



# **Evaluation Final Report**

**Project Period:**

**February 1, 2016 through October 31, 2017**

## Executive Summary

# Maryland Faith Health Network Pilot Evaluation

### BACKGROUND

In January 2014, Maryland's hospital system launched an effort to slow spending at rates lower than the national average. This would be accomplished by health care institutions implementing models of care that improved health and quality and contained costs. To achieve these goals, the Health Services Cost Review Commission (HSCRC) challenged institutions to explore non-traditional partnerships and collaborations that would extend preventive care into the community.

The Maryland Citizens' Health Initiative (MCHI) learned about a program in Memphis, TN where a hospital system partnered with the faith community to provide spiritual and domestic support to congregants who had been hospitalized. The host hospital system credited the program with reducing readmissions by 40% and saving \$3.4 million annually.

After visiting the Memphis program, the MCHI embarked on a campaign to implement a similar program in Maryland. Eventually, they secured funding and a partnering health system to implement the Maryland Faith Health Network (MFHN) pilot. The pilot officially launched in February 2016 with LifeBridge Health System as the health system partner and MCHI as the initiative's convener and coordinator. The pilot concluded on October 31, 2017.

It was the goal of the pilot to develop a standardized, proven approach for reducing hospital readmissions through partnerships between the faith community, hospitals, and community-based organizations. The venue for the pilot would be LifeBridge's three hospitals: Sinai Hospital, Northwest Hospital, and Carroll Hospital Center, located in an urban setting, suburban setting, and semi-rural community, respectively. Ideally, the Network would be replicable in other hospitals and communities.

### RESULTS

The pilot was successful in establishing an infrastructure to implement and evaluate the impact of scalable population health programs involving partnerships between health care institutions, community-based organizations, and faith communities. Notable achievements include:

- Seventy congregations representing eleven denominations in Baltimore City, Baltimore County, and Carroll County participated in the Network's pilot. The leading reasons faith leaders cited for joining the Network included a desire to improve the health of their members, expand community partnerships, and be alerted when a member needed assistance.
- More than 170 congregation leadership and volunteers were trained to support fellow congregation members following hospitalization.

- 1,818 congregation members formally enrolled in the Network.
- When compared to individuals not enrolled in the Network, **congregation members who had been treated at the three hospitals had 75% lower inpatient utilization after one month in the Network and 17% lower utilization after one year in the Network.**

Carroll Hospital Center made substantially more referrals to the Network than the other two. This likely can be attributed to their inclusionary system of identifying members by responding to prompts in their management information system, which queried patients about the congregation they belonged to rather than their formal enrollment in the Network. This process resulted in identification of congregation members who had not formally enrolled in the Network but were desirous of support from their place of worship.

Key contacts at the three hospitals expressed enthusiasm for the potential of the Network as illustrated by the success of one of their hospitals, acknowledged the difficulty two of the hospitals experienced in identifying Network members upon admission, and offered suggestions for general improvements to the program.

A survey administered to faith leaders at the end of the pilot revealed that most had a better understanding of how they can assist institutions in achieving their health goals, are more knowledgeable about health resources available for their congregants, and want to do more to support the state's overall community health goals. Moreover, these faith leaders believed that participation in the Network enhanced their ability to address their members' needs and further established their place of worship as a resource for health information and a partner in wellness.

These findings substantiate continuation and expansion of the Network as well as engagement of faith communities as important, equal partners in other hospital- and/or government-oriented health initiatives. The infrastructure established through the pilot can support expansion of programs of mutual interest to faith and health stakeholders, including advanced directives, prevention and management of diabetes and other chronic conditions, and substance use disorders.

## **NEXT STEPS**

It was the purpose of the Maryland Faith Health Network pilot to assess the effectiveness, feasibility, and sustainability of the model and devise a refined version that could be expanded to involve multiple hospitals and hundreds of congregations across Maryland. To apply the lessons learned for advancing the pilot:

1. LifeBridge Health System will continue to identify and refer for support patients who are members of participating congregations.
2. Other Maryland hospitals will be encouraged to leverage the infrastructure established by this pilot, particularly those facilities located in the areas where current Network members live and worship.

3. As convener for the pilot, the Maryland Citizens' Health Initiative will widely release and present the evaluation report to various stakeholders in community and population health, including at the 2018 Maryland Innovations Summit. It will be the intent of this sharing to encourage other hospitals and congregations to join the Network, increasing the number of individuals and communities that can be served.
4. The Maryland Citizens' Health Initiative will work with congregations to identify and respond to population health concerns through monthly technical assistance calls.
5. The Maryland Citizens' Health Initiative will aim to identify and support additional local and national hospitals to participate in the Network.

## RECOMMENDATIONS

The following recommendations are offered to advance the pilot objectives or facilitate refined implementation of the expanded program.

1. Continue ongoing recruitment of hospitals and congregations into the Maryland Faith Health Network and continued data collection and reporting.
2. Implement a standardized process within hospitals and across hospital systems for implementing, tracking, and reporting on the Network. The processes employed by Carroll Hospital Center should be considered the standard in the event of expansion. Elements of this model that warrants replication include:
  - Inquiry about congregation affiliation at intake.
  - A dedicated staff person at the institution to oversee Network operations
  - An automated information systems to notify staff of members of participating congregations who are admitted or under observation
  - Participation in the Network as part of a broader community engagement strategy.
3. In initiatives where data will be collected to report on program impact, implement data collection and reporting training for congregations to refine methods and enhance data quality and integrity.
4. Offer institutional and faith- community culture training to facilitate informed, shared decision-making and program operations among Network partners.
5. Develop effective communication mechanisms to consistently share information and reminders across the Network.
6. Develop a toolkit to provide guidance and tools to assist other hospitals, congregations, and community-based organizations seeking to implement a collaborative effort like the Maryland Faith Health Network.
7. Continue to leverage and promote CRISP as an essential tool to identify targets for support and evaluate program effectiveness.
8. Increase statewide and regional investment in faith-health partnerships to achieve mutual goals for population health. Offer additional training and resources for congregations for advancing mutual public health goals related to diabetes, substance use disorder, and other chronic health conditions.
9. For programs aiming to reduce readmissions, increase the emphasis on the importance of providing evidence-based, non-clinical supports that are strongly associated with reducing

readmissions (ie. connection to a primary care provider, assistance in completing the post-discharge appointment, assistance in filling prescriptions).

10. Enlist individuals with knowledge of and relationships in targeted denominations to engage and secure participation from the faith community.

Final Evaluation

# Maryland Faith Health Network Pilot

## INTRODUCTION

In January 2014, the Centers for Medicare and Medicaid Services (CMS) approved a new hospital reimbursement system in Maryland that promised to slow spending at rates lower than the national average. This would be accomplished by incentivizing health care institutions to implement models of care that simultaneously improved health and quality and contained costs. To fulfill the terms of this arrangement, the state adopted the emerging theme in healthcare: the Triple Aim.

The Maryland Health Services Cost Review Commission (HSCRC), the regulating body for the state's hospital industry, maintains that collaboration among healthcare providers and active engagement of consumers are critical to identifying impactful, sustainable approaches to fulfilling the aspirations of the state's health system transformation effort. To achieve the overarching goals, HSCRC challenged hospitals to identify efficiencies in internal practices and explore non-traditional partnerships and collaborations to devise health programs that would extend beyond their walls, with a particular emphasis on prevention.

Recognizing the value of input from consumers and community leaders to this process, the HSCRC convened and tasked two groups with soliciting meaningful input from the public on this endeavor to transform Maryland's health system. The groups were led by known organizations that had the capacity, relationships, and reach to engage the consumer community and its advocates at the appropriate levels. One of the groups, the Consumer Outreach Task Force, was co-led by the Maryland Citizens' Health Initiative (MCHI) and the Maryland Hospital Association (MHA).

## BACKGROUND

The Maryland Citizens' Health Initiative is a nonprofit, advocacy organization that creates and supports legislation, policy, and programs that aim to expand access to quality, affordable health care for all Marylanders. Under MCHI's and MHA's leadership, the Consumer Outreach Task Force was charged with educating individuals, community leaders, community organizations, and health care institutions about the transformation of Maryland's health care system and collecting feedback on the supports necessary to facilitate further engagement in and utilization of health services.

As a part of this effort, the Consumer Outreach Task Force conducted focus groups to gather feedback on the public's thoughts, ideas, understanding, and interest in various aspects of health system transformation. The results of this qualitative research were shared with other groups working on consumer engagement related to the new system. Additionally, it informed the consumer education and outreach activities of the taskforce.

### ***The “Memphis Model”: Inspiration for the Maryland Faith Health Network***

MCHI learned from a local faith leader about a program in Memphis, TN that might help advance the goals of Maryland’s transforming health system. Memphis’s Congregational Health Network (CHN) utilized volunteers from various congregations in the city to provide support to individuals who recently had been discharged from the hospital. The program had more than 600 participating places of worship, encompassing 20,000 congregants. Methodist LeBonheur Hospital (MLH), the host institution, credited the CHN with reducing readmissions by 40% and saving \$3.4 million annually.

Encouraged by the outcomes and potential of the “Memphis Model”, MCHI applied for and was awarded a grant to take a delegation of stakeholders from Maryland to view the operations of the CHN. The group was comprised of representatives from hospitals, the faith community, and health-related state government agencies. While in Memphis, they toured hospitals and surrounding communities and heard presentations from key people in the program. As coordinator, the hospital system handled all program operations and initiated and maintained relationships with the congregations, including responding to questions related to caring for members enrolled in the program. The CHN was funded and run almost exclusively by the hospital system.

### ***Launch of the Maryland Faith Health Network***

The delegation concluded that the Congregational Health Network model could help Maryland’s institutions prevent readmissions, thus realizing a key objective of health system transformation. However, they noted that several modifications were warranted, given differences in community composition, hospital landscape, and available resources. It was agreed that the Maryland model should eventually involve more than one hospital system and would require a third-party facilitator, rather than a single hospital system serving as the program’s hub and coordinator.

To effectuate the recommendations and desires of the delegation, MCHI launched a campaign to educate health care providers, consumers, and community advocates about the intention to adopt the Memphis model in Maryland as a strategy to advance health system transformation. The campaign also aimed to solicit support and funding partners for the initiative.

Several months into their campaign, MCHI found an interested host in Carroll Hospital Center, an institution that soon would be acquired by a health system. The merger would result in a three-hospital network with institutions in urban, suburban, and rural settings. In fall 2015, MCHI formalized a partnership with Carroll’s new parent, LifeBridge Health System, permitting the program’s implementation in Sinai Hospital, Northwest Hospital, and Carroll Hospital Center. In a Memorandum of Understanding, LifeBridge pledged that their hospitals would provide in-kind support--in the form of staffing and limited data collection and reporting--to facilitate implementation and assessment of the model. After solidifying the partnership with LifeBridge, MCHI was awarded funding from one national and four local foundations to launch the Network.

## **PROGRAM DESIGN**

The Maryland Faith Health Network (the “Network”) pilot officially launched in February 2016 with LifeBridge as the health system partner, MCHI as the initiative’s convener and coordinator, and formal support from local and state government. The pilot concluded on October 31, 2017. With the goal of reducing readmissions, the Network enlisted volunteers and staff from the faith communities surrounding the LifeBridge hospitals in providing support to their fellow congregants who had been discharged from the hospital. It was hypothesized that spiritual, domestic, and social supports would decrease the likelihood of these individuals going back into the hospital within thirty days of release. Planned support involved praying with members, performing domestic chores like preparing meals or light housekeeping, and providing transportation to medical appointments or to pick up prescriptions.

It was agreed that MCHI would coordinate the operational and community-based aspects of the Network while LifeBridge managed the hospital-based intervention and activities. In this arrangement, MCHI recruited congregations and individual congregation members for participation, trained and provided technical assistance to congregation staff and volunteers, and collected data to demonstrate impact and substantiate the Network’s continuation and expansion. As health system partner, LifeBridge would lead its individual institutions in building internal infrastructure and processes to identify and refer hospitalized members to the Network. Additionally, they would assign a “Navigator” to serve as the main point of contact and provide support to congregation’s staff and volunteers.

### ***Recruiting and Preparing Faith Community Partners***

The Maryland Faith Health Network employed various approaches to recruit congregations for this unique, faith-based approach to reducing readmissions. Through one-on-one meetings and group information sessions, MCHI secured written endorsements from the leaders of the various denominations represented in the communities surrounding LifeBridge hospitals. The resulting letters of support were used to introduce the concept to and encourage participation among individual congregations within these denominations.

The letters of support were supplemented by outreach from two consultants who were hired to connect with congregations more directly and provide guidance and technical assistance in implementing the program within their congregations. These consultants had strong ties in the faith communities targeted and, therefore, offered a more efficient process for securing confidence and buy-in.

Interested congregations signed a Memorandum of Understanding and Confidentiality Agreement that detailed the terms of their partnership in the Network. Participating congregations were charged with actively soliciting their congregants to enroll in the Network; naming a main point of contact to serve as the “Liaison” with the hospital and MCHI; identifying and hosting trainings for volunteers and staff to enhance their delivery of support to parishioners following hospital discharge; and coordinating data collection and reporting efforts related to their congregants’ contributions to the Network.

The staff and volunteers identified by congregations to be the hospitals' main point of contact were given initial training, technical assistance, and monthly continuing education to enhance the depth and quality of their spiritual, domestic, and social support. In many instances, participation in the Network formalized or expanded congregations' existing programs that provided this type of support to members who were ill. In categorizing and tracking the type of care given and ultimately assessing its impact on health outcomes and member satisfaction, the Network added structure that, as a byproduct, created a mechanism for congregations' internal evaluation and reporting of charity and volunteer activities.

Following training of staff and volunteers, congregations would begin recruiting congregants to enroll in the Network as "members." In general, members were recruited through announcements during services, inserts in programs, brief presentations during meetings, and personal urging and encouragement by advocates in the congregation. To enroll, members completed an application that secured demographic information and consent. Each member was issued a Network Identification Card containing their name and congregation name, which they were to carry with them and present if ever admitted to the hospital.

Liaisons and volunteers were tasked with providing and reporting on the support given to their fellow congregants for up to thirty days following discharge. The support would be reported monthly using an online or paper form that recorded the nature, frequency, and length of time devoted to each "care occurrence". These reports were to be submitted monthly to MCHI where data were compiled and analyzed. The support provided by Liaisons and volunteers could extend beyond the thirty days following admission; however, data about care delivered beyond thirty days was not collected by MCHI since the program design targeted the impact of support provided in the month following discharge.

### **Hospital-Level Implementation**

While each of its institutions developed similar processes to accommodate the Network, LifeBridge allowed flexibility in execution based on individual institutions' internal capacity, systems, and procedures. All hospitals established a process for identifying and referring Network members upon admission. Each institution's process entailed an inquiry about membership in the Network during intake and a point person(s) who was tasked with notifying faith leaders about their parishioner's hospitalization.

At Carroll Hospital Center, all coherent patients who were admitted were asked during the nursing intake assessment if they were a member of a congregation in the county. If they answered in the affirmative, the staff was prompted by a drop-down menu in their patient information system—which had been customized for participation in the Network—to search for the patient's congregation among the list of stored participating congregations. If their congregation was a member of the Network, the intake officer would send an alert to the Navigator, who would request the patient's permission to notify their congregation of the hospitalization. The hospital had a dedicated staff person to ensure consistent implementation of this protocol.

Upon admission at Sinai and Northwest Hospitals, an intake officer was to ask every patient if they were a member of the Network. Alternatively, Network members also were expected to self-identify when they came to the hospital. If they self-identified or responded in the affirmative to the inquiry about Network membership, an alert would be sent to the hospital Navigator, who would then alert the member's faith leader. These hospitals had varying degrees of staff support to implement and oversee the Network.

Later in the pilot, hospital contacts received virtually real-time alerts about hospitalized Network members from the state's health information exchange, CRISP. These "CRISP Alerts" used a listing of Network members provided by MCHI to identify and notify the partners of an admission. Additionally, CRISP was able to provide historical information about Network members' inpatient utilization, which would enable inferences on the project's impact on utilization and readmissions. Incidentally, MCHI is the first non-clinical entity to be granted access to enter data about social support into CRISP.

Once notified by the hospitals, the congregations would deploy liaisons or volunteers to connect with the patient and provide spiritual, social, or domestic support for up to thirty days following admission. Liaisons and volunteers were able to seek support from the hospital Navigator for assistance in addressing issues for which they had not been trained. The support provided by liaisons and volunteers was to be discontinued in less than thirty days in the event the member requested ending support, was readmitted, or had another outcome that was not conducive to this type of support.

To monitor implementation of the program and discuss successes or challenges, monthly calls were held between MCHI and the leadership at LifeBridge. On these calls, the partners discussed issues that precluded optimal implementation and collaborated on program refinements and opportunities for improvement.

## **PROGRAM EVALUATION**

### ***Evaluation Approach***

It was the goal of the Maryland Faith Health Network pilot to develop a standardized, proven approach for successfully implementing a program that promised to reduce hospital readmission through partnerships between the faith community, hospitals, and community-based organizations. Ideally, the Network would be replicable in other hospitals and communities. Although the program was designed to support attainment of the Triple Aim, it was understood that, because of the anticipated small sample size that would result from hospitalizations among the enrolled population, the evaluation would instead focus on building infrastructure, processes, and non-traditional and community health partnerships. This would serve as the foundation for the initiative and allow analysis and evaluation that might substantiate expansion. Consequently, the evaluation largely is comprised of process metrics that monitor progress towards key components of implementation, rather than product measures that evaluate health outcomes.

An external evaluation team from the University of Maryland and an independent internal evaluator were engaged to collaborate with MCHI and LifeBridge on the pilot's objectives, identify or create data sources to evaluate the objectives, and evaluate the pilot. At the outset of the pilot, the University of Maryland team assisted with development of research questions, drafting an evaluation plan, and facilitating a focus group with faith leaders to establish baseline capacity and attitudes regarding the Network.

Several months into the pilot, an internal evaluator joined the project, working closely with MCHI team in developing or refining tools to enhance the project's implementation and potential for a robust evaluation at the conclusion of the pilot. The internal evaluator also assisted in assessing program refinements and process evaluation to ensure consistency with the available data and ability to report.

### ***Evaluation Stakeholders***

Given the collaborative nature of Maryland's evolving health system, MCHI surmised that there were several groups and entities that would have interest in the evaluation results. As such, the evaluators selected research questions that would respond to the explicit and/or anticipated appeal to the following stakeholders:

- **Current Partnering Hospitals and Funders** that desire to know how efficiently the Network's systems and processes are working, Network utilization, and partners and member/patient satisfaction with the Network.
- **Maryland Hospital Association** that will be a key partner in the expansion phase of the Network when the pilot ends, including hosting a website for future hospital and congregational partners to sign the MOU.
- **Potential Hospital Partners** that require information about utilization, impact, and stakeholder satisfaction to facilitate their decision-making in joining the Network.
- **Participating Congregations** that seek to understand the impact of Network participation in congregation member and volunteer satisfaction and identify opportunities to expand parishioner participation.
- **Prospective Congregations** that would like to learn about participating congregations' experiences to aid in their decision-making about joining the Network.
- **Health Services Cost Review Commission** that can learn more about the potential and impact of this approach to achieving the goals for health system transformation.
- **Local and National Community-Based Organizations** that are seeking insight and technical assistance in implementing a similar initiative
- **State and Local Government Officials** who formally registered early support of the initiative through resolutions and advocating adoption of the Network
- **Local and National Media** that showcased the program to raise awareness in communities about the Network and benefit of these types of efforts.

### ***Pilot Research Questions***

To satisfy the interests and assessment needs of the aforementioned stakeholders, the evaluators arrived at the following research questions:

1. How effective were outreach efforts to recruit participating congregations?
2. How effective were outreach efforts to attract participating hospitals?
3. How effective were collaborative efforts to identify and train volunteers to support the Network?
4. How effective was the support provided to enroll members in the Network?
5. What is the average number of “care contacts” made by volunteers/liaisons?
6. How useful did volunteers find workshops, training calls, and technical assistance provided through the program?
7. What is the level of satisfaction of participating congregations?
8. What is the level of satisfaction of members and their caregivers who have been served by the Network?
9. What is the level of satisfaction of participating hospital partners?
10. How effective were tools and systems designed to collect and report on data related to the Network’s participation and utilization?
11. What was the impact of caregiver support on health outcomes and health care utilization?

### ***Process Evaluation***

Consistent with pilot best practices, MCHI closely monitored implementation to allow for informed, timely program refinements. Faith leaders and internal and external evaluators were integral to the process evaluation. Through continuing education, networking, regular team meetings, and informal and formal qualitative data collection, MCHI conducted process evaluation for the duration of the pilot. Among the most noticeable refinements were the institution of an electronic form to track care occurrences and addition of three specific questions/support targets that would enhance the pilot’s ability to measure its impact on readmissions.

### **Tracking Network Support**

In the early phase of the pilot, the MCHI team tested several systems and processes to collect data from congregations. They explored a telephone option where liaisons would enter information using a keypad, a paper option that would require manual completion and data entry, and an online form that could be completed on a computer or smartphone. The team convened a focus group that allowed faith leaders to test the phone and online options. As a result of the feedback, the project institution the options of submitting reports using the paper or online form.

It is anticipated that recording and reporting the care occurrences of liaisons and volunteers ultimately should provide insight into the possible correlation between readmission rates and the frequency, type, and quality of support given. However, in this pilot phase, the tracking form informed the convener on the format in which volunteers prefer to report information, expectations for timeliness and completeness of these types of reports, and the relationship between health outcomes and the amount and perceived quality of support provided.

### **“The Three Questions”: Non-Clinical Support to Prevent Readmissions**

To assess the possible correlation between the activities and efforts of the Network and reduction in hospital readmissions, MCHI added three items about which liaisons should inquire and, if indicated, offer support. These questions were inspired by the Agency for Healthcare Research and Quality’s (AHRQ)-endorsed Re-Engineered Discharge (RED) Program, which has been successful

in reducing hospital readmissions by ensuring that basic preventative actions are taken following discharge. Conceived by Boston University Medical Center, “Project RED” has proven that, among other factors, a patient’s attendance at their scheduled post-discharge appointment, filling prescriptions issued at discharge, and having a primary care provider all are strongly associated with avoiding readmissions. In adding these questions, MCHI hoped to have a more tangible way to cite their possible contributions to reductions in readmissions.

### Issuing Members Identification

At the outset of the pilot, all members of the Network were issued a Network Membership Identification Card that contained their name and congregation information. It was anticipated that members would carry the cards with them and present it to the hospital, if ever admitted. Several months into the pilot, unique identification numbers were added to the card to allow anonymous tracking of care occurrences. These unique identifiers were used in place of names on reports submitted by Liaisons.

### Sources of Data

The project relied on various quantitative and qualitative sources of data to assess impact. Primary quantitative and qualitative data were collected through general and project-specific hospital data, tools that were created for the use of the project, surveys, focus groups, and informal interviews. Secondary (existing) sources included hospital data, HSCRC data, and reports from Maryland’s health information exchange, CRISP.

## RESULTS

### Hospital Engagement

The Network secured a health system partner within the first several months of seeking a host institution. The partnership with LifeBridge Health System enabled engagement from their three hospitals— Sinai Hospital, Northwest Hospital Center, and Carroll Hospital Center--that are based in an urban, suburban, and semi-rural setting, respectively.

At the outset and over the course of the pilot, MCHI approached several other Maryland hospitals and health systems about joining the Network. While many of the facilities expressed interest in the initiative, they declined joining, citing a desire to review the results of the pilot to inform their decision-making.

**Table 1. Sampling of Maryland Faith Health Network Pilot Outputs and Outcomes**

Measure	Number
Participating Hospitals	3
Participating Congregations	70
Denominations Represented	11
Trained Liaisons	173
Congregants Enrolled in the Network	1,818
Reported Hospitalizations of Enrolled Congregants During Pilot Period (duplicated)	83
Hospital Utilization (Cost) of Enrolled Congregants after 1 Month in Network	↓75%
Hospital Utilization (Cost) of Enrolled Congregants after 12 Months in Network	↓17%

## Congregation Engagement

Over the course of the pilot, seventy congregations representing eleven denominations signed up to receive training and technical assistance to support congregation members during the thirty days following discharge. This includes forty-one congregations in Baltimore City, fifteen in Baltimore County, and fourteen in Carroll County that have been trained and signed MOUs and confidentiality agreements.

The leading reasons congregations cited for joining the Network include to improve the health of the congregation (75%), to expand community partnerships (67%), and to be informed when a member of their congregation was in the hospital (58%). The main anticipated benefits from joining the Network were that the congregation would know when people needed assistance (67%), they would be able to support caregivers of hospitalized congregant (67%), and they would be able to coordinate members' care more effectively while they were hospitalized and after they were discharged (67%).

## Liaison Recruitment and Engagement

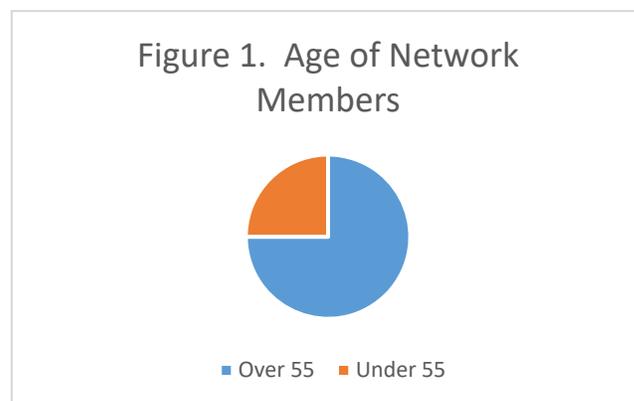
During the twenty-one month pilot, 173 congregation leadership and volunteers were trained as liaisons to support fellow congregation members following hospitalization. Each month, MCHI offered monthly training/technical assistance teleconferences for congregation leadership and liaisons, providing information on health conditions and resources that would enhance liaisons' ability to care for recently-discharged congregants. Table 2 shows a list of topics addressed on these calls. Each monthly call averaged ten participants and four congregations represented. Over the course of the pilot, eighteen technical assistance calls were held with an aggregate of 183 participants.

<b>Topic</b>	<b>Attendees</b>	<b>Topic</b>	<b>Attendees</b>
Introductory Call	25	CPR Training Resources	8
Liability	17	Estate Planning, Pt. I	11
Supporting Caregivers	6	Estate Planning, Pt. II	9
Supporting Stroke Survivors	6	Health Insurance Challenges	9
Substance Use and Addiction	9	Food and Faith	10
Smoking/Tobacco Cessation	11	Health Fair Tips	7
Introduction to Network	8	Funding for Health Ministries	12
Signing Up for Health Insurance	8	Community Health Needs Assessment/Health Insurance Enrollment	11
Health Ministers Certification	9		
Fall Reduction	7		

## Member Recruitment

At the end of the pilot, 1,818 congregation members of the seventy congregations had formally enrolled in the Network. Because of the wide variation in the way congregations count their members, a reliable figure for the total number of members across all congregations and, thus, the percent participation, is unavailable.

Most of the congregations reported enrolling fewer members in the Network than anticipated or desired. Anecdotally, the reasons they cited for low participation include members' privacy concerns, congregants not living in the areas surrounding LifeBridge institutions, congregants missing the activity and recruiting efforts that occurred during the official launch, members not feeling they would be hospitalized, and members not completing the enrollment paperwork correctly.



Among the enrolled members, 30% were men and 70% were women. More than 75% of members were 55 years of age or older and 83% reside in medically-underserved communities. For the members who reported their race/ethnicity, 62% are African-American and 37% are white. Less than 1% of other races were enrolled in the Network. (Figure 1)

### Tracking Network Support

Over the course of the pilot, the Network was notified eighty-three times about inpatient encounters of enrolled members and congregants from participating congregations. This number includes hospitalizations and, in the case of some Carroll Hospital Center referrals, individuals who were kept in observation but, ultimately not admitted.

The eighty-three notifications originated from the three participating hospitals and, later in the pilot, through alerts from the state's health information exchange. Because of limitations in data collection and tracking, it is unknown how many among this number of referrals and alerts from the hospitals' internal mechanisms and CRISP are unique patients. Therefore, the pilot assumes some duplication in the patients referred by hospitals and those identified through CRISP.

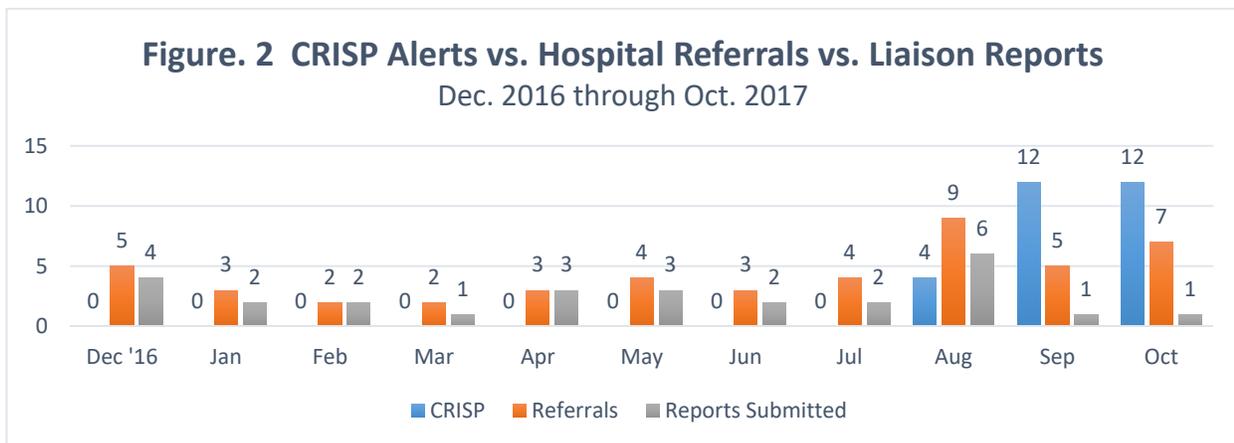
During the entire pilot period, there were fifty-five instances of the hospitals notifying liaisons about inpatient encounters of members of the Network and participating congregations. It is important to note that forty-seven occurred after the institution of tracking reports. At fifty-three, Carroll Hospital made the most referrals for support. Sinai hospital identified two members. Northwest did not refer any patients for support during the pilot. (Table 3)

In August 2017, the hospitals officially began receiving CRISP inpatient alerts for Network members. Between August 2017 and October 31, 2017, CRISP alerted participating hospitals of twenty-eight admissions or transfers: ten at Carroll Hospital, ten at Sinai, and eight at Northwest.

The members referred for support from the Network were from twenty-nine of the participating congregations. Liaisons from five of the participating congregations submitted a total of twenty-seven Care Occurrence Tracking Reports for the forty-seven hospital referrals that were made in the period for which report tracking was available. (Figure 2) These reports represent twenty unique patients, four of whom were hospitalized more than once during the pilot period.

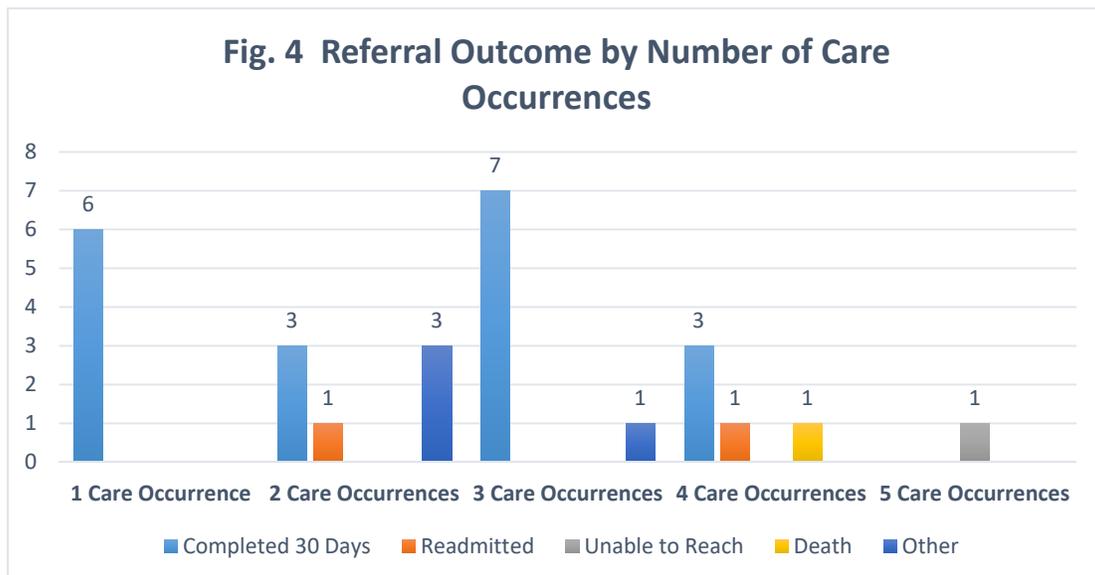
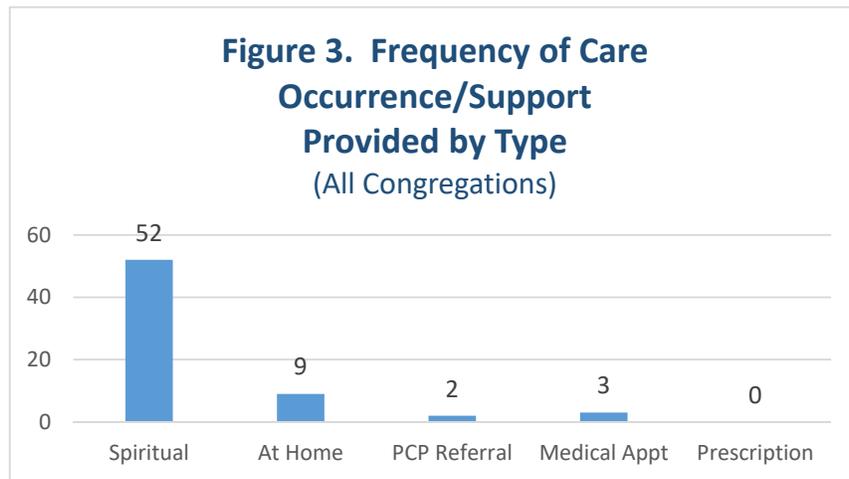
<b>Table 3. Liaison Referrals and Care Occurrence Outcomes</b>	
<b>Total Number of Referrals from Hospital to Liaisons</b>	55
• Carroll Hospital Center	53
• Northwest Hospital Center	0
• Sinai Hospital	2
<b>Total Number of Care Occurrence Tracking Reports Submitted (All Liaisons)</b>	27
<b>Number of Congregations That Submitted ≥1 Tracking Report</b>	5
<b>Number of Unique Patients Who Received Support</b>	20
<b>Number of Members Hospitalized More Than Once</b>	4
<b>Total Number of Care Occurrences During Pilot (All Liaisons)</b>	69
<b>Average Number of Care Occurrences Received Per Member</b>	2.5
<b>Support/Care Occurrences Provided (Frequency)</b>	
• Connect with Primary Care Provider	2
• Assistance With Medical Appointment	3
• Assistance With Prescription	0
• Spiritual or Emotional	52
• At Home Support	9
<b>Reasons for Ending Care (Frequency)</b>	
• More than 30 days After Discharge	19
• Member Readmitted	2
• Unable to Reach	1
• Member Died	1
• Other	4

Overall, there is unexplained disparity between the number of referrals hospitals made to congregations, number of CRISP alerts transmitted, and the number of tracking reports that were submitted during the same time period. (Figure 2) This might be explained by instances where: (1) Network members who were admitted were not identified by the hospital as members of the Network; (2) the hospital offered to contact a Network member’s congregation, but the patient declined support; (3) a hospital identified a Network member but did not notify or was unable to alert the congregation of a member’s hospitalization, (4) a congregation was notified about a congregant’s hospitalization, but did not provide support, or (5) a congregation provided support to



a hospitalized member, but did not submit a tracking report. Of note, hospital privacy policies precluded a mechanism that would allow real-time monitoring of individual Network members' progression and outcomes.

The twenty-seven tracking reports submitted by congregations reflect a total of sixty-nine care occurrences provided to twenty patients. The average number of care occurrences contacts received by a member was 2.5, with a range from one to five contacts. The average length of a care occurrence was thirty minutes. More than 78% of the care provided was spiritual or emotional. At 13%, At Home Support was the distant second-most common type of support provided. Two members received support with connecting to a primary care provider and three received assistance getting to a medical appointment. None of the liaisons reported assisting a member in getting a prescription filled. (Figure 3) The majority (70%) of care occurrences ended because the member reached thirty days post discharge. Two of the twenty patients were readmitted. (Figure 4)



## Faith Leader Satisfaction and Built Capacity

At the end of the pilot, faith leaders and liaisons were surveyed about perceived role in community health partnerships and how participation in the Network improved their capacity to address the health needs of their congregants. When queried about their level of agreement with statements about built capacity, 87% of responding congregations said they embrace their role in assisting hospitals and community organizations in achieving community health goals and 75% stated that they both better understand how they can assist these entities in achieving their goals and are more knowledgeable about programs and services in the community that can help congregation members be healthier. (Table 4)

When asked about how participation in the Network has impacted their congregants, 62% of respondents strongly agreed or agreed that their members consider their place of worship as an even greater resource for health information and services and that they now view their congregation as a stronger partner in wellness. (Table 4)

<b>Table 4. Congregations' Agreement With Built Capacity Statements</b>	
<b>Expanded Capacity</b>	<b>Agreement</b>
<i>Better understand how we can assist hospitals in achieving community health goals.</i>	75%
<i>Are more knowledgeable about community resources that can help congregation be healthier.</i>	75%
<i>Members consider congregation as a greater resource for health information.</i>	62%
<i>Members view congregation as a greater partner in wellness.</i>	62%
<i>Want to be more involved in helping hospitals and the state achieve community health goals.</i>	50%
<i>Are more skilled in recruiting congregations and community members for health programs.</i>	50%
<i>Better understand Maryland's new health system and how it works</i>	37%
<i>Are better prepared to assist in collecting data and reporting outcomes to measure success.</i>	37%
<i>Are more knowledgeable about what is needed to support people with serious health conditions.</i>	37%
<i>Members are more knowledgeable about the state's community health goals.</i>	37%

Qualitative research and anecdotal accounts demonstrate faith leaders' high level of satisfaction with the Network. Clergy members expressed pleasure in the Network's ability to deepen connections with their congregants, other congregations in the community, and the healthcare community. In general, they expressed appreciation for access to resources that facilitated expansion of their congregation's health promotion activities and desired more opportunities to support more members in need. These faith leaders said they want the Network to expand to other hospitals so they can provide this support to all of their members, rather than just to those who live near one of the three pilot hospitals. Additionally, some expressed interest in being notified when members presented at the Emergency Department or were in the hospital "under observation." Finally, several expressed the value of the data collection system that allows them to track and formally report on their members' volunteerism.

Faith leaders in Carroll County maintain that the process employed by Carroll Hospital Center allowed them to connect with congregants who missed formal enrollment in the Network due to prolonged illness or absence. These congregants were captured through the hospital's automated

referral process where information about membership at participating congregations—versus the patient’s formal enrollment in the Network--was collected at intake.

### **Hospital Partner Satisfaction**

In a focus group, key contacts at the three hospitals anonymously shared their impressions of successes and challenges of the pilot. They expressed enthusiasm for the potential of the Network as demonstrated by the success of one of their hospitals, acknowledged the difficulty two of the hospitals experienced in identifying Network members upon admission, and offered suggestions for general improvements to the program.

The group agreed that there is great value in an initiative that efficiently connects hospitals with the community. They felt the Network could be more successful if, at the outset, the coordinators collaborated with hospitals on the project design and objectives to ensure alignment with hospital priorities and capacity. They offered that efforts like the Network would benefit from partners being educated about the respective institutions’ resources and limitations in implementing a new program. For example, community-based organizations may not appreciate the multiple layers of approval required to implement a software change in a large hospital. Conversely, they acknowledge a gap in understanding challenges that are specific to smaller organizations. Finally, they shared that this “culture” training might also include guidance on the norms and customs of interacting with the faith community.

### **Hospital Utilization**

When compared to individuals not enrolled in the Network, congregation members who had been treated at the three hospitals had 75% lower inpatient utilization after one month in the Network and 17% lower utilization after one year in the Network. (Table 1) It should be noted that the data collected during the pilot period did not allow linkages between the patients identified through CRISP and who had documented contact with Network liaisons. Moreover, information is not available about other programs and services these patients utilized. Therefore, a positive relationship between Network participation and reduced inpatient utilization cannot be definitively concluded.

### **Staffing and Infrastructure**

The majority of the administrative functions of the pilot were performed by employees, consultants, and interns of the convener, the MCHI. This team, with input at varying stages from other pilot stakeholder, developed processes, workflows, forms, training and promotional materials, and data collection instruments and systems requisite to implement and evaluate the pilot.

### **Stakeholder Support**

The Network’s project design and potential seemed to appeal to a diverse group of stakeholders and advocates listed below. They have provided funding or formally supported funding requests, hosted community forums, provided technical support and staffing, and extended validity and credibility to the project design.

- Local governing bodies and health departments in Baltimore City, Baltimore County and Carroll County
- Maryland Hospital Association
- Health Services Cost Review Commission
- Centers for Medicare and Medicaid Services
- Maryland Department of Health
- Johns Hopkins Bloomberg School of Public Health's Center for A Liveable Future

## **DISCUSSION AND CONCLUSIONS**

Faith-based health partnerships offer great potential to improve health outcomes, strengthen community relations, and maximize limited resources. The Network was modeled after a successful program in Memphis, Tennessee, where a hospital system partnered with the faith community to provide support to congregants who had been hospitalized. Although the Memphis model was not specifically designed to reduce hospital readmissions, it proved effective in reducing overall inpatient utilization, equating to millions of dollars in savings for the hospital. It is this potential that inspired the conveners and early advocates of the Maryland Faith Health Network.

In considering the Network as an approach to achieving Maryland's Triple Aim, the convener ultimately sought to prove its promise for reducing hospital readmissions. However, the partners agreed that the twenty-one month pilot period and anticipated small sample size that would result from the limited number of hospital partners was unlikely to produce statistically-significant results on health outcomes and utilization. Consequently, it was agreed that the evaluation of the pilot period would focus on successes and opportunities related to establishing the Network's infrastructure, implementing the project, and developing a system for measuring impact.

There were a number of successes in the early stage of implementation. Most notable was securing immediate support and endorsements from key individuals in state and local government, the faith community, and the media. As a result, the program garnered participation from LifeBridge Health System and funding from four foundations. Additionally, the model intrigued other institutions, though they elected to delay joining the network until they had the opportunity to review the results for the pilot.

The other area hospitals' decisions to forego the pilot precluded widespread implementation of the Network, which might have allowed more people to be served and afforded a more robust evaluation that had the benefit of expanded demographics. The participation of more hospitals also would have permitted evaluation of congregation recruiting strategies, utilization, and messaging across various cultures and communities

Seventy congregations representing eleven denominations participated in the Network's pilot. This underscores the faith community's interest in partnering to improve their congregants' health and achieve overall community health goals. These desires were validated through survey results that found a significant majority joined the Network to improve the health of their members (75%), expand community partnerships (67%), and be alerted when a member needed assistance (58%).

The Network struggled with membership enrollment. Congregations reported difficulty in formalizing congregation members’ participation despite using multiple mechanisms employed to promote the Network among parishioners. Ultimately, just over 1,800 were enrolled. The pilot determined that the process of enrolling members and tracking Network members was labor intensive for congregations and MCHI. In assessing the various implementation approaches of the institutions, it was determined that the most effective process for capturing members of congregations was employed by Carroll Hospital Center. This model demonstrated that the most influential factor in members receiving support was not self-identification or intake inquiries about whether a patient was a member of the Network, but rather asking if the individual was a member of a participating congregation and desirous of support from that congregation.

Carroll’s process resulted in the greatest number of referrals made by a hospital and the most members served by a participating hospital. This success supports discontinuing member enrollment at the congregation level, instead considering all congregants a member of the Network and offering support at admission.

Anecdotal reports revealed challenges in identification of hospitalized members at the hospital level. The convener received reports from various congregations about not receiving notification from about members who had been hospitalized. To an extent, these reports are corroborated by the discrepancy in the number of CRISP alerts versus hospital referrals. For example, between August 2017 through October 2017, there were twenty-eight CRISP alerts for Network members, but only twenty-one recorded referrals from hospitals to congregations.

In August 2017, four more patients were referred by the hospital than were identified by CRISP. (Table 5) This might be explained by Carroll Hospital Center’s inclusionary process which referred patients for support who had not formally enrolled through their congregation and who were held in observation yet, ultimately, not admitted. These patients might not have appeared on CRISP’s “watch list”. As such, more patients were referred for care by hospitals than were captured by CRISP.

	<b>CRISP Alerts</b>	<b>Hospital Referrals</b>	<b>Tracking Reports</b>
<b>Before Dec. 2016</b>	N/A	8	N/A
<b>December 2016</b>	N/A	5	4
<b>Jan 2017</b>	N/A	3	2
<b>Feb 2017</b>	N/A	2	2
<b>Mar 2017</b>	N/A	2	1
<b>Apr 2017</b>	N/A	3	3
<b>May 2017</b>	N/A	4	3
<b>Jun 2017</b>	N/A	3	2
<b>Jul 2017</b>	N/A	4	2
<b>Aug 2017</b>	4	9	6
<b>Sep 2017</b>	12	5	1
<b>Oct 2017</b>	12	7	1
<b>TOTALS</b>	<b>28</b>	<b>55</b>	<b>27</b>

Through this pilot, expanded applications for CRISP in community-based partnerships among non-health care providers has been demonstrated. This should inspire similar partnerships in other community-based initiatives. CRISP offers tremendous promise for reliable, universal identification of members admitted to the hospital. It also has produced encouraging preliminary results about the program's impact on hospital utilization.

Among the hospitals, best practices can be identified through evaluating the processes of the most active hospital in the pilot. Carroll Hospital Center made substantially more referrals to the Network than the other two hospitals. This likely can be attributed to Carroll's dedicated staff person for the Network and automated system of identifying members by responding to prompts in their management information system, which queried patients at intake if they belonged to one of the participating congregations and referred them for support. This process resulted in identification of congregation members who had not formally enrolled in the Network, but were interested in receiving support from volunteers from their place of worship.

Carroll Hospital Center's success also might be explained by its decades-long history with participating in, implementing, and evaluating community partnerships. This history afforded strong relationships with congregations and other community institutions. It also allowed a nimble information system that could be modified to accommodate expansion of community outreach efforts. It is possible that these experiences and resources advantaged Carroll hospital to seamlessly integrate the Network into their nursing assessment and intake processes.

Sinai Hospital and Northwest each used a process that relied on member self-identification and intake staff's inquiries about membership in the Network (versus being a member of a participating congregation). These hospital had less staffing resources dedicated to oversee implementation than Carroll. As only two members were identified at Sinai and none at Northwest during the pilot period, it can be surmised that this system, which was dependent on individuals versus an automated system—was not as effective as the Carroll Hospital system.

After the initiation of care occurrence tracking, there was a total of forty-seven referrals made to liaisons from hospital Navigators, yet only twenty-seven reports for care occurrences submitted. This equates to about half of referrals being tracked or reported through the established system. Because there was no process to perform end-to-end tracking of each referral, it is unknown if the referred members declined support, received support that simply was not reported by the congregation, or if no support was provided when the referrals were received by the congregation.

Future efforts to track impact based on volunteer reporting should entail a mechanism to track referrals from the time of identification and referral to the disposition of the referral at thirty days post discharge. This process must take into account privacy policies, which precluded the hospitals in the pilot from notifying the convener of members who had been admitted. The absence of end-to-end tracking data impacted statistical significance and reliability and might have produced more data, allowing a higher degree of confidence in the methods, approach, and outcomes.

The twenty Network members whose support was recorded in the tracking reports received an average of 2.5 care contacts that lasted for an average of thirty minutes each. The most common type of support provided was Spiritual or Emotional. Only two of the sixty-nine care occurrences delivered involved connecting a member to primary care and three involved providing assistance in attending a medical appointment. None entailed assistance in getting a prescription filled.

While studies exist that show a positive correlation between faith and recovery, more research has been completed that examines the relationship between medical and non-clinical factors associated with hospitalizations and readmissions. For this reason, future efforts should include increased emphasis for liaisons to ask “the three questions” and provide this level of support to facilitate demonstrating the impact of the Network on factors that have been proven to impact readmission.

The impact of participating in the pilot correlates with congregations’ anecdotal satisfaction with the Network. A survey administered to faith leaders at the end of the pilot revealed that most had a better understanding of how they can assist institutions in achieving their health goals, are more knowledgeable about resources available for their congregants that can improve community health, and want to do more to support the state’s overall community health goals. Moreover, these faith leaders believed that participation in the Network enhanced their ability to address their members’ needs and further established their place of worship as a resource for health information and a partner in wellness. These findings substantiate continuation and expansion of the Network as well as engagement of faith communities as important partners in other hospital- and community-based population health initiatives.

## **NEXT STEPS**

It was the purpose of the Maryland Faith Health Network pilot to assess the effectiveness, feasibility, and sustainability of the model and devise a refined version that could be expanded to involve multiple hospitals and hundreds of congregations across Maryland. To apply the lessons learned for advancing the pilot:

1. LifeBridge Health System will continue to identify and refer for support patients who are members of participating congregations.
2. Other Maryland hospitals will be encouraged to leverage the infrastructure established by this pilot, particularly those facilities located in the areas where current Network members live and worship.
3. As convener for the pilot, the Maryland Citizens’ Health Initiative will widely release and present the evaluation report to various stakeholders in community and population health, including at the 2018 Maryland Innovations Summit. It will be the intent of this sharing to encourage other hospitals and congregations to join the Network, increasing the number of individuals and communities that can be served.
4. The Maryland Citizens’ Health Initiative will work with congregations to identify and respond to population health concerns through monthly technical assistance calls.
5. The Maryland Citizens’ Health Initiative will aim to identify and support additional local and national hospitals to participate in the Network.

## RECOMMENDATIONS

The following recommendations are offered to advance the pilot objectives or facilitate refined implementation of the expanded program.

1. Continue ongoing recruitment of hospitals and congregations into the Maryland Faith Health Network and continued data collection and reporting.
2. Implement a standardized process within hospitals and across hospital systems for implementing, tracking, and reporting on the Network. The processes employed by Carroll Hospital Center should be considered the standard in the event of expansion. Elements of this model that warrants replication include:
  - Inquiry about congregation affiliation at intake.
  - A dedicated staff person at the institution to oversee Network operations
  - An automated information systems to notify staff of members of participating congregations who are admitted or under observation
  - Participation in the Network as part of a broader community engagement strategy.
3. In initiatives where data will be collected to report on program impact, implement data collection and reporting training for congregations to refine methods and enhance data quality and integrity.
4. Offer institutional and faith- community culture training to facilitate informed, shared decision-making and program operations among Network partners.
5. Develop effective communication mechanisms to consistently share information and reminders across the Network.
6. Develop a toolkit to provide guidance and tools to assist other hospitals, congregations, and community-based organizations seeking to implement a collaborative effort like the Maryland Faith Health Network.
7. Continue to leverage and promote CRISP as an essential tool to identify targets for support and evaluate program effectiveness.
8. Increase statewide and regional investment in faith-health partnerships to achieve mutual goals for population health. Offer additional training and resources for congregations for advancing mutual public health goals related to diabetes, substance use disorder, and other chronic health conditions.
9. For programs aiming to reduce readmissions, increase the emphasis on the importance of providing evidence-based, non-clinical supports that are strongly associated with reducing readmissions (ie. connection to a primary care provider, assistance in completing the post-discharge appointment, assistance in filling prescriptions).
10. Enlist individuals with knowledge of and relationships in targeted denominations to engage and secure participation from the faith community.