Purpose

The purpose of this Rural Hospital Stabilization Committee “Hub & Spoke” Pilot Program White Paper Report is twofold –

- Report the activities funded within the investment
- Use “lessons learned” to inform the continuous improvement and redesign of rural healthcare delivery in Georgia

Background

In the Rural Hospital Stabilization Committee’s final recommendations to Governor Deal on February 23, 2015, the Georgia Department of Community Health, State Office of Rural Health was designated as the oversight entity for the proposed pilot program implementation and monitoring. This pilot sought to build out an integrated “Hub and Spoke” model to prevent the over-utilization of the emergency department (ED) as a primary care access point. The four initial program hubs were Appling Health System, Crisp Regional Hospital, Emanuel Medical Center, and Union General Hospital.

The goal of the “Hub and Spoke” model is to best use existing and new technology to ensure that patients are being treated in the most appropriate setting thus relieving some of the cost pressures on the smallest rural hospitals’ emergency departments. Working together in partnership, communities can ensure that each patient is receiving the “Right Care, at the Right Time, and in the Right Setting”.

Approach

Using the right metrics to drive rural healthcare performance is critical to determining the success of this segment of healthcare. The four pilot hospitals were brought together on August 14, 2015 to discuss their strategies for meeting the goals set forth in the recommendations report. Using the framework described in Figure 1, the hospital leaders started a brainstorming session with the premise, “What are we trying to accomplish?” and worked through pertinent data regarding financial and operational performance, market share, federal penalty program performance, and the patient perception of care.

![Figure 1 Image](image-url)
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To support the “Right Care, at the Right Time, and at the Right Place”: the pilot hospital leadership established four overarching goals for the program:

- Increase Market Share
- Reduce Potentially Preventable Readmissions
- Reduce non-emergent care and “Super Users” served in the Emergency Department
- Increase Primary Care access

The meeting facilitators used guidance provided by the County Health Rankings Roadmap to Success\(^3\) to provide structure and support each hospital in the assembly of a community stakeholder group to identify the root causes of their communities’ health issues, and develop recommendations for community action. These stakeholders included:

1. Community members
2. Community Healthcare Providers, Decision makers, and those who influence them
3. Community partners/Implementers of programs

The grant execution, including work plan and budget approvals, was completed by October 28, 2015. The program time frame was extended until December 31, 2016 to allow adequate time for hospitals to launch their programs.

Implementation and Preliminary Results

To support each goal the following programs were implemented funded through $2,946,901.25 of the $3,000,000.00 (98%) investment:

**Goal 1 - Increase Market Share (49% of total RHSC funds)**

- **Emergency Department (ED) integration with Emergency Medical Services (EMS)**
  - To ensure the “readiness” and availability of rural hospitals to receive appropriate patients, two hospitals pursued specialty care designations. Crisp Regional Hospital achieved “Remote Stroke Center” designation in May 2017, and Appling Healthcare System successfully met the criteria for “Level 4 Trauma” designation in June 2016. Additionally, the 12-lead EKG monitor has proven to be a landmark addition to the Emergency Medical Services (EMS) toolkit as the critical diagnostic aid to provide care in the field, guide transport to the most appropriate hospital for acute heart conditions and allow notification of the hospital so that emergency staff can be prepared. Funds were used to equip EMS, provide infrastructure for connectivity and the placement of receiving stations at Appling Healthcare System, Crisp Regional Hospital and Emanuel Medical Center. Grant funds were also used to provide automated cardiopulmonary resuscitation devices which will allow medical personnel to perform hands-free consistent and uninterrupted CPR while attending to their patient’s other needs. This is vital to EMS transporting full arrests to the closest facility to optimize patient outcomes and medical staff safety during rural transport. By Quarter 4 2016, 132 EKG transmissions were completed using this new technology.
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- **Existing service line enhancement**
  - Union General Hospital focused on enhancing Emergency Department Services. Their project included a renovation of existing space with the addition of four new treatment rooms and a dedicated Fast Track area with designated “Nurse First” triage. These enhancements have decreased the average triage time from 17 minutes to 7.2 minutes and reduced the average number of patients who leave the emergency department without treatment by approximately 64%.
  - Healthcare is a relationship, and communication is the cornerstone of every successful relationship. To maximize the patient experience Crisp Regional Hospital and Union General Hospital engaged in consultative and coaching services to implement an organization-wide leadership evaluation system in order to establish, accelerate, and hardwire the necessary changes that create a culture of excellence in service delivery. To further enhance the patient experience in the ED, Union General Hospital hired a Patient Advocate to provide ED coverage seven days a week. Both Crisp Regional Hospital and Union General Hospital’s patient perception scores related to “Yes, I would definitely recommend the hospital” – improved 5% and 11% respectively.

- **New service development**
  - Emanuel Medical Center’s review of market share data identified a gap in services related to care of patients with renal disease. To respond to this need, Emanuel partnered with a nephrology service provider which included 24-7 nephrology consults via telemedicine and provision on inpatient dialysis services. The program provides a comprehensive rural renal care program that included staff, patient and community education. By the end of 2016, Emanuel reported a $95,406 net contribution of this program to their revenue.
  - Building the relationships that will positively impact hospital market share is an important strategic approach. Appling Healthcare System’s Industrial/Occupational Medicine Program was developed to deliver healthcare to local businesses and industry. Complete Corporate Care services include functional capacity evaluations, pre and post-employment screenings, preventive health services at the client location or in the traditional office setting by a physician or qualified mid-level provider. The program launched September 1 2016, with a total of 56 patients served during the first quarter of operation. The ongoing nature of the services enhance the relationship with these employees to build loyalty which should lead to the use of other hospital services when needed.
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Goal 2 - Reduce Potentially Preventable Readmissions; and

Goal 3 - Reduce non-emergent care and “Super Users” served in the Emergency Department –

For the purposes of this report these two goals were combined due to cross-cutting initiatives which impacted super users in both categories (36% of total RHSC Funds)

- **Hospital Based Care Coordination** – Appling Health System and Emanuel Medical Center selected care coordination activities to link patients with community partners who can meet their medical, behavioral, and social needs via a nurse case management program. These programs utilized partnerships throughout the community including but not limited to, faith based organization, public health department, and linkages to primary care. The strategies deployed for care coordination involved home visits, phone call outreach, and telehealth. Both hospitals reported at least 45% reductions in ED encounters by the population served by these initiatives.

- **Mobile Integrated Health Care and Community Paramedicine (MIH-CP)** – The MIH-CP innovations have the potential to transform EMS from a strictly emergency care service to a value-based mobile healthcare provider that is fully integrated with an array of healthcare and social services partners to improve the health of the community. Crisp Regional Hospital and Union General Hospital structured their initiative to reduce preventable readmissions and ED use of the top “super users” in the ED focused on engaging their hospital owned EMS program. Crisp Regional focused their efforts impacted their ED encounters by 40%. Union General reported a 32.5% reduction in readmissions by the population served by their initiative.

- **Specialty Telehealth** – Telehealth has great potential to expand access and improve the quality of rural healthcare. It can reduce burdens for patients, such as travel to receive specialty care, and improve monitoring, timeliness, and communications within the healthcare system. All four hospitals implemented telehealth programs – targeting multiple populations such as nursing home residents, inpatient specialty care, in-home monitoring, and schools for neurology and Psychiatric management.

Goal 4 - Increase Primary Care access (3% of total RHSC Funds)

- **Federally Qualified Health Center (FQHC) Partnership** – FQHCs provide comprehensive preventive and primary care to medically underserved populations. FQHC patients are typically low-income and are disproportionately members of ethnic and racial minority groups. Appling Healthcare System partnered with East Georgia Healthcare Center to improve access to care for patients without a medical home and provide resources for prenatal telehealth. This partnership increased the number of indigent patients served from 256 at baseline to 603 by Quarter 4 2016. Crisp Regional Hospital Partnered with Albany Area Primary Health Care to open a school based clinic which completed 852 visits since initiation in April 2016.

- **School – Based Health Care** – During calendar year 2016 Appling Healthcare system enrolled 665 patients into their school based telehealth program. They completed 117 visits. During this same time period, Union General Hospital completed the initial phase of implementation. By Quarter 4, 2016, they had placed telehealth equipment in a total of five schools and received 901 student packets.
Program Strengths and Opportunities

**Strengths –**

- Linkages of rural stakeholders with the hospital has proven to be the greatest opportunity and strength of the Rural Hospital Stabilization Program. Prior to this initiative, some communities had limited knowledge of each other as healthcare providers – in particular, behavioral health, despite the physical proximity of these providers to their facility. This program has forged relationships that can continue to grow with ongoing collaboration in sustaining healthcare delivery to rural Georgia.

- The stabilization funds provided an infrastructure in which hospitals could test innovative programs in response to a rapidly changing health care environment. The hospitals leveraged the investment to bridge the funding gap that exists in population health models. This program provided a necessary level of flexibility, stability, and support for the exploration of new rural health models in Georgia.

**Opportunities -**

- Due to limited data across the healthcare continuum it was difficult to objectively quantify the rural hospital stabilization phase one program results. While the “Pre-Post” Performance Measures reflect hospital performance at two distinct points in time, they are limited in their ability to adequately reflect the complex environment in which the stabilization projects were launched and therefore may or may not correlate with the specific project outcomes. Hospitals and the community stakeholders must share additional longitudinal data across each healthcare delivery settings to understand the impact of performance improvement strategies deployed in the Rural Stabilization Program.

**References Cited:**

1. Rural Hospital Stabilization Committee Final Report to the Governor

2. Figure 1: Metrics Help Rural Hospitals Achieve World-Class Performance, Scott W. Goodspeed; Journal for Healthcare Quality Volume 28, Issue 5 September-October 2006 Pages 28–55


4. [https://www.ruralhealthinfo.org/topics/telehealth](https://www.ruralhealthinfo.org/topics/telehealth)