meeting the needs of the female population ages 45+, which is projected to grow over the next five years. Without ability to recruit an OB/GYN into the provider complement, patients are left going elsewhere for care or choose to forego care altogether.

Potential Benefits Associated with Scenario I

Continuing Labor & Delivery services at Lincoln Hospital would likely be viewed favorably by many community members and members of the medical staff.

This option also avoids organizational disruption. Existing workflows, staffing structures, provider relationships, and community expectations remain intact, reducing change-management challenges and preserving continuity for patients and staff.

Scenario II: Partner Lincoln & Mid Coast and provide full complement of services in both locations.

Low Birth Volumes & Service Area Demographics: As in Scenario I, Lincoln Hospital has been slightly successful at increasing market share over the past several years. Thoughtful consideration was given to opportunities to increase marketing of the services and enable the unit to care for higher-risk patients that are currently referred to larger centers. While Scenario II allows Lincoln and Mid Coast to more seamlessly coordinate care for patients between the two locations, which could result in a small increase in patients delivering at Lincoln, Lincoln's geographic position and declining birth rate make it unlikely that marketing efforts, expanding services, or the benefits of an integrated provider team will result in the significant birth volume needed to achieve long-term sustainability.

While integration with Mid Coast may improve recruitment and modestly increase Lincoln's share of regional deliveries, it would not materially alter the demographic trends affecting the market. The total number of births occurring within the region is expected to remain constrained by declining fertility

rates, continued population aging, and limited population growth. As a result, significant increases in obstetric volume at Lincoln Hospital are unlikely.

One Provider Team, Two Locations: Development of an integrated provider team to cover both communities strengthens the depth of clinical coverage and increases confidence in recruitment efforts. The impact of having an unplanned provider absence is lessened because the pool of providers increases. Standardized care pathway adherence is improved under single physician and administrative oversight and there is opportunity for team members to rotate at both locations, improving exposure to high-risk scenarios and strengthening clinical competencies of the team.

Recruitment and Retention: A "one team" approach may improve recruitment and may allow for more seamless collaboration to support new graduates in board certification case volume requirements. Mentorship may also be improved with a single team, although onsite support is still extremely limited in a low volume setting.

Gynecology Services: Improved recruitment success will allow increased, more consistent access to gynecologic services at Lincoln. However, significant attention is still needed to maintain full obstetric call coverage in a low volume setting, detracting from time paid to the attention of outpatient services.

Potential Risks Associated with Scenario II

The risks associated with Scenario II are largely the same as those described in Scenario I. While integration with Mid Coast may provide additional operational support, the model requires four OBGYN providers plus CNMs and FMOBs complement at a very low-volume Labor & Delivery program at Lincoln Hospital.

As a result, the workforce stability, recruitment, call burden, clinical competency, and long-term sustainability challenges identified in Scenario I would largely remain the same. Scenario II changes the coverage model but does not fundamentally change the underlying demographic, workforce, or volume challenges facing Labor & Delivery services at Lincoln Hospital.

Potential Benefits Associated with Scenario II

The scenario maintains local Labor & Delivery access while also improving OB/GYN stability. Patients continue to receive care, the full complement of services at Lincoln remains available, and the organization benefits of greater physician collaboration and shared resources

This scenario may improve provider recruitment and retention opportunities by creating a larger, integrated physician group serving both Lincoln and Mid Coast. Candidates may view a larger regional practice more favorably than an isolated rural position.

Scenario III: Partner Lincoln & Mid Coast, provide gynecology and outpatient perinatal care in both locations while consolidating Labor & Delivery at Mid Coast

Labor & Delivery Capacity at Mid Coast: By continuing to offer outpatient prenatal services at Lincoln using a "one team" approach, most patients who currently deliver at Lincoln will likely choose to deliver at Mid Coast. Ensuring Mid Coast Hospital is equipped to support this increased volume to ensure a smooth transition and positive patient experience is important. Given the Mid Coast unit is accustomed to a higher volume of births, it is well positioned to take on the Lincoln birth volume. Suggestions were

made for additional OB RN staffing in the Lincoln practice to ensure smooth coordination for patients between the Lincoln and Mid Coast sites and to ensure supportive services typically offered on Labor & Delivery, such as lactation consultations, were available in both locations. Additionally, suggestions were made to incorporate additional Labor & Delivery unit tours at Mid Coast and to coordinate childbirth educational offerings at both sites.

Lincoln Emergency Department Readiness: A review of statistics from Maine suggests that unplanned births at sites where inpatient OB services are not offered is a rare event, occurring 0-1 times per year. Targeted re-education (e.g., simulation training and Basic Life Support in Obstetrics certification) would increase the comfort level of ED providers and nursing teams.

Low Birth Volumes & Service Area Demographics: This scenario supports maintaining outpatient prenatal and postpartum care, outpatient gynecologic care, and gynecologic surgeries at Lincoln. The concern of low birth volumes is substantially mitigated through consolidation of deliveries at a higher-volume site. This is particularly important given demographic projections showing continued population aging, declining birth rates, and limited population growth in Lincoln County through 2035. Outpatient care is improved through a consistent, stable provider complement, enabling greater attention to gynecologic services and women's health needs that are expected to increase as the population ages.

Recruitment & Retention: A "one team" approach with consolidated delivery services offers the most improvement for recruitment success. Candidates are attracted to higher volume settings and collaboration to support new graduates in board certification case volume requirements is most seamless. Mentorship is also significantly improved with a single team providing deliveries in a single location.

Gynecologic Service Offerings: The efficiencies gained by consolidating deliveries allows Lincoln Hospital to prioritize attention to gynecologic service offerings because focus previously dedicated to covering Labor & Delivery is no longer a significant time and energy strain. A cohesive, single team of providers partner seamlessly together, ensuring improved access to a wider complement of gynecologic services, increasing the gynecology visit volumes for females ages 45+.

Potential Risks Associated with Scenario III

The most visible risk is reduced local access for deliveries. Average travel times would increase by approximately 18 minutes, and some patients would experience travel times greater than 50 minutes. While most patients would remain within 39 minutes of a delivery hospital, increased travel time may increase the risk of adverse outcomes for a subset of patients, particularly those experiencing precipitous labor or obstetric emergencies. Travel conditions may be further affected by seasonal weather, traffic congestion, and other circumstances that can increase transportation times.

At the same time, Lincoln Hospital is located within reasonable driving distance of several hospitals that provide obstetric services, and many families in the area already choose to deliver at hospitals other than Lincoln. Maine's emergency medical services (EMS) system routinely transports obstetric patients to hospitals with Labor & Delivery capability when clinically appropriate. State EMS data from the first half of 2026 showed that 95% of 911 responses for obstetric complaints resulted in transport directly to a hospital with in-person obstetric capacity.[xxii] In addition, EMS regularly coordinates transfers of

pregnant patients between hospitals when higher levels of care are needed, reflecting an established statewide system for regionalized obstetric care.

Preliminary review of experience following the closure of Labor & Delivery services at Waldo Hospital has not identified significant unanticipated patient safety concerns related to access, although ongoing monitoring remains important.

The hospital may experience community concern or resistance. Labor & Delivery services are often viewed as an essential community asset, and closure of an obstetric unit can generate significant public reaction and reputational challenges.

Successful implementation would require complex transition planning, including patient navigation, emergency department readiness training, EMS coordination, transport protocols, workforce redeployment, and extensive communication efforts.

There is also a risk that some community members perceive the change as a reduction in services, even if outpatient obstetric and gynecologic care remain available locally. This perception could affect patient loyalty and community trust if not managed effectively.

Potential Benefits Associated with Scenario III

This scenario offers the strongest workforce stability. A single regional call schedule reduces provider burden, decreases dependence on temporary staffing, and creates more reliable contingency coverage.

Recruitment feasibility improves because providers generally prefer larger practices, higher delivery volumes, stronger peer support, and more standardized clinical environments. MaineHealth's recruitment experience has shown greater success in larger-volume delivery settings in our own hospitals.

Quality may improve through concentration of deliveries at higher-volume hospitals, where providers and care teams have greater opportunities to maintain procedural competencies and experience.

The scenario preserves local prenatal care, postpartum care, gynecologic services, and outpatient women's health services, allowing most routine care to remain in the community.

V. Commitment to Ongoing Reassessment

Whether a decision is made to attempt to enhance staffing and grow gynecologic volume (Scenario II) or stop deliveries at Lincoln Hospital (Scenario III), there may be unforeseen circumstances that affect the outcome.

Regardless of the path selected, ongoing evaluation will be necessary to assess outcomes, identify unintended consequences, and determine whether modifications to service delivery are warranted.

Close dialogue must be maintained with the community and medical staff and safety events carefully monitored.

Appendix A: Birth Volumes across Maine

Source of Data: Maine's Rural Maternity Crisis: A Policy Agenda

Prepared by: Dora Anne Mills; Maine Policy Review, Volume 34, Issue 2, *Rural Maine. 2025*

TABLE 2: **Live Maine Births by Facility**

Facility	CY 2024	CY 2023	CY 2022	CY 2021	CY 2020	CY 2019
Delivered At Home	330	321	324	307	274	227
Northern Sun (Topsham) - R		4	9	6	9	6
The Birth House (Bridgton) - R		7	12	5	9	12
Holly #7 (Bangor)		40	39	9	15	11
Soft Corner Midwifery (Bath) - R		2				
Women First (Machias) - R		1				
Free-Standing Birth Center	75					
Bridgton Hospital (2021) - R		1	1	27	58	60
Northern Maine Medical Center (2023) - R		14	46	45	53	43
St Mary's Regional (2022)		1	246	482	504	542
Rumford Community(2023) - R		8	55	84	80	95
York Hospital (2023)		187	291	265	271	324
Millinocket Regional (1998) - R	1	0	1	2	2	
Calais Regional (2018) - R	1	0	1	1	1	2
MH Waldo - R	125	109	97	123	119	137
Houlton Regional - R	82	90	88	107	103	119
Mt Desert Island - R	33	59	67	42	62	64
Northern Light -Inland Hospital - R	208	268	270	270	296	307
MH Franklin - R	256	281	240	222	237	229
MH Lincoln - R	132	132	101	111	111	92
MH Stephens - R	233	204	225	151	147	163
MH Mid Coast - R	475	528	506	532	464	569
MH Pen Bay - R	201	202	234	211	225	248
MH Maine Medical Center Biddeford/Sanford	437	436	476	441	417	505
MH Maine Medical Center Portland	3330	3236	3313	3157	3055	2942
Central Maine Medical	735	855	746	525	559	568
Cary Medical Center - R	214	201	194	195	196	204
Mayo Regional - R	113	104	112	108	108	85
Redington-Fairview - R	112	118	103	119	125	125
Down East Community - R	83	112	141	183	153	177
MaineGeneral Alfond Center for Health - R	1003	1050	1033	1058	980	1015
Northern Light-A.R. Gould - R	190	177	155	212	166	175
Northern Light-Mercy Hospital	725	670	682	632	669	638
Northern Light -Eastern Maine Medical Center	1591	1587	1721	1669	1607	1625
Northern Light-Maine Coast Hospital - R	259	186	170	184	211	193
Total deliveries	11,587	11,737	12198	11,962	11,296	11,511

Source: Maine Center for Disease Control, Office of Data, Research, and Vital Statistics, Communication with Terry Bryant, May 2025.
Note: R following the hospital name indicates a rural hospital using federal HRSA definition of rural. Gray-shaded area indicates facilities that have closed maternity units as of Dec. 2025.

Appendix B: Lincoln Service Area and Birthing Location Choices

Considerable attention in this analysis of the viability of Labor & Delivery services at Lincoln Hospital has focused on understanding why many families in the Lincoln service area choose to deliver at hospitals other than Lincoln.

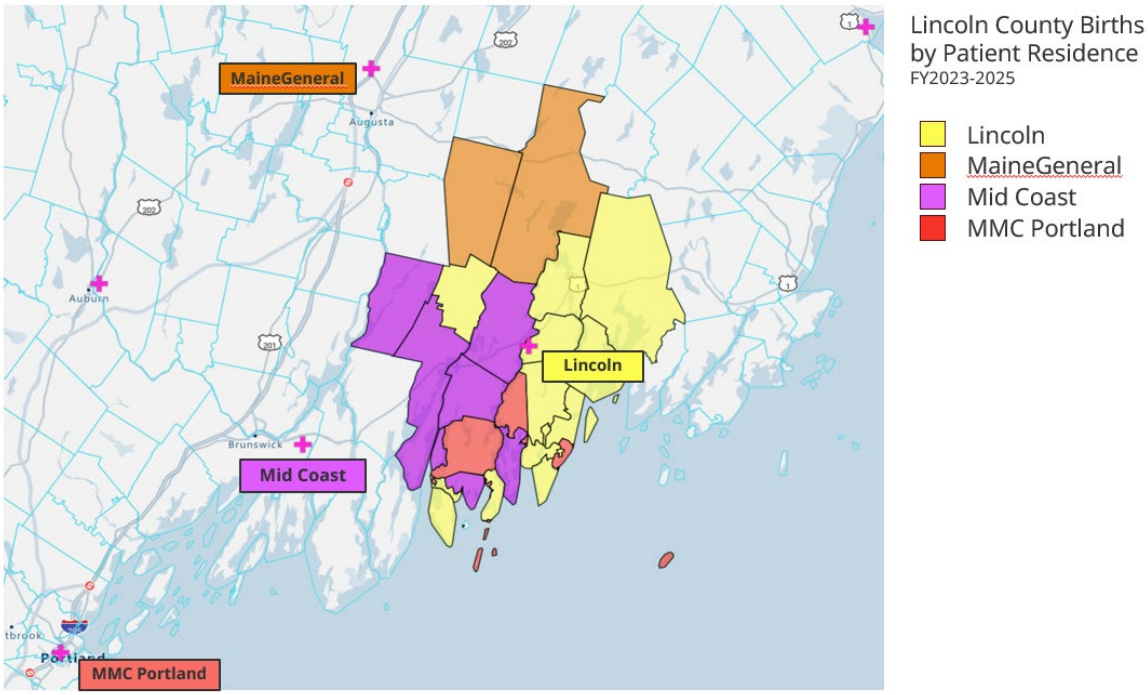
The Lincoln community is geographically positioned between several hospitals that provide obstetric services, including Mid Coast Hospital, Pen Bay Hospital, Maine Medical Center-Portland, and MaineGeneral. This creates a setting in which patients have multiple viable options for where to deliver, rather than a single dominant provider.

These patterns are illustrated in the map below, which shows the primary hospital of delivery by patient residence over the past three years. The data demonstrates that births among Lincoln residents are distributed across several regional hospitals, rather than concentrated at a single location. In many communities, a substantial share of families choose to deliver outside of Lincoln Hospital, even though local services remain available.

Proximity is clearly a key factor influencing patient choice. Communities in the northern and western parts of the region show strong alignment with MaineGeneral and Mid Coast, while coastal communities often utilize Mid Coast and Maine Medical Center. Even in areas closest to Lincoln Hospital, a portion of patients choose to deliver elsewhere, reflecting the availability of nearby alternatives.

Compounding this is the referral of higher risk pregnancies to hospitals with greater clinical depth and specialty resources, which further contributes to deliveries occurring outside the local hospital.

Taken together, these patterns demonstrate that a regional model of care is already in place, with patients routinely accessing multiple hospitals for Labor & Delivery services based on geography, clinical needs, and personal preference, rather than relying exclusively on Lincoln Hospital.



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