**Lead Lankenau Institute for Medical Research Inventor**

Michelle Gray, BSN, RN, CBC, Clinical Informatics Specialist

## Unmet Need

Electronic Medical Record systems (EMRs) have become virtually ubiquitous in the medical field and are widely used at hospitals around the world.  Current EMRs provide robust medical records organized and arranged on an individual, per-patient basis.

However, there are certain circumstances when the care of two patients is interrelated, such as during breastfeeding and other aspects of afterbirth care.  In these situations, current EMR software is inadequate, as patient information cannot be shared across charts.  Rather, data must be entered or viewed individually on a patient-by-patient basis.  Many times, duplicative information must be entered from both the perspective of the mother (on the mother's EMR chart), and the perspective of the child (on the child's EMR chart). Not only does this create more opportunities for human error during data entry, but quality of care is also affected as information in the mother's medical records may be critical to the care of the child.

There is a demonstrated need for EMR workflow software that allows relevant data from multiple patients to be shared in a single chart or graphic user interface.

## Opportunity

There are over 5000 hospitals in the United States that currently use an EMR[1].  Inventors have not identified any current EMR offering a shared chart feature that allows patient information to be linked and viewed on a single chart, or for information to be manually entered into one patient's chart and auto-populated selectively into a related / linked patient's chart.  As add-on software compatible with any EMR, the Gray EMR system has enormous market potential.

The inventors, her colleagues, and EMR experts believe the appeal wouldn't just be limited to hospitals offering maternal and child care, as a shared chart has additional functionality in a variety of health care circumstances. With the inefficiencies inherent in current EMRs, the Gray EMR system has the potential to disrupt and to be viewed as a critical feature of EMR software at hospitals around the world.

The Gray EMR system is add-on software designed to augment any EMR with the capability to create shared charts for multiple patients, such as a mother and child. The Gray EMR software consists of three principal conceptual components

- A graphical user interface (GUI) that allows a user to view relevant data from the records of two patients on a single shared chart during specific and identified circumstances;
- A record management system for storing and retrieving data; and
- A record synchronization module allowing data entered into one chart is auto-populated into a related chart, eliminating inefficiencies related to dual-entry of the same information into multiple charts, protecting patient privacy, and upholding HIPPA regulations.

With the Gray EMR, synced lactation schedules can easily be created for both mother and child and filled out and updated through a single chart simultaneously.

Shared charts could also be utilized for other purposes, such as situations where maternal prenatal lab result information is important for the care of the child during sepsis evaluation. Alternate applications extend further to any circumstance where the medical information of multiple patients is relevant to a single case or task.

---

[1] Roth Mandy, Klas U.S. Hospital EMR Market Share 2018 Report, 2018

## Unique Attributes

- Graphical user interface that allows relevant data from multiple patients to be viewed and manipulated via a single chart or screen.

- Memory system that allows information to be entered, synchronized, recalled, and transferred seamlessly from individual charts to a shared chart.

- Record synchronization module that sorts what data from an individual chart is accessible and relevant to the shared chart and allows entry into one chart, with storage in a linked chart.

## Clinical Applications

- Hospitals, clinics, any healthcare setting where EMRs are utilized.

- Maternal / Child care. Synchronized lactation schedules, immunizations, sepsis evaluation, various medical procedures, etc.

- Outbreak management, any procedure or circumstance where the medical information of multiple patients is related.

## Stage of Development

Designed, preparing for final programming.

## Intellectual Property

Pending patent: US Provisional Patent has been filed.

## Collaboration Opportunity

Available for exclusive licensing.

### INSTITUTIONAL CONTACT

George C. Prendergast, PhD
+1 484.476.8400
prendergast@limr.org

### L2C PARTNERS CONTACT

Merle Gilmore
+1 610.662.0940
gilmore@l2cpartners.com