**Healthcare IT Implementation Strategy Brief  
Riverside Regional Health System**

Robert Shea - HIM 5065 - 09/17/2025

**SBAR Executive Summary**

* **Situation:** Outdated EHR systems with limited interoperability. No telehealth or virtual care capability. RIS/PACS & LIS are FHIR‑capable but disconnected. Manual pharmacy system with no decision support capabilities.
* **Background:** 200‑bed hospital, three outpatient clinics, two urgent care centers, 15 primary care centers, one imaging center and laboratory at main hospital, contracted imaging and laboratory provider, “See You Now”, and imaging via external portal. Budget $15M/3‑year initiative.
* **Assessment:** Fragmented systems create safety and quality risks, delayed turnaround times, limited analytics, lack of telehealth/virtual care capabilities, and high clinician burden.
* **Recommendation:** One enterprise EHR that connects with LIS and RIS/PACS through FHIR/HL7, modernized Pharmacy, embedded telehealth, hybrid data platform with VNA. I suggest starting with a pilot and then expanding into phases.

**Part 1 — Systems Integration Plan**

**A. Clinical Systems Integration Priority (with ROI rationale)**

* **1)** **Enterprise EHR platform:** Move all sites onto a single EHR system. Clinicians would log in once securely and see labs/imaging directly in the patient record. Value: Improves interoperability across all sites, gives clinicians a complete patient view, reduces logins, minimizes duplicate testing, and retires costly legacy systems.
* **2) Pharmacy modernization + EHR integration:** Replace the outdated pharmacy system with tools for electronic prescribing, bar-code scanning for medications, and safety checks. Value: Improves patient safety, reduces medication waste, and improves pharmacy workflows.
* **3) LIS integration:** Connect the laboratory system to the EHR so orders and results flow directly into the patient chart. Value: Gives clinicians faster access to the results in one place, reduces errors from manual entry, and allows for digital pathology in the future.
* **4) RIS/PACS integration:** Connect the radiology system so imaging orders and results flow into the EHR, with images viewable in the patient chart. Value: Gives clinicians easier access to imaging, reduces delays, and lowers the risk of duplicate scans.

**B. Data Storage Strategy**

* **Hybrid Platform:** Data warehouse for reporting and KPIs, combined with a data lake for raw/semi-structured data that supports advanced analytics and future AI.
* **Vendor Neutral Archive (VNA):** Store imaging centrally so clinicians can access studies from the EHR onsite and remotely.
* **Rationale:** This balances trustworthy reporting with flexible data science, while preparing Riverside for AI powered workflows and population health analytics

**C. Implementation Approach & 3‑Year Timeline**

* **Approach:** Pilot → Phased rollout. Start with one hospital unit and one clinic, then expand by departments. Retain legacy systems in read-only mode during transition.
* **Rationale:** Reduces clinical risk, fits change capacity and allows for quick improvements before full deployment.
* **High‑level Timeline (see Figure 1):** Months 0–6 Planning/Analysis; 6–12 Pilot; Months 12–20 Hospital rollout; Months 20–28 Clinics/Urgent Care; Months 28–40 RIS/PACS + LIS integration & optimization.

**Figure 1.** High‑level 36-40 month implementation timeline (pilot → phased rollout → integration & optimization).

**Part 2 — Change Management & Technology Adoption**

**A.** **Stakeholder Analysis (Power/Interest)**

* **Physicians (High power/High interest):** Key players who help co‑design, appoint department champions, burden‑reduction goals, and involved early during the pilots.
* **Nurses & Allied Health (High interest/Moderate power):** Keep informed and empower with role‑based training, support, and feedback loops.
* **Patients & Community (Low power/High interest):** Keep informed and communicate about portal access, telehealth rollout, and data privacy. Capture patient feedback for improvement.

**B. EHR Burden Reduction Technologies (people/process first)**

* **Ambient Listening with Voice Recognition:** Captures notes and orders in real time, easing documentation burden, and giving more time for patient interaction.
* **AI Chart Summarization:** Pulls together patient medications, conditions, test results, and care needs in one place, making it easier for clinicians to review.
* **Agentic AI:** Helps manage the inbox by drafting replies, routing messages to the right place, and suggesting refills. The staff makes the final review for safety.
* **C. Critical Success Factors & Major Risk**
* **Strong Governance:** A steering committee with clear decision-making authority and physician/nurse champions to guide adoption.
* **Workflow Design & Training:** Map current and future workflows, provide role-based training, and ensure each unit has trained champions to support colleagues during transition.
* **Reliable Integration & Data Quality:** Use standards-based interfaces, validate converted data, and monitor performance to ensure smooth operations.
* **Major Risk – Change Fatigue:** Staff may resist the new system if they feel overwhelmed. A phased rollout with visible quick wins, recognition for early adopters, and rapid response to concerns will maintain engagement.

**D. Success Metrics (process + outcomes)**

* **Process Metric – Patient Throughput:** Track how long patients take from check-in to discharge to identify and reduce bottlenecks.
* **Outcome Metric – Medication Error Rate:** Monitor the frequency of medication mistakes, which should decrease with the new EHR and pharmacy integration.
* **Outcome Metric:** Reduce average documentation time per encounter by 25% to ease clinician burden.