4. BIOMEDICAL RESEARCH INFORMATICS MANAGEMENT (BRIM)

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<th>Objectives</th>
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<td>1. Develop Integrated Collaborative Research (ICaRe) portal to enhance access to clinical research informatics tools and resources</td>
<td>• Explorys Inc. – An in-house incubated startup providing policy-compliant access to a large, cloud-based, clinical data warehouse for cohort identification and CER</td>
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<td>2. Enhance access to Electronic Health Record (EHR) data for clinical, translational and comparative effectiveness research</td>
<td>• ICaRe – Integrated Collaborative Research portal</td>
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<td>3. Disseminate technologies and best practices to the National CTSA community</td>
<td>• MIMI – Multi-modality, Multi-resource Information Integration - a web-application framework for integrated management of core resource usage</td>
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<td>4. Expand Clinical Research Informatics education and training programs</td>
<td>• Physio-MIMI – an NCRR-funded, multi-institution research data integration environment that combines disparate clinical and physiological data</td>
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Personnel

- Martin Harris, MD (BRIM Executive Director)
- GQ Zhang, PhD (BRIM Co-Director)
- John Sharp, MSSA, PMP (BRIM Co-Director)
- David Kaelber, MD, PhD, MPH (BRIM Leadership Committee)
- William Walch (Clinical Systems)
- David Pilasky, MHA, MCIS (IT Operations)
- Jake Luo, PhD (BRIM Research Innovation)

Notable Accomplishments

- Developed and deployed RMS
- Served as a leader for national REDCap dissemination (REDCap is a data capture tool from Vanderbilt University)
- Implemented Physio-MIMI and completed plans for dissemination
- Developed and deployed MIMI for managing core resource usage functionalities
- Established sustainable clinical data warehouse business model through Explorys Inc. & piloted rollout
- Regional Extension Center (REC) funded from the State of Ohio to deploy EHR to primary care practices around Cleveland with built-in plan for CER support

Select Proposed Projects (2012-2017)

- Develop ICaRe portal for personalized management of investigator’s access to CTSC resources
- Extend REDCap to practice based research networks and community based research settings
- Establish Explorys as the foundation for CTSC comparative effectiveness research
- Disseminate Physio-MIMI, MIMI, RMS to the National CTSA community
- Develop and support Health Informatics MS programs in collaboration with RETP and TTR cores

**Figure 4.1**: The ICaRe Portal integrates existing systems, *at the service level*, for enhancing support of C/T research workflow. Data inside a box indicate year deployed and total usage stats. Labels on dashed edges represent planned integration milestone. Green boxes are systems and tools invented in-house; white boxes are adopted or licensed systems. Integration around the blue node represents activities in Objective 1. Integration around the pink node is part of Objective 2.