**Etiometry LLC** is creating clinical decision support systems (CDSS) to improve quality of patient care in the Intensive Care Unit (ICU). Our proprietary technology assists medical personnel by interpreting large volumes of real-time data and providing a snapshot view of the clinical risks to the patient.

### The Problem: Data Overload in the ICU
Data overload hampers the ability of clinicians to provide optimal care. Patients within the ICU generate many gigabytes of physiologic measurements per day. Clinical management of multiple patients requires efficient and effective interpretation. ICUs with 24-hour staffed physicians specialized in critical care medicine (intensivists) can achieve 34% shorter length-of-stay and 2.3 times lower mortality\(^1\). Next generation decision support systems will assist physicians with the barrage of data in the ICU, optimizing care while alleviating staffing shortages.

### The Solution: Risk Based Patient Monitoring
Etiometry™ technology interprets patient data in real-time, presenting clinicians with a clear and intuitive view of the patient’s status.

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<th>Patient in ICU</th>
<th>Risk Assessment Algorithm</th>
<th>Visualization</th>
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**Physiology Observer™**
- Aggregated measures are analyzed to quantify the patient’s physiology.

**Clinical Interpreter™**
- Creates a description of actionable medical risks to support clinical decision-making.

A proprietary mobile interface revolutionizes how clinicians interact with, and comprehend the clinical risks in the context of the collected data, medical record, and institution-specific clinical guidance. Using this system, caregivers across broad specialties can leverage their experience to provide optimal care.

### The Opportunity
Etiometry is applying its technology to better control the escalating costs of managing patients in the ICU through reducing mortality, length of stay, and unnecessary testing. Inefficiencies due to a shortage of ICU specialists cost $4.28B and result in 54,000 mortalities annually\(^2\). Critical care accounts for approximately 13% of the total hospital expenditures, or 4.1% of total healthcare costs.

### Competitive Advantage
Early innovation addressing data overload in the ICU focused on aggregating data from multiple clinical sources. Platforms such as eICU (acquired by Philips Medical), VitalSync (acquired by Covidien), Bernoulli, and BedMasterEx are becoming standard of care. The availability of aggregated data has given rise to an opportunity for next-generation analytics. Current competitors have focused on addressing disparate clinical problems, such as early detection of sepsis (HERO Score -MPSC), extubation timing (Predictive Medical Technologies), and multivariable alarms (UPenn).

Spearheaded with clinical partners, Etiometry™ comprehensive technology achieves a paradigm shift from signal-based patient monitoring to risk-based patient monitoring.

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1. Society of Critical Care Medicine
2. The Leapfrog Group