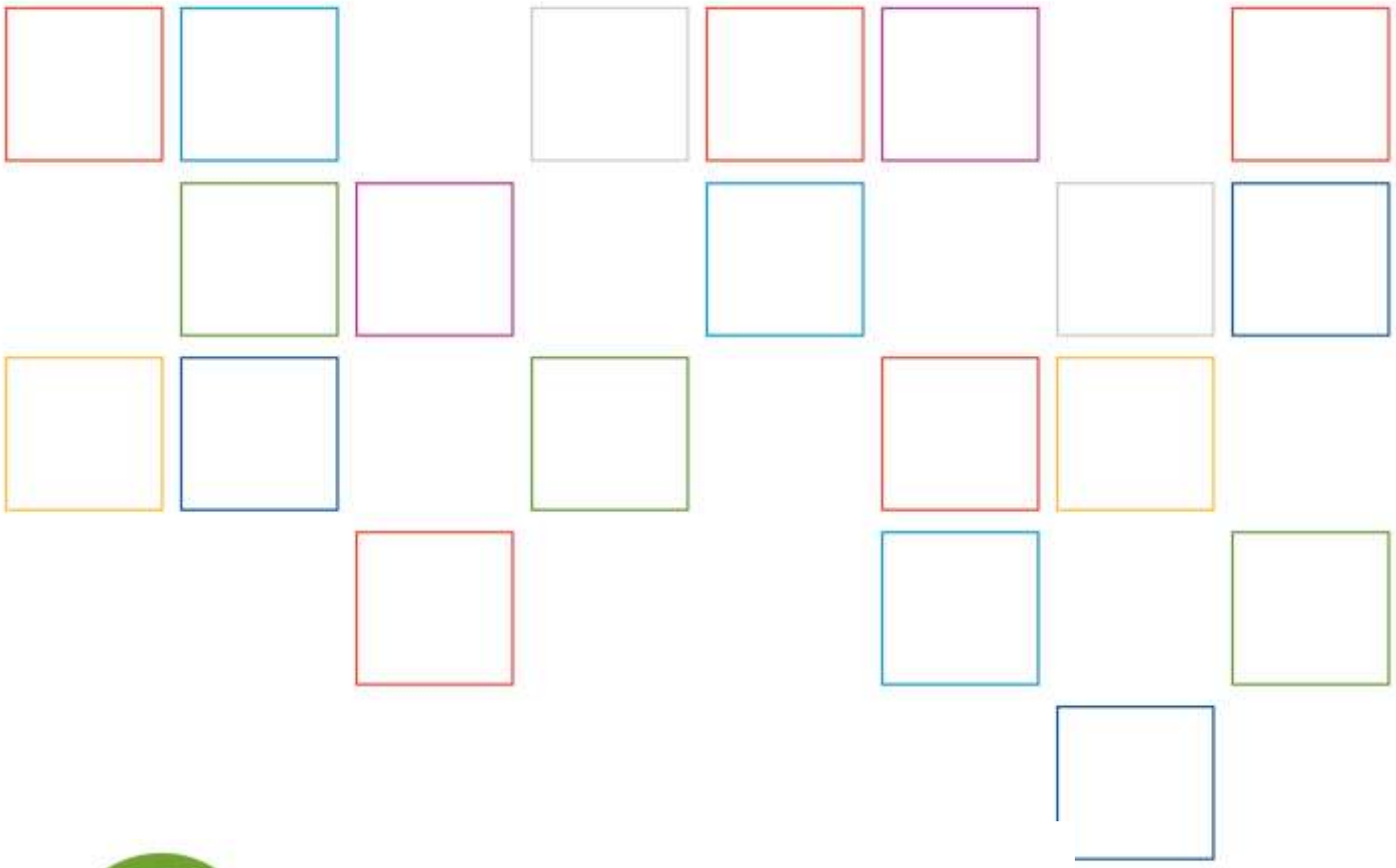

SOUTHSIDE COALITION OF COMMUNITY HEALTH CENTERS

Safety Net Integration

Overview and Lessons Learned from a Care Coordination Pilot Between 8 Community Health Centers and a Hospital serving South Los Angeles

January, 2015

A program funded by Blue Shield of California Foundation

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Executive Summary

Background

With the passage of the Affordable Care Act and new resources to support innovations in health care delivery, the Southside Coalition of Community Health Center members and St. Francis Medical Center began an extensive dialogue to assess the feasibility of building an integrated system of care. This dialogue outlined the importance of improving the quality of care and reducing costs to the system through better coordination and management of patients across the care continuum. Prior to the implementation of this project, there were no formal care coordination activities that existed between community health centers and the safety net hospitals serving South Los Angeles that could circumvent the inappropriate utilization of hospital based care. Much of the time, primary care providers (PCPs) in the Southside network were unaware of patient visits to the emergency department or hospital admissions and only learned of them when a patient returned for a visit and informed their provider. Additionally, PCPs rarely received any communication about the outcome of a patient's visit to a hospital such as instructions for follow-up care, new medications or changes to prescriptions, treatment provided, or lab and diagnostic test results. Data further indicated that there were high rates of chronic disease and inappropriate utilization of health care services in South Los Angeles, thus, the fragmented care that existed between PCPs and the hospital safety net needed to be addressed.

Program Description

Through a partnership with St. Francis Medical Center, the Southside Coalition of Community Health Centers piloted a care coordination model between eight Federally Qualified Health Centers in South Los Angeles whose patients are utilizing the emergency department or have been hospitalized. The primary objectives of this model are defined as follows:

- Develop a model that is financially sustainable, feasible, and effective at managing patient care and care transitions across the spectrum of healthcare systems.
- Implement a system of care coordination that will enable safety net patients to receive well-coordinated care across the care continuum, resulting in patients receiving appropriate transitions, and follow-up care at their primary care clinic.
- Develop an electronic system that will provide a mechanism to track patients while strengthening coordination of patient care.

The target population for this project included patients of all ages seeking healthcare services at St. Francis Medical Center either on an inpatient basis or through the emergency department, and who are also served by the Southside Coalition's health centers in South Los Angeles. Through this program, navigation and some care coordination services were provided to all patients regardless of their health insurance status. Care coordination activities were directed by a team of Patient Navigators, who are employees of the Hospital. The Patient Navigators worked directly inside the Hospital through the department of Case Management, and they were primarily focused on providing support to patients and their families, including helping to schedule follow-up appointments with primary care providers at the health centers, providing education on the appropriate utilization of health care services, and connecting patients to hospital, clinic and other community resources. In order to identify Southside Coalition patients, an IT infrastructure was developed called HIE*Lite which compiles a patient master index from all primary care clinic sites.

The following deliverables resulted as an outcome to this project:

- Southside Coalition and St. Francis Medical Center developed a sustainable plan that includes: written agreements and processes for coordinated care after discharge from an ED or inpatient care unit.
- Patients that have utilized the St. Francis Medical Center hospital-based services (e.g., inpatient and emergency department) who match in the HIE*Lite System as having been seen at one of the Coalition's clinics in the past may elect to return to their clinic for follow-up care and they are provided with the appropriate resources (e.g., education, appointment scheduling assistance) for their follow-up appointment.
- Community health centers receive patient information from St. Francis Medical Center within one hour after an appointment is made regarding patient discharge summaries, labs, medications prescribed, etc.

Evaluation and Reporting

Of the 7,595 patients treated at St. Francis Medical Center that "matched" in the HIE*Lite System, 90 percent (6,814) were evaluated by the Patient Navigators. Of the 6,814 patient encounters that were evaluated by the Patient Navigators, 23 percent (1,562) indicated that follow-up care was needed per the treating provider's discharge orders. Patient Navigators

were able to help schedule appointments for 55.4 percent (865) of these patients, and 67.9 percent (587) of these patients attended their follow-up appointment.

One of the greatest challenges encountered in evaluating this program was the methodology by which financial benefit could be assessed. Fundamentally, the program started with the simple question: do care navigation activities result in a reduction of patient revisits to emergency and inpatient care within 30 days of discharge? In this program, gathering and publishing competitively-sensitive treatment pricing data from the hospital was not possible. Without access to coded, billed, and paid hospital claims for any 30-day avoidable readmissions that incurred penalties or which resulted in below-cost or no payment, the program was unable to accurately quantify cost savings from the perspective of the hospital. However, it was feasible to assess cost savings using 30 day revisit rates for all patients (both ED and inpatient visits) based on the level of care coordination provided by the two Patient Navigators. Data showed the average revisit rates to the emergency department for patients that received navigation and a follow-up appointment were 4.9 percent compared to patients that did not receive any contact by navigators and no follow up appointment at 18.2 percent. It is important to note here, that it was not known why patients returned to the hospital due to the lack of usable patient data. Revisit rates for inpatient admissions for patients that received navigation and a follow-up appointment were 6.2 percent compared to patients that did not receive any contact by navigators and no follow-up appointment at 16.6 percent. Based on modeling of the best possible practices, if 100 percent of Southside patients were evaluated by a Patient Navigator and received a follow-up appointment with their primary care provider, the program would cost $294,000 annually to operate with a potential cost savings of $2,428,102 to the hospital system with avoided revisits. Approximately $76,520 in revenue was collectively generated for the health centers by booking follow-up appointments for their patients presenting at SFMC over the course of this pilot.

Final Observations and Next Steps

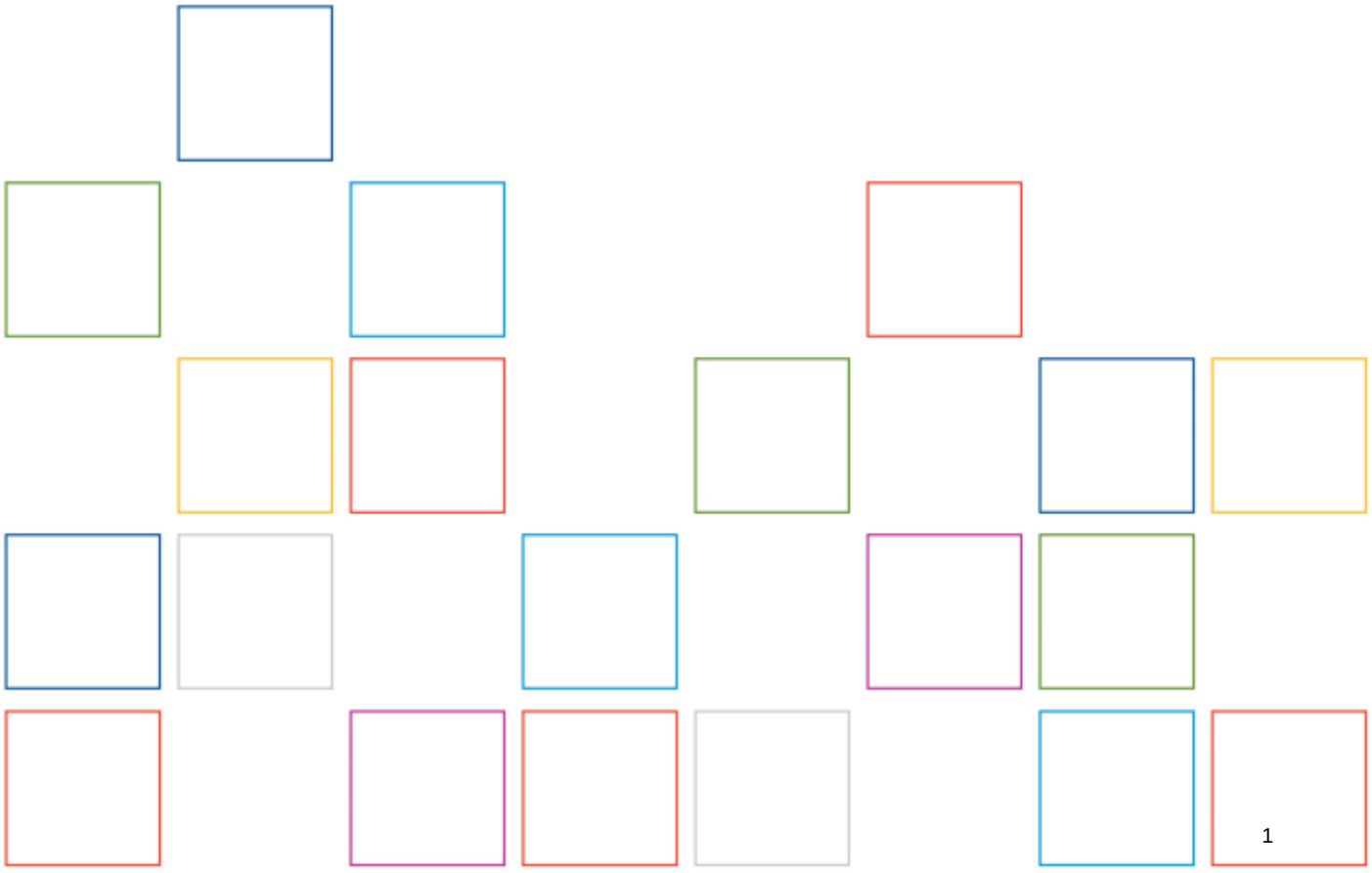
Based on this pilot project, several promising practices and lessons learned were identified for the replication and spread of this model in the future. Key considerations and observations are:

- This model was unique in that the Southside Coalition, a health center consortium, assumed the role of project manager given the strong relationships between the consortium and its members. This relationship helped to facilitate the development of the project with

established trust and buy-in from key decision-makers and was especially useful in guiding dialogue around the sharing of patient demographic information, working with an IT vendor, and negotiating a contract for data sharing with the hospital.

- Sustaining relationships between the Southside Coalition health centers and St. Francis Medical Center is crucial. In order to sustain those relationships, it is imperative to have written contracts, policies and procedures with documented processes in place to preserve and sustain care coordination efforts.
- The coordination of patient care between the health centers and hospital requires considerable resources and the Patient Navigator serves as an important link between these entities. The Southside Coalition, in collaboration with its member health centers and St. Francis Medical Center, will continue to assess and develop a joint strategy to implement and retain supportive services as a core component of this initiative beyond the pilot period and for purposes of replicating the model at other hospital locations.
- With limited financial resources to build out the HIE*Lite System, this pilot project was limited to patient demographic/identifier data that could be collected and shared across clinic and hospital systems. Thus, it was not possible to collect any clinical information for identified patients, such as primary diagnosis codes from the health centers or discharge diagnosis codes from the hospital within the current version of HIE*Lite. Such information would have provided a comprehensive understanding of preventable readmissions to the hospital, and the prevalence of ambulatory care sensitive conditions for which Southside patients are presenting at the hospital with. Future iterations of this model should build in this capacity to information systems.
- Concerns were expressed during the planning stage from both the health centers and the hospital about sharing protected patient clinical information across health care systems. This pilot project was a monumental first step between health centers and a hospital in this community as they had never before agreed to exchange patient information through a secured technology platform. This first step may pave the way for future dialogue around a robust health information exchange between health systems.
- The project was intended to contact 100 percent of the Southside patients, see all patients before discharge from the hospital, and overlap the navigator schedules to accommodate some extended hours (evenings and weekends). The project funded 1.75 FTE, based on our assessment, 3.2 FTE are actually needed to navigate 100 percent of Southside patients.
- Explore opportunities to replicate this program, and implement at other safety net hospitals.

II. Background



II. Background

Background

The South Los Angeles communities within the Southside Coalition of Community Health Centers' ("Southside" or the "Coalition") network are overwhelmingly comprised of low-income, uninsured, multi-ethnic residents. The poverty level and rate of uninsured residents in the service area are the highest in Los Angeles County, and access to primary care is frequently sought on an episodic or emergency basis. The need for accessible healthcare for children and adults is further exemplified by the health outcomes of service area residents. In comparison to Los Angeles County as a whole, the "2013 Key Indicators of Health" report, which is based upon 2011 data, shows that South Los Angeles has a higher proportion of overweight children (29 percent vs. 22.4 percent), low birth weight children (8.1 percent vs. 7.1 percent), and higher teen birth rates (51.1 per 1,000 live births vs. 28.1 per 1,000). Additionally, this population has among the highest rates of adults diagnosed with hypertension (28.4 percent vs. 24 percent) and diabetes (10.1 percent vs. 9.5 percent) in Los Angeles County. Further, this area also contains some of the highest percentages of obese adults (32.7 percent vs. 23.6 percent), and has among the highest rates of coronary heart disease, cancer, diabetes, and stroke mortality. The lack of health facilities and infrastructure is alarming as nearly 45 percent of residents report difficulty accessing care.[1]

In 2010, the South Los Angeles Healthcare Leadership Roundtable, which had been convened by Community Health Councils, Inc., evaluated the acuity of emergency department ("ED") visits in South Los Angeles among ten local safety net hospitals. This stakeholder assessment found that approximately 29 percent of ED visits were for primary care related needs while another 48 percent were for urgent/acute care needs. The Roundtable further found that at St. Francis Medical Center ("SFMC" or the "Hospital"), of the 34,671 ED visits that originated from South Los Angeles ZIP Codes, 5,794 visits could have been treated in a primary care setting and 6,221 visits were more appropriate for an urgent care setting. A report provided by the California Office of Statewide Health Planning and Development ("OSHPD") further demonstrated that rates of preventable hospitalizations in service planning area ("SPA") six (i.e., South Los Angeles) far exceeded every prevention quality indicator for Los Angeles County and the state overall. While demand for trauma and emergency services is high, local capacity for these services is limited. For example, South Los Angeles has approximately ten ED beds per 100,000 lives served, versus an average of 20 beds per 100,000 lives in Los Angeles County. Additionally, the South Los Angeles population has among the highest use rates for inpatient

[1] Los Angeles County Department of Public Health (March, 2013) "Key Indicators of Health"

II. Background

utilization (107 inpatient discharges per 1,000).[2] The high demand for healthcare services in South Los Angeles further supports the need to improve care coordination and strengthen local care delivery systems, resulting in the creation of primary care medical homes and appropriate and seamless care transitions between settings (e.g., ambulatory, inpatient, post-acute).

In response to this data, Southside has been working with its members to transform clinical practices into recognized patient centered medial homes ("PCMH") with a key focus on improving the care coordination of services (e.g., follow-up with a primary care provider) outside of each clinic's four walls. Currently, six (6) of the eight (8) Southside Coalition members have achieved PCMH recognition. The other two clinics plan to apply in 2015 for National Committee for Quality Assurance's ("NCQA") PCMH recognition. PCMH recognition has created more internal focus on continuity of care and the importance of coordinating patient care across healthcare organizations. Additionally, Coalition members have been implementing new information systems and upgrading current systems, including electronic health records and chronic disease management systems/registries.

At the beginning of this work, there were no formal care coordination activities that existed between community health centers and the safety net hospitals serving South Los Angeles that could circumvent the inappropriate utilization of hospital-based care. Much of the time, primary care providers ("PCP") in the Coalition's network were unaware of patient visits to the ED or hospital admissions, and only learn that these events have occurred when notified by the patient. Further, PCPs typically received little to no information regarding the outcome of a patient's visit to the hospital, such as discharge and follow-up care instructions, new medications and/or changes to prescriptions, treatment provided, diagnostic testing results, etc. Given healthcare reform initiatives, it is critical that these challenges are addressed in order to improve care delivery and overall health in the South Los Angeles communities.

[2] The California Endowment, Critical Condition: Examining the Scope of Health Care Services in South L.A., October 2007.

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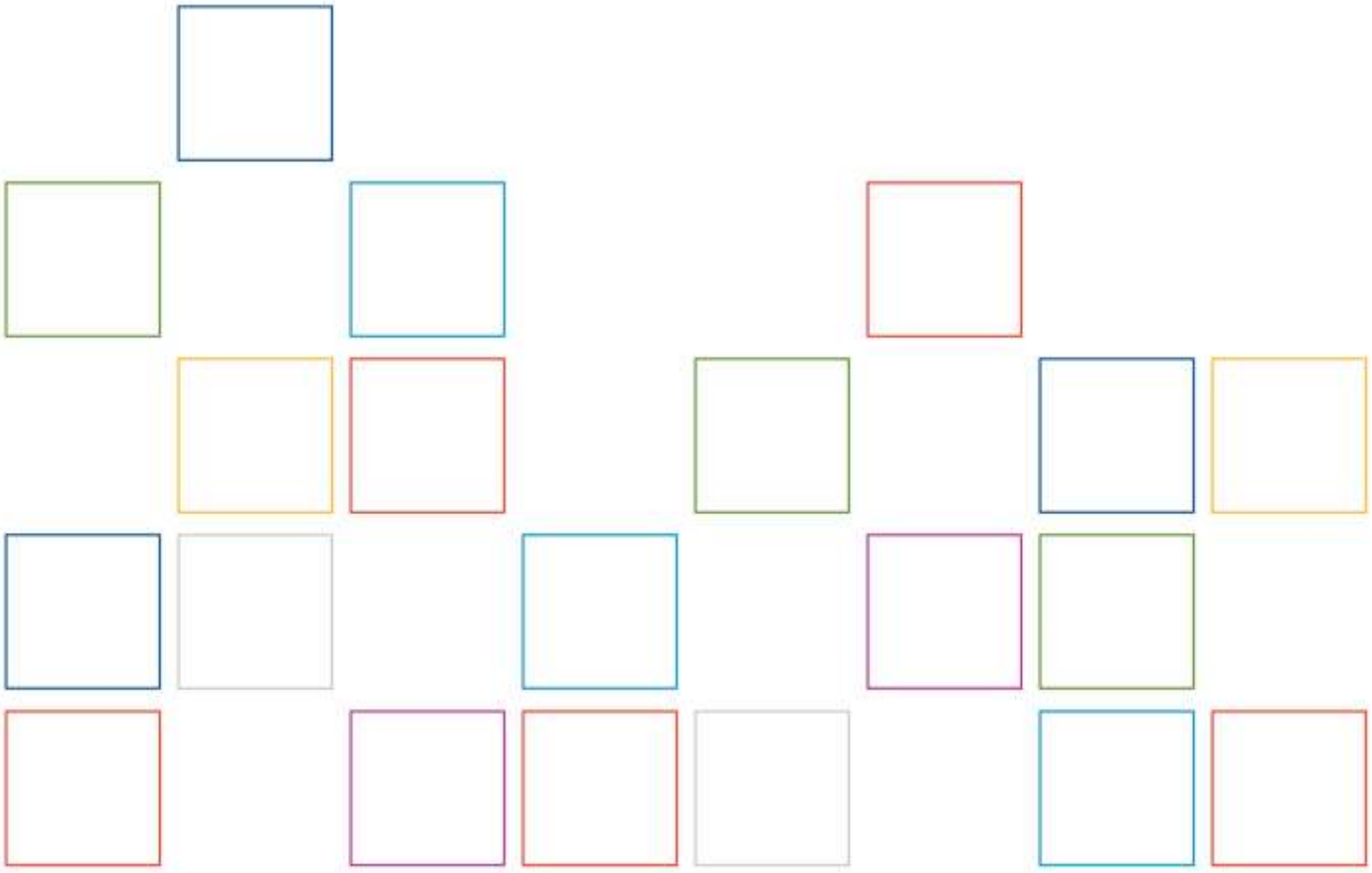

III. Program Description

Program Overview

Through a partnership with SFMC, the Coalition piloted a care coordination model between eight Federally Qualified Health Centers in South Los Angeles whose patients are utilizing the ED or have been hospitalized. The primary objectives of this model are defined as follows:

- Develop a model that is financially sustainable, feasible, and effective at managing patient care and care transitions across the spectrum of healthcare systems using SFMC and Southside members as pilot sites.
- Implement a system of care coordination that will enable safety net patients to receive well-coordinated care across the care continuum, resulting in patients receiving appropriate transitions, and follow-up care at their primary care clinic.
- Develop an electronic system that will provide a mechanism to track patients while strengthening coordination of patient care.

The emphasis on coordination with the eight Southside Coalition members and SFMC designed around the PCMH model creates an infrastructure to improve the quality of care and patient experience while lowering utilization of more expensive and often inappropriate hospital services. The objectives defined above make care delivery and operations more sustainable via reductions in patient care costs. In order to accomplish the objectives of this project, a series of activities were completed:

- **Planning phase:** Consultants facilitated a working group to develop consensus on the navigator role and responsibilities and staffing requirements to assist in care coordination activities and a focus on sustainability of such activities.
- **The working group** consisted of representatives from the Coalition, the eight Southside members, SFMC, and MedPOINT Management/Health Care LA-IPA.
- **Implementation Phase:** During implementation, consultants and the working group monitored and evaluated the effectiveness of strategies during regular meetings with the patient navigators and clinic care coordinators.
  - The Patient Navigators were focused on providing assistance to patients to move from hospital-based care to a primary care medical home. This includes coordination of post-discharge appointments with the accompanying medical records, referrals to internal or external resources, and providing education on the appropriate utilization of health care services.

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- A HIPAA-compliant medical home patient registry was deployed. This registry, HIE* Lite, identifies Coalition patients who present in the SFMC ED or are admitted to the Hospital, and alerts the Patient Navigator of this encounter.

Target Population

The target population for this project includes patients of all ages seeking healthcare services at SFMC either on an inpatient basis or through the ED, and who are also served by the Coalition's health centers in South Los Angeles. South Los Angeles has the highest rates of uninsured adults (38.2 percent) and children (8.6 percent). Los Angeles County's average is 21.3 percent for uninsured adults and 7 percent for children. The population in South Los Angeles also has the highest number of residents reporting difficulty in accessing medical care; 44.6 percent, as compared to the County average of 31.7 percent. Thus, the need for well-coordinated and accessible health care services within this community is significant.[3]

Project Partners and Roles

Southside Coalition of Community Health Centers

The Southside Coalition is a non-profit organization serving as the lead agency of this initiative. The Coalition is a consortium of eight federally qualified health centers ("FQHCs"), who collectively operate 43 health center sites (excluding mobile locations) throughout the South Los Angeles region. These FQHCs are identified as follows:

- Central City Community Health Center
- Eisner Pediatric & Family Medical Center
- South Bay Family Health Care
- South Central Family Health Center
- St. John's Well Child and Family Center
- T.H.E. Health and Wellness Centers
- UMMA Community Clinic
- Watts Healthcare Corporation

The Coalition's role in this effort as project managers was the coordination of all partners by facilitating working group meetings, providing direction to consultants and vendors on the

[3] Los Angeles County Department of Public Health (March, 2013) "Key Indicators of Health"

development of information technology ("IT") systems and evaluation efforts, assisting with the recruitment and hiring of the Navigator Team, continuous monitoring and adjusting of the workflow model, health center and navigator staff orientation and education, and completion of all budget and grant reporting requirements.

All eight members of the Southside Coalition participated in this project. Most health centers uploaded their patient data into the IT system on a monthly basis. Each clinic identified care coordination leads to work with the Patient Navigator team to book follow-up appointments. Health center staff have also actively participated in all working group meetings.

St. Francis Medical Center

SFMC, an affiliate of Daughters of Charity Health System, is a 384-bed faith-based hospital located in Lynwood, California. SFMC is designated as a Level II Trauma Center, and offers a full range of general acute care services including: cardiovascular surgery, obstetrics and gynecology, neonatology, including a 29-bed neonatal intensive care unit, pediatrics, and wound care. Additionally, SFMC also provides acute psychiatric and skilled nursing facility services, and hosts five outpatient clinics located throughout Southeast Los Angeles.

Specific to this initiative, SFMC assigned four different representatives from the Hospital to collaborate with the two navigators and the Southside Coalition and provide input on the overall direction of the project:

- The Patient Navigator's direct supervisor within the case management department communicated the navigator's role and responsibilities to Hospital staff, ensured that the navigators completed appropriate follow-up with patients, and provided overall support.
- In collaboration with the navigators' supervisor and the navigators themselves, the Director of Case Management reviewed patient workflows and the overall roles and responsibilities of the navigators.
- One representative from the Hospital's foundation monitored compliance with the grant's requirements and guidelines, and communicated updates to the navigators as needed.
- The hospital's Director of Managed Care and Provider Relations worked with hospitalists in the ED to bridge relationships with the primary care providers and oversaw the use of data systems.

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Trans World Health Services

Trans World Health Services ("TWHS" or "Trans World") served as the IT partner on this project. TWHS was founded with the goal of enabling technology-supported processes that can be deployed in business environments to make substantial improvements in delivering better care and better value. TWHS developed HIE*Lite specifically for this project and built out a robust reporting and evaluation component of this system which enabled effective monitoring of the project in real time.

The Camden Group

The Camden Group is a healthcare advisory consulting firm located in El Segundo, California. Consultants from The Camden Group assisted the Coalition by facilitating working group meetings, developing job descriptions, disseminating data, and providing consultative advice throughout the duration of this program.

Other Partners

MedPOINT Management is the Management Services Organization for the Health Care LA, IPA ("HCLA") which is a California non-profit mutual benefit organization with a mission to support safety net community clinics and FQHCs. HCLA manages the Coalition's Medi-Cal managed care patients and shares risk with SFMC for their Medi-Cal lives. Representatives of both MEDPOINT Management and HCLA have been engaged in this project, serving in an advisory capacity.

Care Model Description

Through this program, navigation and some care coordination services were provided to all patients regardless of their health insurance status. Care coordination activities are directed by a team of Patient Navigators, whose positions have been funded by a grant from Blue Shield of California Foundation and are employees of the Hospital. The Patient Navigators work directly inside the Hospital through the department of Case Management, and they are primarily focused on providing support to patients and their families, including helping to schedule follow-up appointments with primary care providers at the health centers, providing education on the appropriate utilization of health care services and connecting patients to hospital, clinic and other community resources. In order to identify Coalition patients, an IT infrastructure was developed called HIE*Lite which compiles a patient master index from all primary care clinic sites. This system queries patient demographic information in real time within SFMC's admitting, discharge and transfer systems in order to match Coalition patients that have registered in the ED or have been admitted. The System then guides the navigator team through their workflow

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process resulting in the booking of a follow-up primary care appointment once discharged from the Hospital, providing appropriate documentation, and storing all of the activity in a reportable database. Finally, all pertinent medical records are sent to the primary care provider within 24 hours post patient discharge.

Patient Navigators

The pilot project funded the employment of two Patient Navigators at 1.75 Full Time Equivalents (FTE) who worked at SFMC. One navigator started work in late January, 2014 and the second navigator started work in early March, 2014. Patient Navigators served as a liaison between the patient, the Hospital, and the community health centers. They enhanced the use of appropriate and established health services by assisting and guiding patients to schedule and attend appointments post-discharge, educating patients on the appropriate utilization of the ED, and reconnecting with patients who missed primary care appointments. The navigators also helped to align patients with other non-clinical healthcare resources, such as billing and health insurance enrollment assistance, food assistance, and other personal needs that impact one's overall health.

Both navigators have at least a bachelor's degree, are fluent in English and Spanish, and have excellent verbal and written skills. Additionally, they are each committed to working with ethnically diverse individuals and families who reside in safety net communities. Please refer to Appendix A for the complete job description for this position and qualifications.

Work/Patient Flow

For this initiative, two sets of workflows were developed: 1) workflows specific to patients who are seeking care at SFMC; and 2) workflows specific to communication between the Hospital and Clinics. It should be noted that these workflows were regularly monitored throughout the pilot program and were modified on an as needed basis in order to improve efficiencies and optimization as the pilot progressed. Graphic illustrations of these workflows are provided on the following two pages. These illustrations reflect the current workflow.

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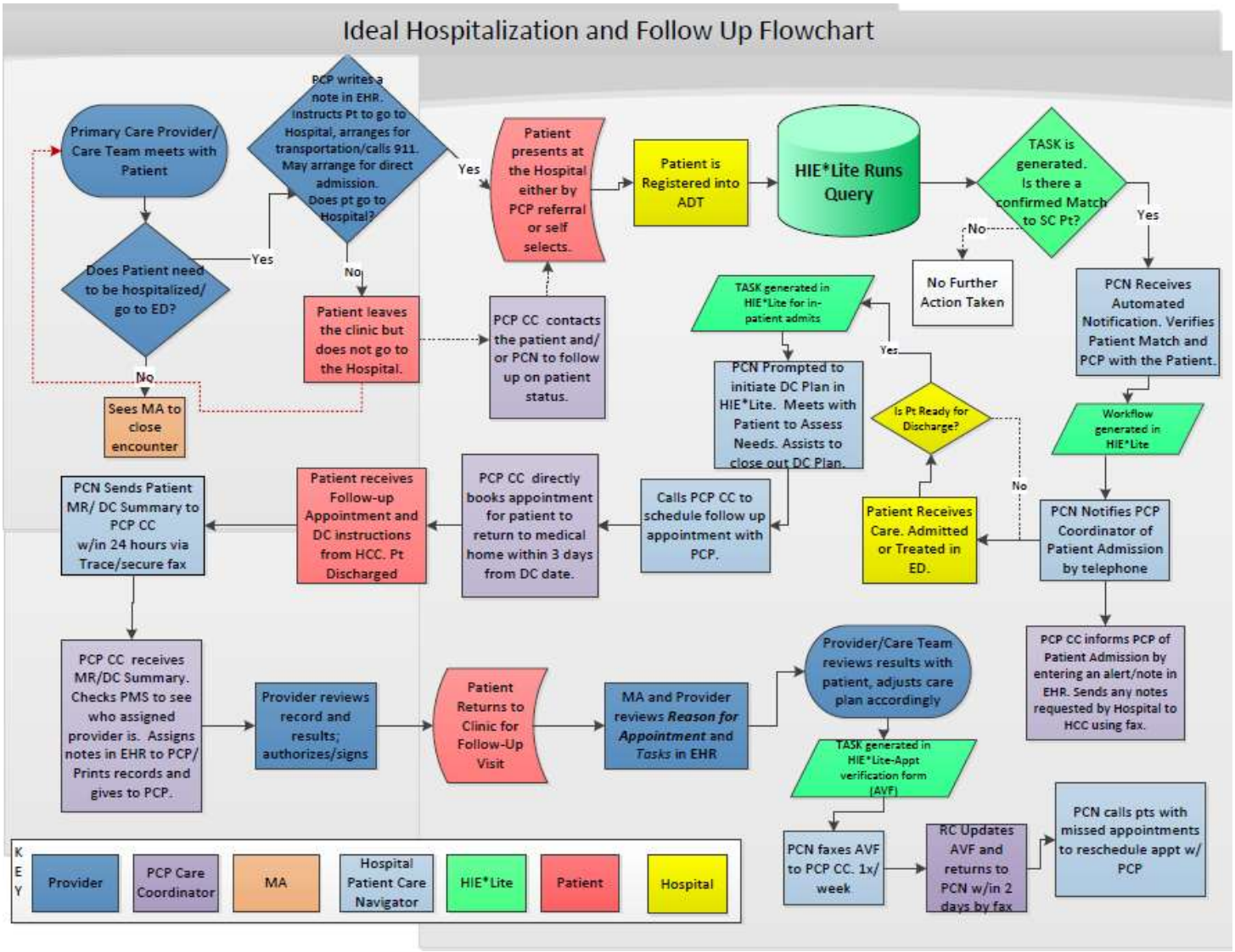

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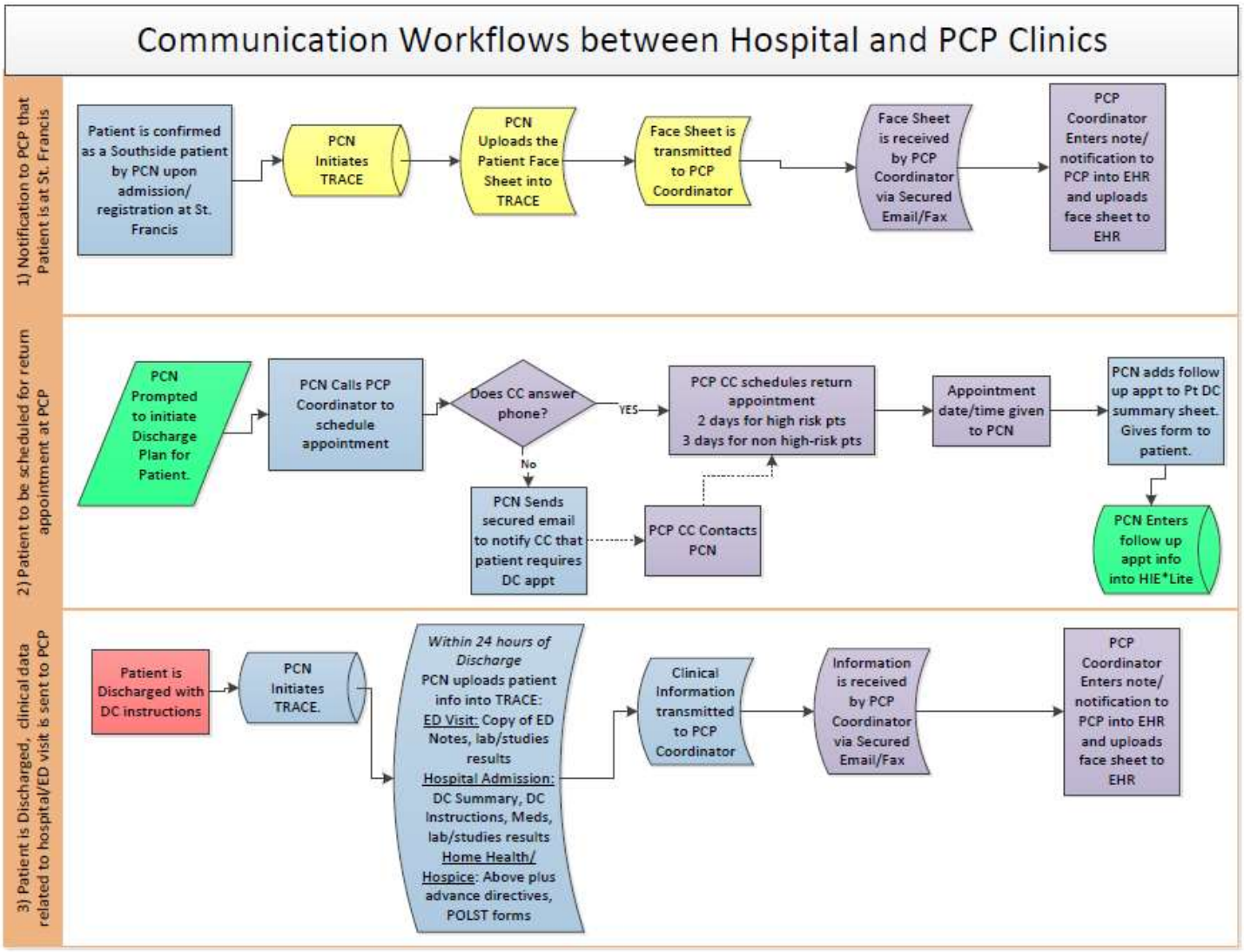

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Program Implementation and Operations

Education

Once the Patient Navigators were hired, they participated in all internal training activities for new hospital employees and were trained and given user access to internal information systems. Navigators were then provided a one day training by Trans World on the use of HIE*Lite. Patient Navigators worked closely with Trans World to map out an efficient workflow for HIE*Lite once it was in use. A plan was also developed to educate the health center staff on the program. As part of this education, a navigator and representative from the Coalition jointly met with each appointment manager and on-site care coordinators to introduce the program, explain the workflows and answer questions.

Uploading of Historical Patient Data

Each of the Southside clinics submitted a patient database to Trans World that included approximately three years of historical data. This historical data was uploaded into the HIE*Lite system, and was on average, updated on a monthly basis. In order to complete this process, Trans World created a detailed data submission manual for all participating clinics, and also provided on-going education and support to facilitate this process. For example, Trans World's Development Manager held individual meetings with each clinic's IT representatives to ensure that they understood all of the required steps to upload their patient data. This individual then worked with each of the clinics as they submitted their initial data files. Additionally, three sites contracted for the extractions to be written by Trans World (UMMA, South Central, and South Bay). These extract routines were created remotely with no need to be on site, and this process enabled these clinics to send data files at any point in time (e.g., daily, weekly monthly).

Patient Identification

When a patient visits the SFMC ED or is admitted to the Hospital for inpatient care, their demographic identifiers (e.g., patient first and last name, date of birth, social security number, and address when available) are queried in the HIE*Lite System to determine if there is a match with an existing Southside clinic patient. The Patient Navigators are able to determine if a patient "matches" in real time, regardless of the time of day. For those patients in which a "match" is found:

- The Patient Navigator is provided with further information that specifies the primary care clinic where that patient was last seen.
- The Patient Navigator researches the location (e.g., ED, inpatient) in which the patient is receiving care in a SFMC-specific database to determine if that patient is still in the Hospital.

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It should be noted that the navigators do not follow-up with patients who have been admitted to SFMC's psychiatric unit and also worked collaboratively with OB patients and the Welcome Baby staff at the hospital.

Patient Visit in the Hospital

Patient Navigators complete a visit with patients who are still in the Hospital at the time "matching" information is received, pending the patient's clinical status allows for such to occur. The primary objective of the visit is to evaluate the patient's follow-up healthcare needs, including an appointment with their primary care provider. A description of the actions taken during and after these visits is illustrated below:

- The Patient Navigator verifies the patient's primary care clinic site.
- The patient provides acceptance to obtain a follow-up appointment through the Patient Navigator.
- The patient provides their availability to attend their follow-up primary care appointment consistent with hospital physician discharge instructions.
- Follow-up appointments are scheduled between two days and up to two weeks after the visit, depending on the anticipated discharge date and acuity of the patient.
  - Note: When inpatient hospitalizations are extended, the navigators cancel and rebook appointments.
- Patients still in the hospital are given an appointment form that contains the clinic contact information, the appointment date and time, clinic hours, and a list of specific items to bring to their appointment. A template of this appointment form is provided in Appendix B. Additionally, the navigators receive the "Daily Assignment for Hospital Case Managers and Social Workers" to facilitate needed patient follow-up.

Patient Contact via Telephone

Patients who have left the hospital before they could be seen by the navigator are contacted by telephone. In order to do so, the following steps are taken:

- Patient telephone numbers are validated through the hospital and HIE*Lite databases. In some cases, the primary care clinic may be contacted to confirm telephone numbers when the navigators have difficulty reaching the patient.
- Once contact with the patient is made over the telephone, patients are identified by stating date of birth and confirmation of their recent visit to SFMC.

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- Patients are provided with education highlighting the importance of a follow-up appointment with their primary care clinic. The Patient Navigator then provides them with assistance to schedule their follow-up appointment based upon the patient's availability.
- Follow-up appointments are typically scheduled between two days and up to two weeks post-discharge depending on patient acuity and scheduling are in accordance with physician discharge instructions.
- Once scheduled, appointments are confirmed with the patient, and the Patient Navigator mails the appointment form (e.g., appointment date and time, clinic hours, list of items to bring to appointment) to an address designated by the patient. (Please refer to Appendix B for a template of this appointment form.)

Resource Assistance for Patients

Patient Navigators have an opportunity to assist patients with other resource needs each time they interact with a patient, whether it is in-person, at the Hospital, or through a telephone conversation. Frequently asked questions relate to topics such as payment of hospital bills, how to obtain health insurance, transportation to clinic appointments, access to food resources, and how to report child abuse. The navigators are able to provide either direct information (e.g., instructions on how to log into the hospital patient portal for bill payments, child abuse hot line phone number), or the navigators directly contact internal resources such as the social worker.

Scheduling Patient Appointments with the Primary Care Clinics

Initial Appointment

- The Patient Navigator will contact the care coordinator at the designated primary care clinic. If the care coordinator is available at the time a Patient Navigator calls, the appointment is scheduled/rescheduled at the time of the call.
- During times in which the care coordinators are not available, the Patient Navigator will leave a message for the care coordinator, submit patient records (face sheet, visit history, encounter form, laboratory and radiology results) through e-fax, and follow up with a secure encrypted e-mail to obtain an appointment.
- After an appointment is confirmed, the Patient Navigator will enter the following information into HIE*Lite: patient appointment date, time, and clinic location, and a summary of the patient records that were sent.

III. Program Description

Patient Call Back

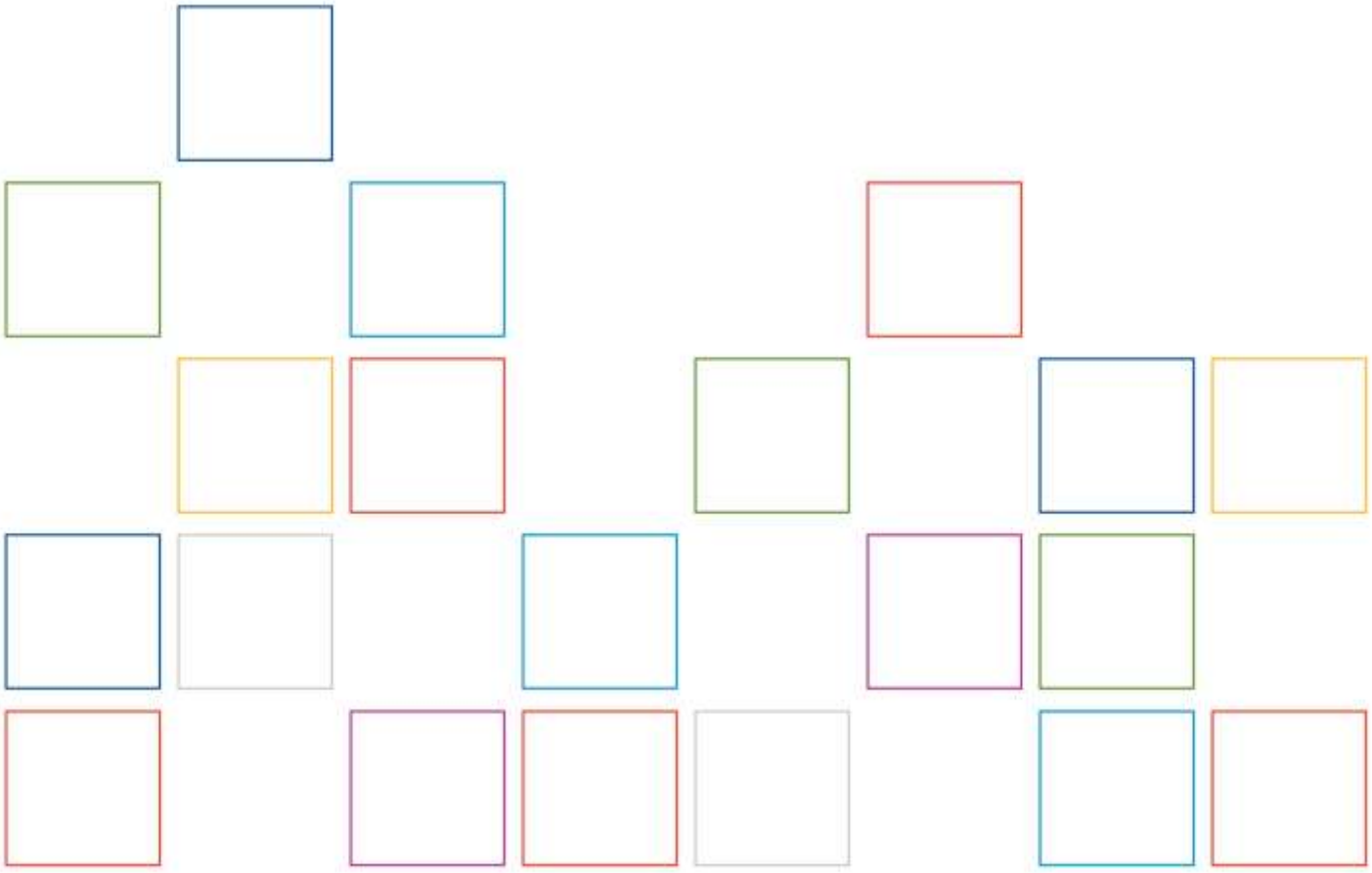
- HIE*Lite automatically produces an Appointment Verification Form on a regular basis which prompts the Patient Navigators to follow-up on booked appointments.
- The Patient Navigator will contact the primary care clinic to confirm whether the patient attended their appointment.
- When patients miss a scheduled clinic visit, the Patient Navigator will follow up with the patient and assist in rescheduling this appointment.
- Appointment outcomes (kept or missed) are logged into HIE*Lite on the Appointment Verification Form.

Project Outcomes

The following deliverables resulted as outcomes of this project:

- Southside and SFMC developed a sustainable plan that includes: written agreements and processes for coordinated care after discharge from an ED or inpatient care unit.
- Patients that have utilized SFMC's hospital-based services (e.g., inpatient and ED) who match in the HIE*Lite System as having been seen at one of the Coalition's clinics in the past may elect to return to their clinic for follow-up care and they are provided with the appropriate resources (e.g., education, appointment scheduling assistance) for their follow-up appointment.
- Community health centers receive patient information from SFMC within one hour after an appointment is made regarding patient discharge summaries, labs, medications prescribed, etc.

IV. Evaluation and Reporting



IV. Evaluation and Reporting

Evaluation and Reporting

The approach was a mixed method approach that combined both quantitative and qualitative data collection strategies to asses both process and outcomes. To date, data sources include the hospital and clinic databases, and the HIE*Lite System. The Coalition monitored program implementation through regularly scheduled meetings with the working group, as well as through routine meetings with the Patient Navigators to understand their perceptions of the program, barriers, and enablers.

Quantitative Data Assessments: Coordinating Patient Access to PCPs with Clinics

Trans World generated monthly reports using data from its HIE*Lite system.

The following measures were evaluated on a monthly basis, and were reported in aggregate and for individual clinics by type of care at SFMC (e.g., ED, inpatient):

- Number of patients that received care at SFMC that were “matched” as Southside patients
- Number of patients that were evaluated by Patient Navigators
- Number of follow-up patient appointments made by Patient Navigators
- Percentage of appointments attended and missed by patients, and the percentage unknown

The table on the following page provides a high-level summary of these metrics by month for each type of care (e.g., ED, inpatient) at SFMC. Key findings are noted as follows:

- Of the 7,595 patients treated at SFMC that “matched” in the HIE*Lite System, 90 percent (6,814) were evaluated by the Patient Navigators. Of the 6,814 patient encounters that were evaluated by the Patient Navigators, 23 percent (1,562) indicated that follow-up care was needed per the treating provider’s discharge orders.
  - Patient Navigators were able to help schedule appointments for 55.4 percent (865) of these patients, and 67.9 percent (587) of these patients attended their follow-up appointment.
  - Patient Navigators cited the following as the most common challenges for those patients who needed follow-up care, but did not receive a scheduled appointment:
    - 49 percent: Unable to establish communication with patient

IV. Evaluation and Reporting

- 13.7 percent: Other reasons, which include those patients that left without being seen, declined all follow-up care, were transferred to a different level of care and/or to another facility, expired, or were in custody
- 7.6 percent: Patient no longer elected to seek care at their prior Southside clinic
- 18.2 percent: Reasons unknown

All Clinics		Patient Matches	Patients Evaluated	Evaluated Patients with Follow-Up Care Indicated	Patient Appts Made	Patient Appts Kept	Appts Kept (%)	Appts Missed (%)	Appts Unknown Status (%)
Feb-14	Emergency	609	61	58	58	37	63.8%	36.2%	0.0%
	Inpatient	128	13	12	12	9	75.0%	25.0%	0.0%
	Total	**737**	**74**	**70**	**70**	**46**	**65.7%**	**34.3%**	**0.0%**
Mar-14	Emergency	846	752	135	135	80	59.3%	40.7%	0.0%
	Inpatient	72	58	7	7	5	71.4%	28.6%	0.0%
	Total	**918**	**810**	**142**	**142**	**85**	**59.9%**	**40.1%**	**0.0%**
Apr-14	Emergency	897	889	95	95	69	72.6%	25.3%	2.1%
	Inpatient	52	51	5	5	3	60.0%	40.0%	0.0%
	Total	**949**	**940**	**100**	**100**	**72**	**72.0%**	**26.0%**	**2.0%**
May-14	Emergency	946	946	113	112	76	67.9%	32.1%	0.0%
	Inpatient	68	68	7	7	5	71.4%	28.6%	0.0%
	Total	**1014**	**1014**	**120**	**119**	**81**	**68.1%**	**31.9%**	**0.0%**
Jun-14	Emergency	888	888	96	94	65	69.2%	29.8%	1.1%
	Inpatient	46	46	2	2	1	50.0%	50.0%	0.0%
	Total	**934**	**934**	**98**	**96**	**66**	**68.8%**	**30.2%**	**1.0%**
Jul-14	Emergency	855	854	109	95	67	70.5%	29.5%	0.0%
	Inpatient	143	143	31	19	15	79.0%	21.1%	0.0%
	Total	**998**	**997**	**140**	**114**	**82**	**71.9%**	**28.1%**	**0.0%**
Aug-14	Emergency	860	860	323	101	64	63.4%	36.6%	0.0%
	Inpatient	225	225	100	26	21	80.8%	19.2%	0.0%
	Total	**1085**	**1085**	**423**	**127**	**85**	**66.9%**	**33.1%**	**0.0%**
Sep-14	Emergency	773	773	386	76	53	69.7%	30.3%	0.0%
	Inpatient	187	187	83	21	17	81.0%	19.0%	0.0%
	Total	**960**	**960**	**469**	**97**	**70**	**72.2%**	**27.8%**	**0.0%**
	Totals:	**7595**	**6814**	**1562**	**865**	**587**	**67.9%**	**31.8%**	**0.3%**

Source: Trans World Health Services

IV. Evaluation and Reporting

Financial Reports

One of the greatest challenges encountered in evaluating this program was the methodology by which financial benefit could be assessed. Fundamentally, the program started with the simple question: do care navigation activities result in a reduction of patient revisits to emergency and inpatient care within 30 days of discharge? This allowed the program to stratify patient revisits into three categories:

- Navigated with follow-up appointment made
- Evaluated but no appointment made
- Not evaluated/no appointment made

These categories formed the basis of the cost modeling exercise that follows:

A drop in a revisit rate may be of financial benefit to the overall health economy, but not necessarily to the treating hospital. In this program, gathering and publishing competitively-sensitive treatment pricing data from the hospital was not possible. Without access to coded, billed, and paid hospital claims for any 30-day avoidable readmissions that incurred penalties or which resulted in below-cost or no payment, the program was unable to accurately quantify cost savings from the perspective of the hospital.

The metrics used to develop these projections were created utilizing the following definitions:

- **30 Day Revisit**: Counted in HIE*Lite where the same patient presents at the hospital ED or inpatient setting within 30 days of a previous discharge.
- **30 Day Revisit Rate:** The number of 30 Day Revisits counted divided by the total number of patient visits counted in a particular cohort, expressed as a percentage.
- **Navigation with Follow-Up Appointment Booked before Revisit**: All patients who had a revisit to SFMC within 30 days of a previous discharge who also had a follow-up appointment booking with a primary care provider made by the patient navigator.
- **Navigation with Evaluation Completed Before Revisit**: All patients who had a revisit to SFMC within 30 days of a previous discharge who also had received an evaluation by a patient navigator, but for whom no follow-up appointment booking was made.
- **No Navigation or Follow-Up Appointment Booked After Revisit**: All patients who had a revisit within 30 days who had received neither an evaluation nor follow-up appointment prior to their revisit to SFMC.

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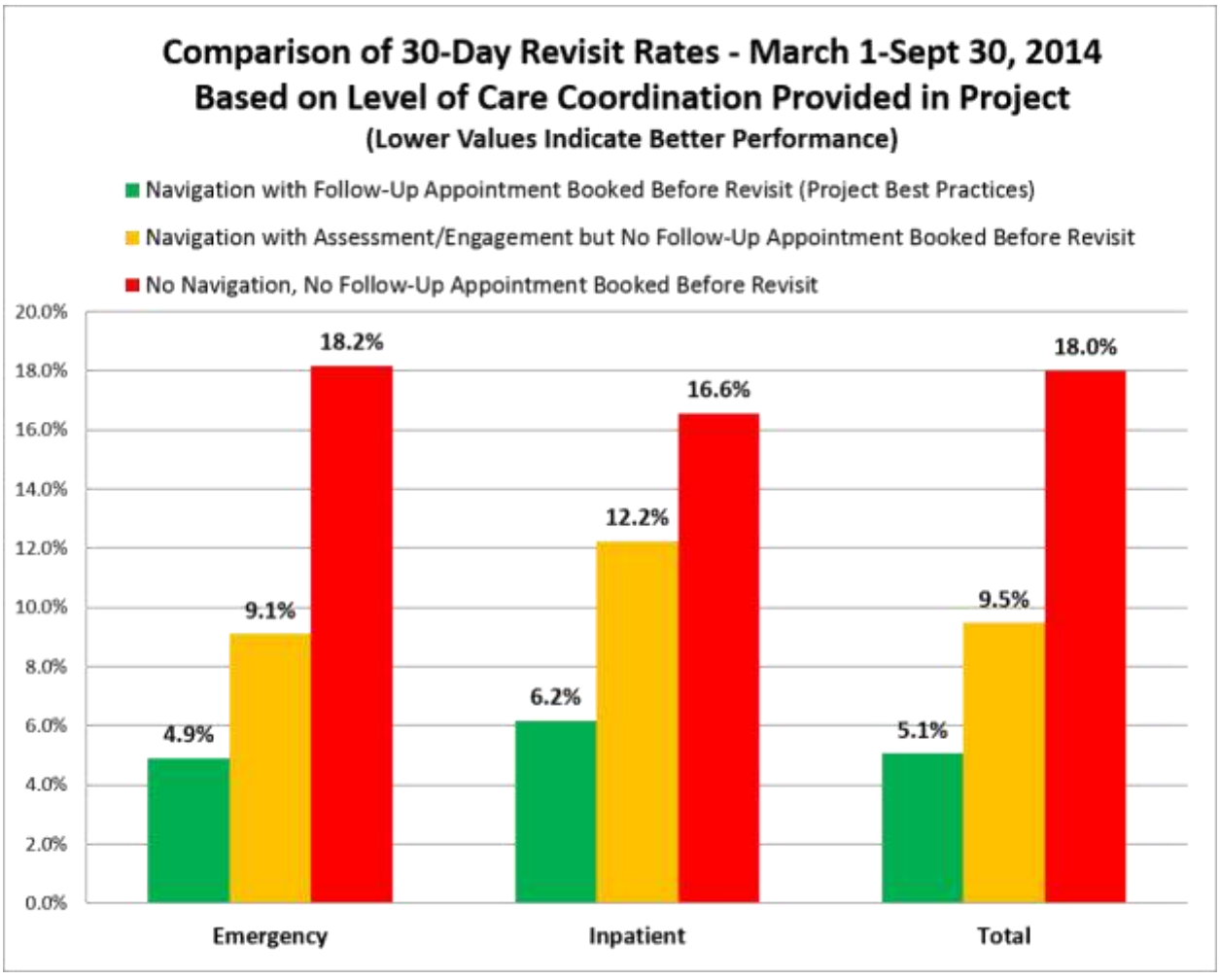
The following graph shows a comparison of 30 day revisit rates from March 1, 2014 through September 30, 2014 for all patients (both ED and inpatient visits) based on the level of care coordination provided by the two Patient Navigators at SFMC. The **red bar** shows the base level for patients not seen by the navigator nor had a scheduled primary care visit before having a return visit to SFMC. The **yellow bar** shows the reduced revisit rate for patients who were evaluated and contacted by the Patient Navigators. However, no follow-up appointment was accepted by the patient. The **green bar** shows substantially reduced revisit rates for patients who were evaluated, contacted, and had a post-hospital appointment set up by the Patient Navigator.



Source: Trans World Health Services

IV. Evaluation and Reporting

The following chart uses the above data as a baseline for the percent of revisits that will take place regardless of whether or not the best care navigation practices were utilized. Using the results achieved by the Patient Navigators, the best practices revisit rate (green column) is subtracted from the no-coordination revisit rate (red column) to represent the percent of patients for whom there is an opportunity for improvement. This is rendered as a percentage that is applied to the relevant revisit patient volume to determine the estimate of the number of avoidable revisits.

Patient Revisit Data

Revisit Reduction Estimated Savings Report
1-Mar-14 through 30-Sep-14

Mar-14 through Sep-14	Visit Type	Actual Revisit Rates, All Southside Patients			Percent Reduction Opportunity for Patients with No Coordination*	Estimated Avoidable Revisits*	Estimated Cost per Visit
		Without Any Coordination	With Care Coordination				
		No Evaluation, No Appointment Made Before Revisit	Interaction with Patient, but No Appointment Booked Before Revisit	Interaction with Patient and Appointment Booked Before Revisit			
	Emergency	18.2%	9.1%	4.9%	73.0%	465	$767.00
	Inpatient	16.6%	12.2%	6.2%	62.8%	28	$11,774.40

Source: Trans World Health Services

Estimated Annual Savings, All Southside Coalition Patients				
Mar-14 through Sep-14	Visit Type	Current Pilot	Better	Best Practice
		Estimated Current Annual Savings Achieved by Care Coordinators in Pilot	Estimated Annual Savings with 100% Evaluations/ Interactions Done by Care Coordinators But With No Bookings Made Before Revisit	Estimated Annual Savings with 100% Evaluations/ Interactions and With Primary Care Clinic Bookings Made Before Revisit
	Emergency	$611,409	$723,634	$1,057,400
	Inpatient	$565,171	$694,519	$1,664,702
	Total	**$1,176,580**	**$1,418,153**	**$2,722,102**

Source: Trans World Health Services

Estimated Annual Savings are calculated as the annualized results of the pilot project based on the estimated costs of avoided revisits.

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Current Pilot Savings (white column): projects what the patient care navigators achieved in the reporting period into an annualized amount.

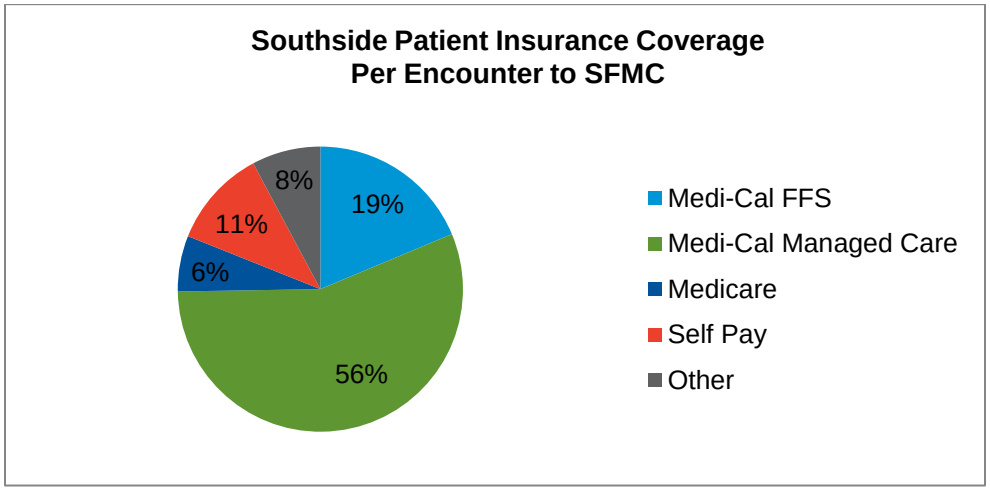
Better (orange column): projects what the patient care navigators could have achieved on an annualized basis if they had been able to contact and evaluate all patients but were unable to make follow-up bookings.

Best Practice (green column): projects the savings achieved if all Southside patients were engaged by the care coordinators and had follow-up appointments booked before any possible revisit within 30 days.

*Data sources used for cost estimations:

- Estimated Cost per Emergency Visit data sources from Robert Woods Johnson Foundation, 2007. (A request to obtain data from the State of California from the Office of Statewide Health and Planning Department was made but they do not collect this level of information from hospitals in their annual reports.)
- Estimated Cost for Inpatient Visit for not-for-profit California hospitals was sourced from Becker's Hospital Review 2010 daily costs, which was multiplied by the CDC 2010 average number of inpatient days for west coast hospitals.

With the data provided by the hospital it was possible to extract some useful information around payer source per encounter. In a subset of data provided for 5,586 encounters from February 1, 2014 through June 30, 2014 to both the ED and inpatient admissions at SFMC, we do know the following payer sources per encounter for the Southside Coalition patient population. The "Other" category is inclusive of workers compensation cases, charity approved care, CCS, and those individuals in custody by the LA County Sherriff's Department:



IV. Evaluation and Reporting

Operational Costs

To assess the actual savings to the hospital system, the ongoing monthly project costs must be considered. During the planning and implementation phases of this pilot project, not all costs were funded by the Foundation. The following costs were provided in-kind by project partners: staff supervision of navigators by the hospital partners, Care/Appointment Coordinators salaries/benefits by the Primary Care Health Centers, project management by Southside, and HIE*Lite modifications and data reporting by Trans World. The ongoing costs to operate this model beyond the pilot phase is inclusive of the information technology platform (HIE*Lite), salaries and benefits for Patient Navigators, salaries and benefits for Care/Appointment Coordinators (at primary care clinics), project management, and staff supervision. The costs are also developed assuming the implementation of a best practice scenario (green column in the graph on the prior section) of reaching 100 percent of Southside patients and providing all with a follow-up appointment. Some of the operating costs are estimations provided by project partners and do not include overhead or other expenses such as rent/utilities, supplies, equipment, etc. These costs are outlined in the following table:

Operating Costs to Maintain a Care Coordination Program at St. Francis Medical Center

Description	Actual or Estimated Costs per month
HIE*Lite Monthly technology costs for the software, cloud-based servers and support as configured for St. Francis Medical Center and the Southside Coalition exclusively.	$8,000
Patient Navigator (hospital staff position) The project employed 1.75 FTE Navigators. However, it was identified that 3.2 FTE PN would be needed to catch 100% of Southside patients.	$12,000
Case Management Supervisor (hospital staff position) Supervision of the hospital based Navigators at .10 FTE.	$500
Care Coordinator/Appointment Scheduler (health center staff position) Average time utilized by health center staff per navigated patient is 10 minutes total, however, the volume of patients per agency varies greatly due to clinic size and proximity to the hospital as do hourly salaries and benefits of clinic staff. To identify these costs it was assumed that 100% of patients were touched by a PN, with an average of 950 patients seen at SFMC monthly. The costs reflected here are total monthly costs for the program, and are not by site or participating agency.	$3,000
Project Manager (consortium staff position) Post implementation the Project Manager serves as liaison between the vendor, hospital and clinic staff and time allocated can be reduced to .25 FTE to assure the program is being managed and evaluated effectively.	$1,000
TOTAL MONTHLY COSTS:	$24,500

IV. Evaluation and Reporting

If 100 percent of Southside patients were evaluated by a Patient Navigator and received a follow-up appointment with their primary care provider, the program would cost $294,000 annually to operate with a potential cost savings of $2,428,102 to the hospital system with avoided revisits. It should also be noted that this model can generate revenue for the FQHC's with the booking of additional patient appointments which could subsidize their costs to participate in the program. In an exercise to assess potential revenue for the FQHCs using the outcomes of this pilot project, the following assumptions were made for the 8 months of data collected using the total number of patient appointments that were kept of 587 based on the payer mix of Southside patients that presented at SFMC:

Patient Health Insurance Coverage ➡ assume 56 percent have Medi-Cal Managed Care (n=329); 19 percent have Medi-Cal Fee For Service (n=111); 6 percent have Medicare (n=35); and 11 percent are enrolled in a LA County DHS low income coverage program (at the time of the pilot this was Healthy Way LA 'HWLA' and South LA Medical Preservation Fund) (n=65)
FQHC Rates Vary Per Agency and Site ➡ assume average rates for Medi-Cal Managed Care and Medi-Cal FFS at $150/visit (this number may be much higher for some FQHCs); Medicare at $126/visit; and HWLA (Unmatched) rates are $94/visit.

Therefore ➡ approximately $76,520 in revenue was collectively generated for the health centers by booking follow-up appointments for their patients presenting at SFMC. If 100 percent of patients evaluated with follow-up care indicated upon discharge had been given appointments with the same kept appointment rate at 67.9 percent, revenue generated could have been approximately $138,223 for the health centers.

Qualitative Data Assessments

Patient Experience Survey Data

A patient survey was implemented from July, 2014 – August, 2014. The navigators approached all patients during this time asking if they would participate in the survey. When the goal of 100 patients was reached, the survey was concluded. The navigators asked patients if they would complete a survey focused on questions related to satisfaction with the services offered by the navigators. Patients were contacted in-person (40 patients) and on the phone (60 patients). In either case, patients were read the question in either English or Spanish, depending on the patient's preference.

Patients were asked to rate their experience with the Patient Navigators based upon the domains listed below using four response categories: excellent, good, acceptable, and poor.

IV. Evaluation and Reporting

Results

Two sets of questions were asked: The first set of six questions demonstrated the following results. On the average: 63 percent of the patients responded excellent to the first six questions, and 29 percent of the patients responded good (92 percent of the patients responded either excellent or good). The grids below indicate the number of responses for each response category.

Domain	Excellent	Good	Acceptable	Poor	Total Responses
Navigator promptness in seeing you	62	28	10		100
Navigator courtesy/friendliness	63	29	8		100
Navigator interest in you	62	30	8		100
Adequacy of time navigator spent with you	62	29	9		100
Information provided about your visit (e.g., admission, ED visit)	62	29	9		100
Your confidence level in the navigator	64	28	8		100

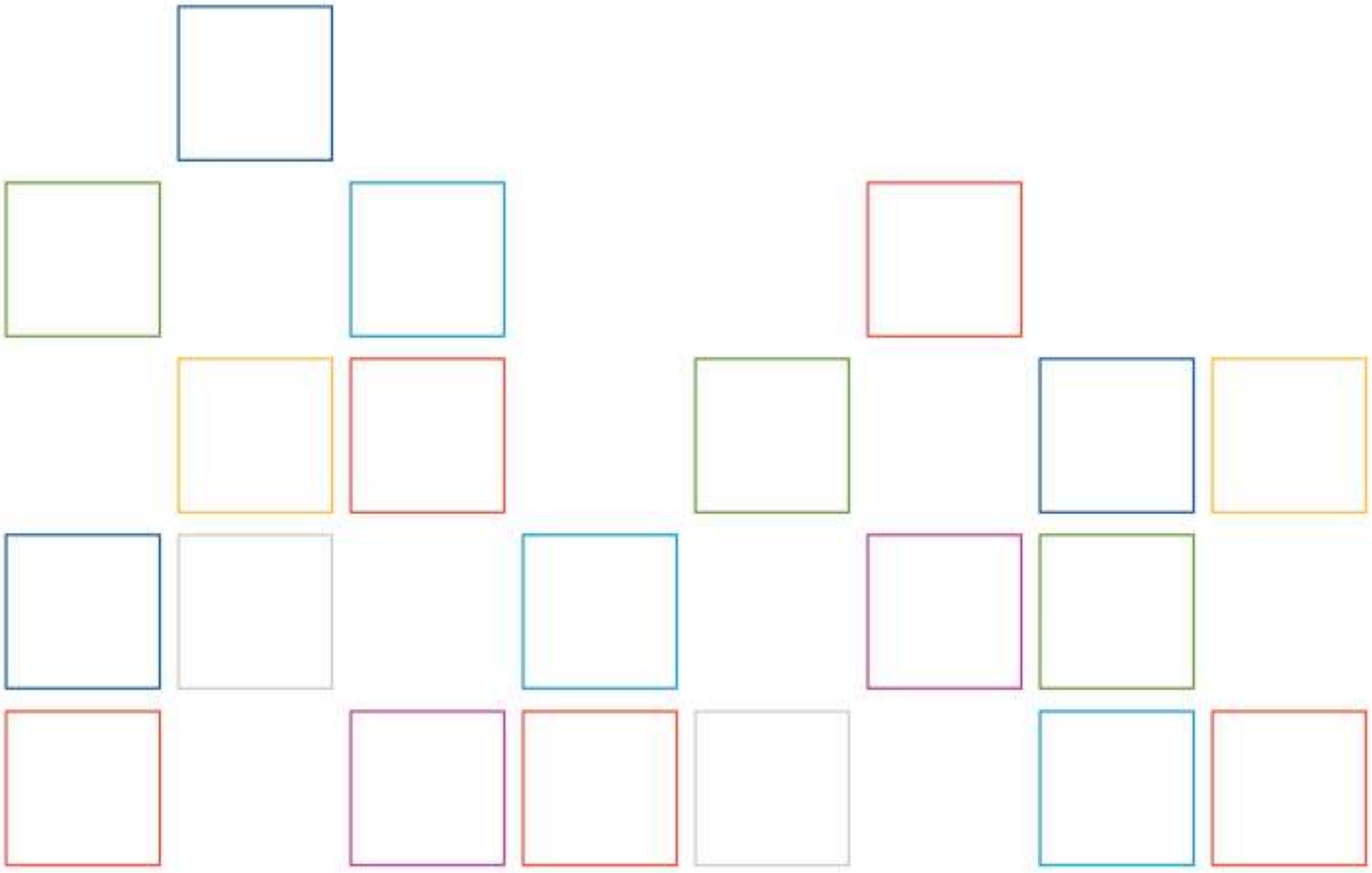
Results

The second set of four questions demonstrated the following average response rates: 91 percent of the patients responded “yes” and nine percent responded “no.” All of the patients responding “no” did so for one specific question: “Did your navigator help you schedule a follow-up appointment with your clinic?” Although this was an area that was approached by the navigator, it is not clear whether the nine percent included patients who refused an appointment, had a change in insurance status or did not want to go back to their current clinic.

IV. Evaluation and Reporting

Question	Yes	No	Total Responses Received
Did your navigator discuss your next steps after your visit? (e.g., date/time of next appointment at clinic, resources for questions between now and appointment at clinic, etc.)	100		100
Did you understand your next steps after your visit? (e.g., date/time of next appointment at clinic, resources for questions between now and appointment at clinic, etc.)	100		100
Did your navigator help you schedule a follow-up appointment with your clinic?	62	38	100
Did your navigator answer all of your questions related to your follow-up care?	100		100

V. Final Observations and Next Steps



V. Final Observations and Next Steps

Final Observations

Based on this pilot project, several promising practices and lessons learned were identified for the replication and spread of this model in the future. Key considerations and observations are discussed in detail along with next steps.

Key Challenges

Partner Engagement

- There was a significant delay in executing the business associates agreement and other related contracts with SFMC, as well as receiving approval of the Patient Navigator job description from SFMC, posting this employment opportunity on the Hospital's website, and eventually hiring candidates for this position. This was largely due to several key issues the Hospital was experiencing, including:
  - **Turnover of key staff assigned to the project.** Specifically, the original SFMC lead contact that was responsible for this engagement left the organization, and SFMC was not able to identify a single leader within the organization to take over this assignment. As a result, three different team members from SFMC were appointed by the Hospital's management team to assist with this project.
  - **Divestiture of each of the Daughters of Charity hospitals, including SFMC.** At the midpoint of implementation of this project, the System was actively seeking a buyer for the System. As a result, SFMC leadership was unable to successfully commit to the continuation of this project at that Hospital, despite positive outcomes.
    - Of note, at the time of this report, Daughters of Charity Health System accepted an acquisition offer from Prime Healthcare for each of the System's hospitals. Due to the System's ongoing operational and financial issues, SFMC has elected to discontinue the Patient Navigator program at the Hospital until additional funding is secured.
  - Although the HIE*Lite system adhered to HIPAA and other patient confidentiality requirements, some of the clinics delayed submitting their historical patient indices. One clinic did not submit any data until May, 2014. This delayed the original timeline to complete the master patient index build. To address their level of uncertainty, the Coalition hosted additional educational meetings with those specific clinics.
  - As a result of these contract execution delays, there was a delay in activating this project from the original proposed timeline.

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- **Sustaining Relationships between the Southside Coalition Health Centers and SFMC:** In order to sustain those relationships, it is imperative to have written contracts, policies and procedures with documented processes in place to preserve and sustain care coordination efforts.
  - Coordination of patient care between the health centers and hospital requires considerable resources, and the Patient Navigator serves as an important link between these entities. However, because services provided by the Patient Navigator are not typically reimbursable, it is difficult to quantify their value to patient care coordination. The Coalition, in collaboration with its member health centers and SFMC, will continue to assess and develop a joint strategy to implement and retain supportive services as a core component of this initiative beyond the pilot period and for purposes of replicating the model at other hospital locations.

Data Analytics/Data Sharing

- With limited financial resources to build out the HIE*Lite System, this pilot project was restricted to patient demographic/identifier data that could be collected and shared across clinic and hospital systems. Thus, it was not possible to collect any payer source or clinical information for identified patients, such as primary diagnosis codes from the health centers or discharge diagnosis codes from the hospital within the current version of HIE*Lite. Such information would have provided a comprehensive understanding of preventable readmissions to the hospital, and the prevalence of ambulatory care sensitive conditions for which Southside patients are presenting at the hospital with.
- Furthermore, concerns were expressed during the planning stage from both the health centers and the hospital about sharing protected patient clinical information across health care systems. This pilot project was a monumental first step between health centers and a hospital in this community as they had never before agreed to exchange patient information through a secured technology platform. Thus, it was agreed that for the purposes of sharing data for the first time, clinical information would be omitted for the pilot stage and further discussions would be held post pilot around the development of a robust health information exchange between participating health systems in South Los Angeles.
- As many clinics uploaded their historical data, many of the submitted files did not match the technical specifications that had been communicated to the clinics in order to successfully load this data into the HIE*Lite System. To resolve these technical issues, representatives from Trans World worked closely with the impacted clinics to format the files in the requested manner.

V. Final Observations and Next Steps

- The Coalition requested that the clinics refresh their historical patient data files in the HIE*Lite System on a monthly basis. However, this did not occur consistently, and resulted in potentially missed patient "matches" at SFMC. The Coalition did discuss this issue with the clinics; challenges sited were limited IT staffing capacity and other competing IT and quality improvement projects. A summary of the frequency in which the clinics uploaded their data is provided on the following page.

- Although the HIE*Lite System provides comprehensive automated reports specific to "matched" patient utilization by clinic, and outcomes related to follow-up appointments with the PCP post discharge, it does not track clinical outcomes or financial trends. To address these challenges, Southside worked with SFMC to determine whether automated reports could be obtained that would provide detailed information on the "matched" patient's visit (e.g., payer source, discharge diagnosis, reason for visit). This would determine if patients are using the ED inappropriately, and if patient education is needed to redirect certain types of visits to alternative healthcare providers (e.g., clinics, urgent care centers during after hours, others).
  - SFMC submitted the first report to the Coalition in October, 2014, and the following were challenges associated with this report:
    - The data did not include unique patient identifiers or ICD-9 diagnosis codes, thereby limiting the ability to evaluate utilization and identify visits that might be treated more appropriately outside of the hospital setting.
    - The data was provided to the Coalition towards the end of the project. For purposes of this specific project, it was too late to refine the data and develop interventions that would impact patient utilization for conditions that could be treated outside of the hospital.

V. Final Observations and Next Steps

Clinic	2013		2014									
	November	December	January	February	March	April	May	June	July	August	September	October
Clinic A			✓			✓						
Clinic B		✓										
Clinic C							✓	✓	✓	✓	✓	✓
Clinic D					✓	✓	✓	✓	✓	✓	✓	✓
Clinic E			✓									
Clinic F		✓			✓	✓	✓	✓	✓	✓	✓	
Clinic G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clinic H			✓	✓								

Source: Trans World Health Services

V. Final Observations and Next Steps

Funding

- **Patient Navigator capacity:** Funding was insufficient to fully staff the navigators for this project at the 2.0 FTE rate as was initially proposed. The request was intended to contact 100 percent of the Southside patients, see all patients before discharge from the hospital, and overlap the navigator schedules to accommodate some extended hours (evenings and weekends). Patient navigator capacity is a function of FTEs, scheduled work hours throughout a week, work schedule overlaps, physical proximity to patients, patient volume, timing of patient arrivals (particularly into the Emergency Department), and desired timing of patient engagement. Thus, it was anticipated that there would be a challenge with the capacity of 1.75 FTE Patient Navigators to fully manage the total patient population. It was also challenging to project FTE needs prior to the launch of this pilot as there were concerns about baseline utilization data at SFMC not including the entire Southside patient population as baseline data was only inclusive of HCLA-IPA Medi-Cal managed care lives and also did not account for a large uninsured population utilizing this safety net hospital. There were also contractual changes between the HCLA-IPA/Hospital post baseline data and pre implementation resulting in an increase of patients utilizing this hospital along with the new Medi-Cal expansion population effective January, 2014.
  - In the first month that both care navigators were working (March), their average rate of patient engagements was 463 patients per FTE per month. As their operational efficiencies increased, their capacity increased to a maximum of 620 patients per month, with an overall average from March through September 2014 of 550 patients per month.

Time Period	Average FTE	Total Matched Patients	Total Evaluated Patients	Average # Patient Matches per Month	Average # Patients Evaluated per Month	Average # Patients Evaluated Monthly per FTE	Average # Minutes per Evaluation	Average # Patients Not Evaluated per Month	Average % of Patients Evaluated	Average % of Patients Not Evaluated	Additional FTEs needed to Evaluate 100%
Feb-Sep	1.65625	7,595	6,814	949	852	514	20.2	98	89.72%	10.28%	0.19
Mar-Sep	1.75	6,858	6,740	980	963	550	18.9	17	98.28%	1.72%	0.03

Source: Trans World Health Services

When the Patient Navigators were unable to engage patients prior to their departure from SFMC, they staged contact campaigns to reach the patients and engage them at home. Given the demographics of the safety-net population, this was not as effective due to challenges with being able to reach the patients post-discharge. Of the 7,595 patients who were matched (February-September) and those who received a follow-up appointment (865) there was also a significant number of patients who declined follow-up assistance for a variety of reasons. In seeking to understand this issue, HIE*Lite was able to capture the

reasons appointments weren't booked. This study and found that 49 percent were related to the following communication issues:

Reason Appointment Not Booked	Total Lost Appointment Opportunities
No Answer By Patient	1,737
Wrong Number/Disconnected Number	1,121
No telephone number	824
Total	**3,682**

Source: Trans World Health Services

- In assessing the percentage of those patients who were matched but did not receive navigation services while still in the hospital, data indicates that of the 7,595 matched, 3,682 weren't seen in the hospital by a Patient Navigator and could not be reached by phone, or 48 percent of the total. Therefore, it can be inferred that for staffing reasons, Navigators were unable to reach this population because there was insufficient staffing on site to seek patients out while they were in the hospital. So, if Navigators reached 52 percent of the 7,595 total patients with an average of 1.65 FTEs over the entire period, the program would need approximately another 1.52 FTEs to cover the other 48 percent for a total of 3.2 FTEs.
- The pilot project was funded by Blue Shield of California Foundation through September, 2014. Notably, SFMC extended the project time through December 2014, and retained one of the Patient Navigators.

Operations

- There was a delay in obtaining access to the Hospital's e-fax system (TRACE) for both Patient Navigators. As a temporary solution, the Patient Navigators utilized a regular, paper-based fax machine to send documents. This access issue is attributed to the fact that SFMC had a limited number of licenses to their e-fax system. As licenses became available, the Patient Navigators were given access to this resource.
- The first navigator started in January, 2014, and the second navigator was started in March, 2014. Although it is expected that ramp-up for this type of intervention would take two to three months, the duration of the grant was not long enough to work out the inevitable system issues and provide for enough time to sufficiently demonstrate additional successes as Navigator productiving increased.
- The designated care coordinators at the community health centers had varying degrees of knowledge about the process changes and experienced turnover at some of the partner

clinics. As new clinic staff was hired, Southside project managers were not promptly informed about new staff that required orientation to the navigator program, thus causing unnecessary delays in appointment scheduling for the Patient Navigators.

- The initial time period in which clinics provided feedback to the Patient Navigators about appointment scheduling and patients keeping their appointments varied greatly across each of the sites. However, once the Patient Navigators and project managers provided re-education and re-orientation to the clinics on this program, scheduling times improved. Additionally, when the navigator had an opportunity to schedule patient appointments through a call center, shorter wait times to confirm the appointments resulted. Lastly, it is important to note that some clinics did experience external audits and/or major staffing changes, thereby resulting in longer wait times to confirm patient appointments. The following table illustrates the average wait times to confirm an appointment by clinic for two time periods: January, 2014 through April, 2014, and May, 2014 through October, 2014.

Average Wait Times Per Clinic: to confirm appointment

Clinic Name	January 2014 - April 2014	May 2014 - October 2014	Comments
Central City Community Health Center	Immediately - 8 Hours	Immediately - 24 Hours	
Eisner Pediatric & Family Center	Immediately	Immediately - 30 minutes	
South Bay Family Health Center	No Data Uploaded	Immediately - 30 minutes	Booked through call center
South Central Family Health Center	24 Hours - 72 Hours	Immediately - 30 minutes	
St. John's Well Child and Family Center	10 minutes - 72 Hours	Immediately - 10 minutes	Booked through call center
T.H.E. Health and Wellness Center	1 Hour	Immediately	
UMMA Community Clinic	1 Hour - 24 hours	Immediately	Booked through call center
Watts Healthcare Center	Immediately - 3 Hours	Immediately - 1 Hour	

Note: purple font indicates change.

V. Final Observations and Next Steps

Promising Practices and Lessons Learned

Based on this pilot project, several promising practices and lessons learned were identified for the replication and spread of this model in the future. This model was unique in that the Southside Coalition, a health center consortium, assumed the role of project manager given the strong relationships between the consortium and its members. Over the last ten years, the Coalition members have been working collectively on programs, projects and initiatives with one another. This relationship helped to facilitate the development of the project with established trust and buy-in from key decision-makers at the health centers particularly within the "C-Suite". This was especially useful in guiding dialogue around the sharing of patient demographic information, working with an IT vendor, and negotiating a contract for data sharing with the hospital. The consortium also assisted in the facilitation of the relationship with the hospital serving as a primary point of contact with a collective voice rather than eight separate contacts within the health centers participating. This was especially effective in jointly developing communication strategies and workflows for the project so that all participating health centers contributed to the development of a model that was feasible to implement.

The following components were identified as important for a successful program.

Pre-Implementation:

- Appoint an on-site manager at the hospital who is oriented to the goals of the project, IT system and its ongoing changes and who links consistently with the larger project team and the Southside Coalition project managers.
- On-site clinic managers and staff at the health centers should be provided with a written document outlining the goals and expectations of the program.
- Develop a standardized presentation to all clinic-based staff involved with appointment scheduling, leaving behind the rationale and written process.
- Establish a weekly call between the navigators and the project manager to discuss appointment turnaround time, issues and challenges at the clinics/hospital, and the need for more staff education.
- Ensure that there are at least two contact people at each health center/site who understand the system and can schedule timely appointments.
- Provide navigators with a room location with good internet connectivity. The number of mobile and desktop phones and laptops should be based on the number of navigators.

V. Final Observations and Next Steps

- Provide the navigators with a contact list of internal and external patient resources including those at the referral clinics. Referral source information should contain contact information and a description of the program.
- Require a system for each site to quickly upload data on at least a monthly basis into the patient master index and obtain organizational commitment for a staff person to conduct this routinely. Project managers should send out monthly email reminders for data uploads.
- Obtain a pre-project database from the hospital that addresses key elements needed to evaluate ED visits and inpatient visits.
- Implement a policy and procedure on how the clinics will process the patient data received from the Navigators and alert PCPs to their existence.
- Ensure that an e-fax system or secured/encrypted email systems are available for the communication of patient information across health systems.
- Define the measures that will be collected on a monthly basis aggregated by ED vs. inpatient and age groups.

During the Program

- Conduct monthly partner meetings with Southside and representatives from the hospital and each clinic for the first six months and then move to quarterly meetings for the remainder of the first year of implementation. Discussion should focus on the current status of a number of key elements, data, and opportunities for improvement.
- Provide monthly cumulative reports by clinic referral site and by type of hospital visit:
  - Patient numbers seen by age
  - Patient appointments made by age
  - Patient appointments kept by age
- Review clinic reports monthly with clinic contact manager and their supervisor.
- Provide aggregated Coalition reports with the data outlined above.
- Provide hospital reports at least quarterly showing date of admission, date of discharge, ICD discharge codes, discharge diagnosis, and a distinct patient identifier to identify trends. The data should be analyzed per unique patient identifiers, per location, age groups, ICD codes, and ambulatory sensitive conditions.
- HIE*Lite System should be able to automatically identify if a patient who has come back to the ED or admitted to an inpatient unit has a future appointment already booked.
- For patients no longer of the Southside Coalition**:** HIE*Lite could eliminate patients from the system that no longer belong to clinics.

V. Final Observations and Next Steps

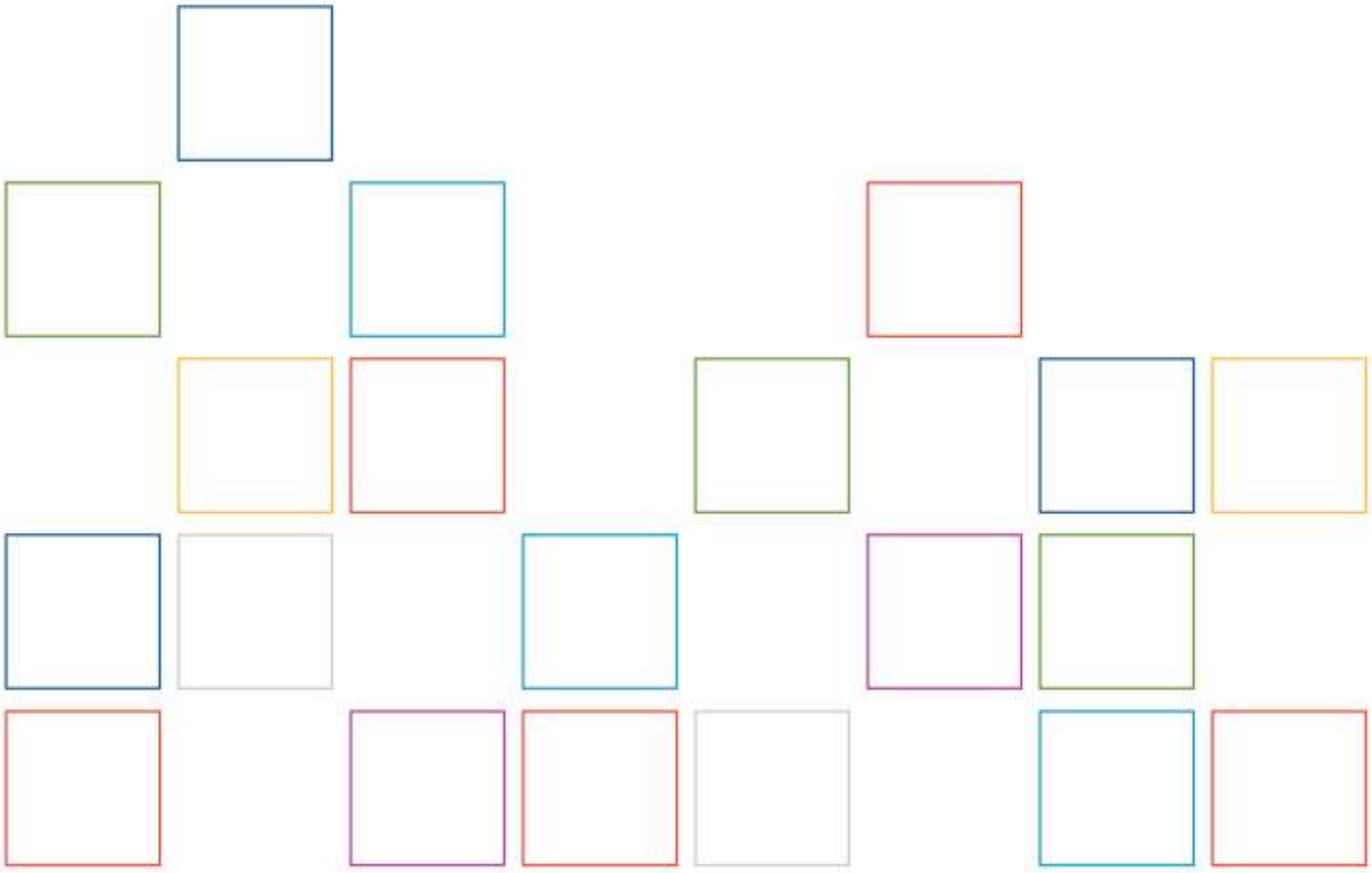
- Patient navigator should be kept updated regarding changes to the provider and coordinator staff at the health centers.
- Patient navigator should have updated information on changes in clinic hours during the week and on holidays.
- Clinic staff who book appointments should have access to appointments at all locations.
- Initially staff the program with two FTE navigators and decide on coverage needs (7 days/week and evening hours) then increase staffing as necessary.
- The patient satisfaction survey should be completed at least every six months to obtain validation of continued excellence and/or improvements. Additionally, it should be translated into Spanish to eliminate the difference in English language interpretation.
- Conduct surveys with health center staff (care coordinators, appointment schedulers, clinicians) to assess satisfaction with the program.

Next Steps

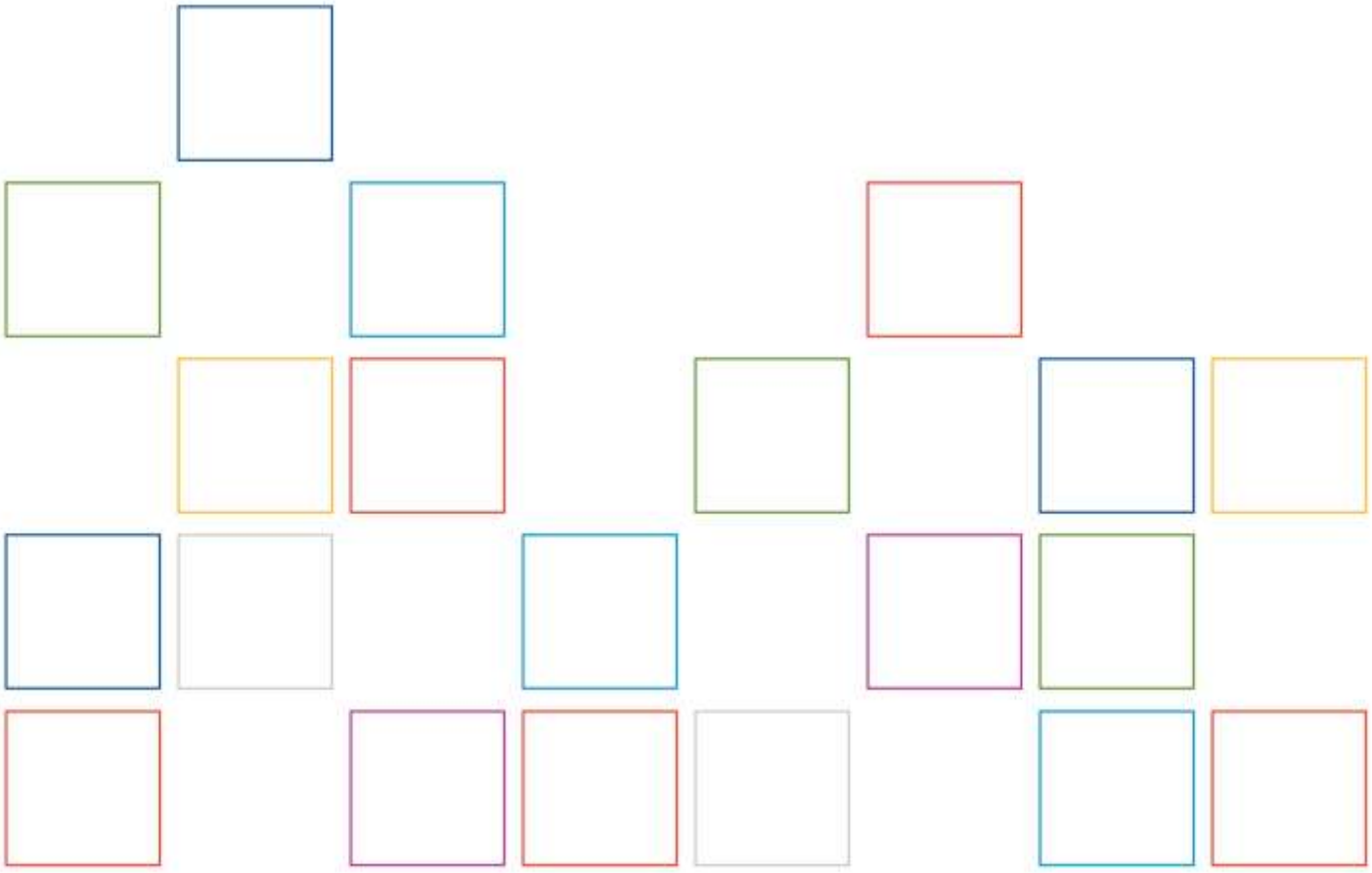
- Identify opportunities to capture meaningful data on a regular, on-going basis. For example, establishing electronic linkages between the HIE*Lite System and the Hospital's decision support systems so that utilization and financial reports for this program will provide the program with real-time information that is critical to improving overall population health and effectively managing care.
- Explore the value of implementing a health information exchange within the health services providers in South Los Angeles so that clinical information can be shared to improve the quality of patient care and provider communication across health systems.
- Consider risk stratification to provide navigation services to a sub-set of higher need Southside patients based on clinical acuity, history of high utilization of hospital based services, or for those with the existence of chronic disease or illness. This would require the ability to identify and capture clinical information within health center and hospital information systems or identified through other means (such as health plans).
- Consider allocating Patient Navigator time in the ED for non-Southside Coalition patients who present at SFMC without a primary care health home. Patients without a primary care health home may be offered a follow-up appointment at a participating health center of their choice.
- Currently, primary care clinics provide after-hours care lines but they are underutilized. Facilitate a pilot project to collect data to understand utilization issues with after-hour care

lines in order to help patients use the ED more effectively. This would include obtaining information about the top ambulatory sensitive conditions that Southside patients present to the ED with and encouraging patient use of the after-hours care line to better triage care for those conditions. The development of common information for patients could focus on prevention and could be tied in to some of the work of the Navigators.

- Explore opportunities to replicate this program, and implement at other safety net hospitals. To date, the Coalition has engaged in discussions with the new Martin Luther King, Jr. Community Hospital. The new Martin Luther King, Jr. Community Hospital is scheduled to open in 2015, and the Coalition will continue to discuss opportunities for this program with their team.
- Develop a formal education and on-boarding program for the Patient Navigators to foster standardization and enhance core competencies.



Appendix A
Patient Navigator Job Description



Appendix A
Patient Navigator Job Description

Position Summary

The Patient Navigator will serve as the liaison between the patients, health systems, medical providers, and community health center based care coordinators in order to increase the utilization of appropriate primary care and tertiary services for a care coordination pilot project in collaboration with the Southside Coalition of Community Health Centers. The Patient Navigator will work to maximize patient use of appropriate and established health services, assists and guides patients in receiving post hospital follow-up visits, educates patients on the appropriate utilization of care, appointments and treatments services, ensures that patients are able to access and keep medical appointments, participates in recommended care plans or follow-up, and when necessary identify a primary care medical home when one is needed.

This position requires the full understanding and active participation in fulfilling the Mission of St. Francis Medical Center. It is expected that the associate holding this position will demonstrate behaviors consistent with our core values and will comply with all required standards governing our commitment to compassionate care, exemplary service, and serving our patients. The associate holding this position will support St. Francis Medical Center's strategic and annual operating plan and all essential elements of quality improvement and financial stewardship.

Education/Training/Experience

Bachelor's degree in social sciences, health education, or related field of study or an associate's degree with two years of experience, or MA certification with three years of experience, or high school/GED with four years of experience. Relevant experience considered will be inclusive of health education, public health, social work/case management, or other related fields.

A commitment to working with families living in disadvantaged communities of diverse racial and ethnic backgrounds is essential along with a familiarity of the health disparities, challenges, and areas of need among south Los Angeles communities.

- Bilingual in English and Spanish required.
- Excellent verbal and written skills.
- Working knowledge of medical terminology preferred.

Licenses/Certifications

- BCLS (AHA)
- MAB training within three months of employment

Physical Demand Analysis

Must continuously (66 percent to 100 percent of a work day):

- Walking
- Reaching
- Sitting

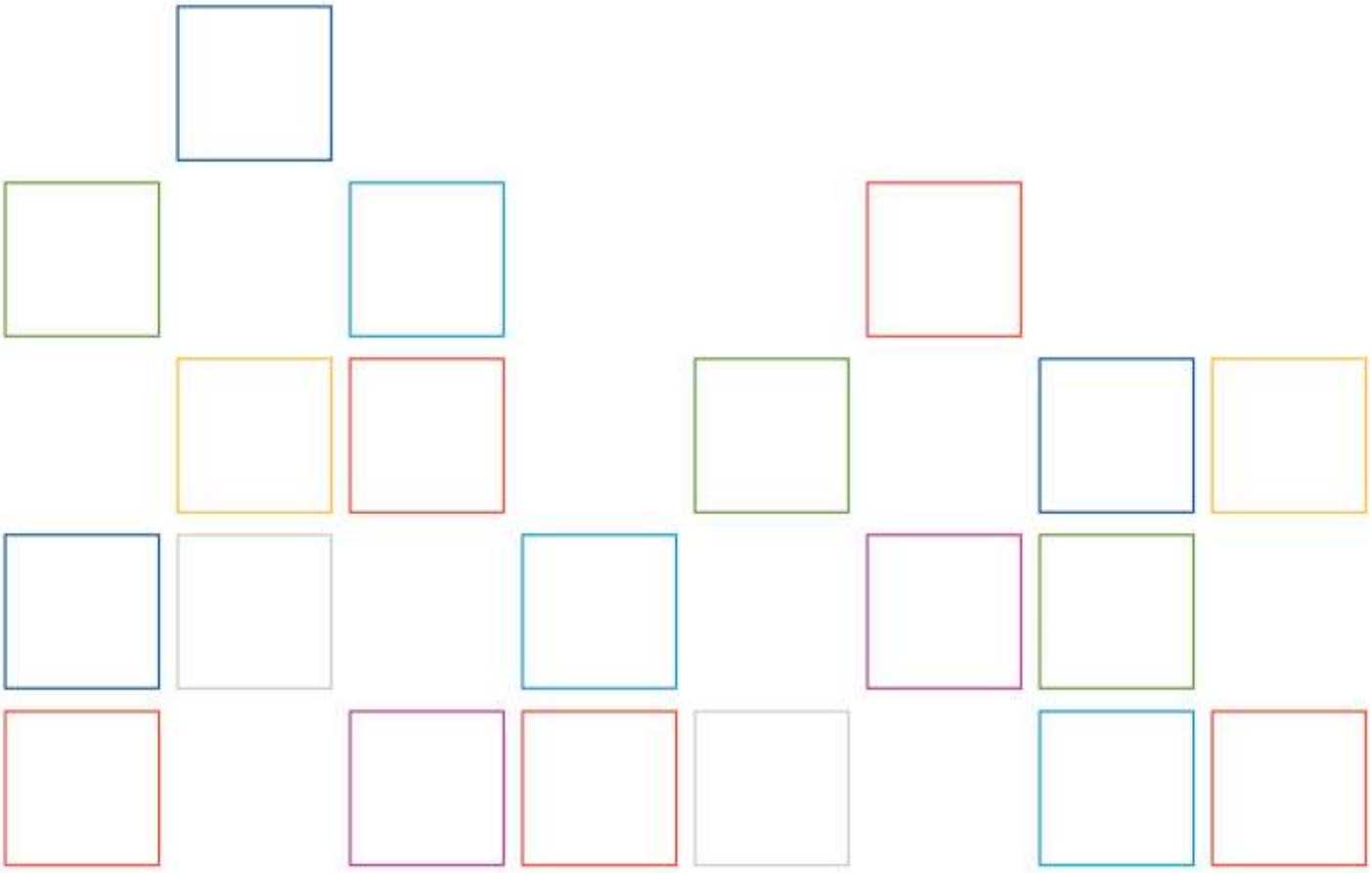
Must frequently sit (34 percent to 66 percent of a work day):

- Wrist rotation and deviation
- Twisting of neck
- Typing

Must occasionally (11 percent to 33 percent of a work day):

- Lift maximum of five pounds
- Standing

Appendix B
Sample Patient Appointment Form



Appendix B
Sample Patient Appointment Form

CLINIC LOGO (PLACEHOLDER)

CLINIC ADDRESS(ES) (PLACEHOLDER)

CLINIC HOURS OF OPERATION/HORAS DE OPERACIÓN (PLACEHOLDER)

APPOINTMENT LINE/ LÍNEA DE CITA (PLACEHOLDER)

PATIENT NAME/NOMBRE DEL PACIENTE: _____

DATE OF BIRTH/FECHA DE NACIMIENTO: _____

YOUR APPOINTMENT DATE/FECHA DE SU CITA: _____

YOUR APPOINTMENT TIME/SU HORA DE LA CITA: _____

YOUR DOCTOR AT/MÉDICO en *XXX Community Health Center:*_____

SPECIAL INSTRUCTIONS/ INSTRUCCIONES ESPECIALES:

On the date of your appointment please bring the following documents with you to your appointment:
1) Discharge summary from St. Francis Medical Center
2) Discharge instructions received by your doctor at St. Francis Medical Center
3) List of medications started or discontinued after your visit at St. Francis Medical Center

En la fecha de su cita por favor traer los siguientes documentos con usted a su cita:
1) Informe de alta de St. Francis Medical Center
2) Las instrucciones recibidas por su médico en St. Francis Medical Center
3) Lista de medicamentos iniciado o continuado después de su visita en St. Francis Medical Center

If you have any questions please call (310) 900-XXXX
Si tiene alguna pregunta por favor llame a (310) 900-XXXX

After 7:00pm and on weekends please call (310) 900-XXXX
Después de 19:00 y los fines de semana llame al (310) 900-XXXX