

SI2013 Collective Impact Proposition

Summer Institute Collective Impact Proposal

Few of the prototypes stemming from the Summer Institute have been utilized or further developed in post-Institute community medicine related endeavors. The level of appreciated advancement ranges from simple translation of ideas presented during institute activities into other SCM educational endeavors to implementation of the Greater-THAN/MyHealth Access Network project, illustrating the wide array of potential outcomes for social innovation projects conceived during the activities that constitute the Summer Institute curriculum. As we move forward, there is continued hope and expectation that the efforts expended during future Institutes and related prototyping activities will yield even greater returns on the investment of time and resources in this unique educational model. In an attempt to bring more prototypes to focus on problems discovered in the community, the Summer Institute organizers have loosely-tested various hypotheses believed to be necessary for full maturation of the various prototypes. Exposure to lean-processing methodologies, attempts to entice prototype champions to become true advocates, and continuing efforts to bring a mindset of fiduciary responsibility to the developing prototypes have been introduced to help shape and evolve the projects toward “success” while simultaneously providing a rich educational experience for the participants. However, to date only limited sustainability has been observed in prototype projects that have evolved from the Institute.

While the original intent of the Institute was to provide an firsthand community medicine learning experience for students and faculty of the new School of Community Medicine track and other OU-Tulsa programs, we currently have a dedicated core of multi-year Institute participants who have studied and begun to contribute to the science of innovation, specifically as it relates to delivery of health care in the context of a community medicine model. Part of this model is the approach to understanding the ecosystem within which the university and associated medical practices reside. This requires the early development of Interpersonal Communication and Systems-Based Practice skills to not only effectively understand and communicate with patients but also to be able to comprehend the myriad of factors that contribute positively and negatively to the overall well-being of the patient. The Summer Institute explicitly explores and attempts to develop the facilities to collectively see, hear, and reflect upon what the community as a whole is calling for in order to evolve to a holistically improved state. What we have observed is that while we explore and synthesize knowledge of the community collectively, we have continued to attempt to address the problems we have discovered in autonomous and isolated ways. We propose that in order to appreciate measurable and sustainable positive outcomes we must approach the solutions to these problems in the same way that they were discovered. Specifically, we must attempt simultaneous interventions in order to capitalize upon the force of *collective impact*. Intuitively, this makes sense. The analogy is the development of multi-drug regimens that have been implemented for treatment of TB and HIV. These examples demonstrate how single drugs used alone are ineffective but utilized in a multi-drug format, synergy can be realized resulting in a therapeutic outcome.

As the prototypes represent the collective perceived call of the community we serve, as interpreted by the Summer Institute participants, we propose a strategy to collectively implement the projects from SI2013 in a simultaneous fashion. We believe that while implementation of a single prototype will generally fail to provide the necessary impact needed to appreciate a significant change within any segment of the Tulsa community medicine ecosystem, a strategic array of complementary prototypes will be able to accomplish this goal.

Collective Impact Proposal to Reduce Emergency Room Utilization at Hillcrest Hospital

A common theme that emerged during Summer Institute 2013 was the realization that overutilization of the Emergency Room is still an issue that plagues the Tulsa healthcare ecosystem. If organized correctly, the majority of the projects can be woven together to create an organic network that will catalyze a desired impact with regards to ER utilization patterns. *Specifically, we believe that by harnessing the force of collective impact we can help Hillcrest Hospital reduce ER admissions and readmissions by a statistically significant degree through coordinating the implementation of the following alliance of social innovation projects.*

The proposed alliance will focus its efforts within the 80% boundary of the Hillcrest ER catchment area (HERCA). A central node of this coalition will be the three projects that directly deal with various facets of the utilization patterns present in Tulsa Emergency Rooms. **Three Strikes You're In**, **Merging Emergency Medicine**, and **EMStreamline** each address ER use from different vantage points. **Three Strikes You're In** helps to reduce ER frequent fliers, **Merging Emergency Medicine** helps utilize fire departments in follow-up patient care, and **EMStreamline** helps EMSA in finding the appropriate level of care for patients. Impacting all three projects is the **HealthPrint** project. Implementation of this fingerprint scanner technology will allow for accurate and quick identification of patients by emergency rooms, fire fighters, and EMSA.

A complementary node that will be established and act as an anchor within the HERCA will be the **OU to You** mobile clinic. Logistics of this operation are predicted to be feasible and will additionally support the **Sooner Mobile Neighborhood** project. This project is a social service fair that will allow patients using **OU to You** (and others within the HERCA) to meet with social service agencies in order to learn more about what resources are available for them in Tulsa. The coordinating activities of the **Sooner Mobile Neighborhood** project naturally tie-in with the information that will be provided by the **Service Vine** and **Feed Your Need** projects. **Service Vine** will coordinate and maintain an online directory of social service agencies available in Tulsa. Through its integration within the ER and mobile clinic, **Service Vine** will help patients access social and health resources they most likely need at the time they are in most need of the information. The **Feed Your Need** project is the most feasible and quickest to market prototype proposed. This prototype will coordinate and provide printed guides for services and resources within Tulsa, and specifically within the HERCA to assist and more effectively coordinate citizens' usage of resources and services that are predicted to preventatively diminish ER misuse. In addition, this will provide street level advertisement and information related to the ongoing project in attempts to boost community buy-in.

An additional node of three projects will be utilized following an ER visit. Patients that are prescribed medications will have the opportunity to use the **Bug Out** prototype. This service will be a telephone/smartphone reminder to fill and take prescriptions while ensuring timely and proper usage of medications. **BIG** will be a prescription for usage of a medical library to help patients understand their diagnosis and to help them implement healthier habits and lifestyles. The **Eat Less Feed More** prototype is a prescription for

Individuals who are obese or need to lose weight and may form the hub of a node for broadly addressing a variety of weight loss strategies that are relevant to the health situation that led to the ER visit.

Inadequate transportation has been a recurring theme in previous Summer Institutes and manifested in SI2013 as **Tisdale Wheels to Heal**. The idea behind this prototype is to assist individuals incapable of accomplishing transportation to and from routine clinic visits. Provision of this service can conserve system resources by reducing missed appointments. This is based on a cost analysis of the break-even point for providing the service versus the incurred costs due to missed appointments. If this analysis proves to be valid, an additional systems' savings could be appreciated insofar as adherence to regularly scheduled doctor's visits should diminish the number of events that escalate from missed appointments which subsequently result in a preventable-ER visit.

An additional prototype that was proposed, **Medical Magellan**, is a mobile GPS app which will provide guidance for patients at St. Francis Hospital. Initially the prototype is designed to be an appointment reminder and guidance to the provider service. It is envisioned that this technology would also improve the patient provider relationship and diminish frustration for all stake holders. Leveraging the same technology, this prototype could be implemented at Hillcrest in addition to or instead of at St. Francis. Interestingly, implementation of this prototype at both locations would allow for unique comparisons between the two, one with a collective impact approach and one with a solo approach.

Through the implementation of each of these projects along the lines proposed, we hope to have a collective impact on the Tulsa community resulting in development of a model capable of reducing overutilization of the Hillcrest ER.

Implementation and Coordination

Successfully achieving the collective impact goals along the lines outlined here will prove to be challenging. We propose project coordination by the OU SCM Emergency Medicine department and ownership by interested EM faculty who could strategically take the lead on the overarching collective impact study as well as the lead for the ER node. The various other nodes and prototypes would have established node and project directors within their pieces of the effort within the context of the overarching goals of the collective impact strategy. Buy-in and establishment of a common mission and metrics will also be critical for success. Towards this end assistance from the established Integrative Immunology Center, Center of Applied Research for Non-Profit Organizations and the Center for Clinical and Translational Research.