414LIFE Program Evaluation Plan

For 2019-2021 with Draft Plan for 2022-2025

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BACKGROUND

Violence-related injury is the third leading cause of death in the United States in 15- to 34-year-olds and the fourth leading cause of death in 10- to 14-year-olds as of 2020.[1] In Wisconsin, homicide is a leading cause of death for Black residents, with firearm-related homicide being the fourth leading cause of death in the state and the second leading cause of death in Milwaukee from 2000-2017, with an average age of 28 at time of death for firearm homicide victims in Milwaukee.[2] The national Violence Policy Center ranked Wisconsin as 2nd in the nation for Black homicide victimization in 2016.[3] After a 70% increase in homicides in 2015, the City of Milwaukee expanded its Office of Violence Prevention and engaged thousands of residents in developing its first comprehensive violence prevention plan known as the *Blueprint for Peace*. The *Blueprint* contains 6 goals and 30 strategies for addressing violence as a public health issue. The 414LIFE program was one of the programs developed as part of the response to firearm violence in Milwaukee. After a steady four-year decline in homicides and nonfatal shootings from 2016-2019, Milwaukee has experienced record-breaking levels of gun violence in 2020 and 2021.[4] Unfortunately, Milwaukee has not been alone in this trend. The increased stress from the social, psychological, and economic impact of the COVID-19 pandemic and related community-level challenges, have been cited as potential contributing factors.

Program Overview

414LIFE is a program strategy called for by the community in Goal 1 of Milwaukee's Blueprint for Peace. This strategy called for the use of an evidence-based approach to prevent conflict and retaliatory gun violence in Milwaukee neighborhoods. After researching several local and national models, the City of Milwaukee's Office of Violence Prevention (OVP) chose to utilize the Cure Violence (CV) model as the basis for its evidence-based approach for this strategy. Started by Dr. Gary Slutkin, an epidemiologist and disease control specialist at the University of Illinois Chicago, Cure Violence Global is one of the most replicated and evaluated models for violence interruption used across the world. This specific approach understands violence as a public health issue and addresses gun

[1] National Center for Injury Prevention and Control, U.S. Centers for Disease Control and Prevention, Web-Based Injury Statistics Query & Reporting System (WISQARS) Leading Causes of Death Reports, 1981-2020, for National, Regional, and State, https://www.cdc.gov/injury/wisqars/LeadingCauses.html. Accessed April 11, 2022.

[2] Dunton, Z., Hargarten, S., Kohlbeck, S., & Osman, F. (2021). Homicide: A Leading Cause of Death for Black Non-Hispanics in Wisconsin. *WMJ, 120(Suppl 1):* S6-S9. https://wmjonline.org/wp-content/uploads/2021/120/S1/S6-1.pdf.

[3] Black Homicide Victimization in the United States: An Analysis of 2016 Homicide Data. May 2019. Violence Policy Center. https://vpc.org/studies/blackhomicide19.pdf.

[4] Milwaukee Homicide Review Commission. Homicide and Nonfatal Shooting Dashboards https://www.mcw.edu/departments/epidemiology/research/milwaukee-homicide-review-commission/reports/dashboards. Accessed April 11, 2022.

violence specifically as a preventable disease that is transmitted from one person to another. This model holds the belief that this transmission can be prevented through intentional outreach, public education, and intensive case management and interrupted through effective conflict mediation. In Milwaukee, this intervention was designed to focus on individuals ages 15 to 35 at highest risk for gun violence victimization through regular individual interactions, conflict mediation, media campaigns, and community mobilization. The program aims to prevent violence through a three-prong approach: (1) identification and detection (2) targeted intervention and (3) changing community-wide attitudes, behavior, and norms related to gun violence.

The initial structure for the 414LIFE program was launched in two phases starting in October 2018. The first phase focused on hiring and training the initial staff to implement the community intervention side of the program that includes both violence interruption and outreach activities as part of the feasibility or pilot implementation of the program. During the feasibility implementation, the community-based program had 10 positions, including 3 Violence Interrupters (VIs) and 5 Outreach Workers (OW), plus a Community Engagement Coordinator and a Program Director during the initial years of the program, which will be the focus of the first phase evaluation report. The initial geographic focus for the program was in two particular neighborhoods within Milwaukee, including Old North Milwaukee and Garden Homes, given the high levels of violence in those neighborhoods, which aligns with the overall CV model to have a concentrated geographic focus area for the intervention.[5] However, during the initial time period of program implementation, the reach of the program has extended far beyond those neighborhoods since the team has been requested and has responded to all areas of the city when notified of a potential violent event, incident involving potential retaliation, or in the aftermath of a violent event, particularly during the time period since the start of the COVID-19 pandemic. As discussed further below, the fact that the initial team has responded outside of the target neighborhoods will impact the evaluation approach during the first years of the program. The implementation of the program expansion and the hiring of additional VIs, OWs, Case Managers (CMs), and related positions in 2022 will also affect the measures included in future evaluation reports.

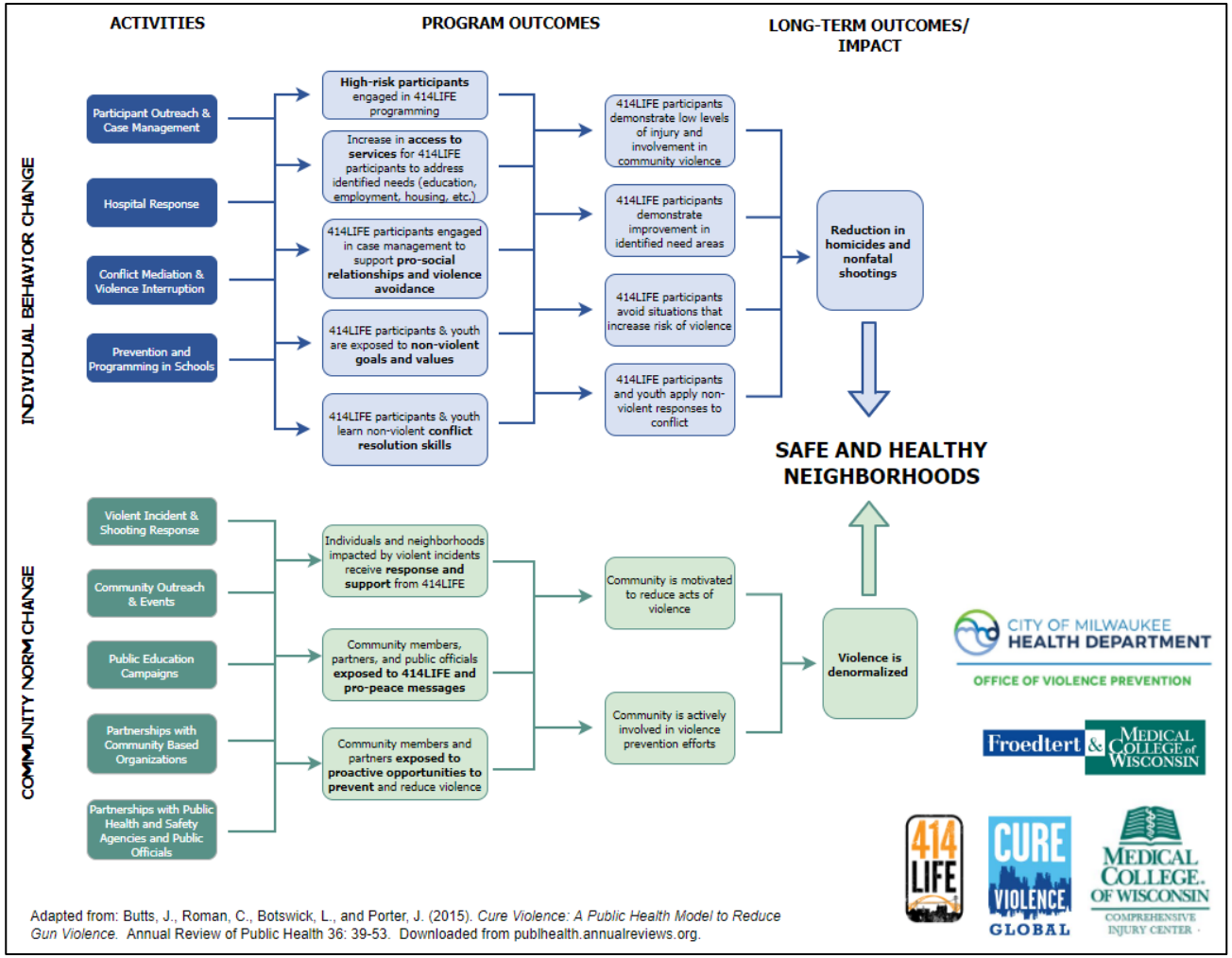
The second phase of implementation focused on the launch of the hospital response component of the program. This phase launched in May 2019, in partnership with Froedtert Hospital (FH), the Medical College of Wisconsin's (MCW's) level 1 trauma center. Froedtert Hospital was chosen since it is the only adult level 1 trauma center in the city and approximately 80% of adult gun violence survivors are seen at FH as they are either transported there directly or are transferred after being stabilized at another hospital. Gunshot wound survivors who are 35 years of age or younger are referred to a hospital responder, if the event occurred in the city of Milwaukee or the patient lives in the city of Milwaukee. Therefore, the hospital portion of the program accepts referrals from all neighborhoods in Milwaukee. Ascension St. Josephs also joined the program in June 2021 and efforts are underway to add

[5] Slutkin, G., Ransford, C., & Zvetina, D. (2018). How the Health Sector Can Reduce Violence by Treating It as a Contagion. *AMA Journal of Ethics*, *20*(1), 47–55. https://doi.org/10.1001/journalofethics.2018.20.1.nlit1-1801

additional hospitals to the 414LIFE network. The initial feasibility phase of the hospital response part of the program was based on one hospital responder position, which will also be expanding in 2022 and will be addressed in later phases of the evaluation.

The program is primarily funded and administered by OVP in partnership with MCW as the contracted agency, through its Comprehensive Injury Center (CIC). The program is currently managed through the CIC's Division of Violence Prevention (DVP). Froedtert Hospital also funds part of the hospital response portion of the program. The program is set to expand in 2022 with additional funds being added through both the American Rescue Plan Act (ARPA), the Milwaukee Health Care Partnership (MHCP), and Froedtert Hospital. Part of what makes the Milwaukee program unique is the collaboration between the community- and hospital-based portions of the program, as shown in Figure 1. The growth and expansion of the program will be reflected in the planned evaluation years as outlined below.

Figure 1: Overall 414LIFE Program Logic Model



Adapted from: Butts, J., Roman, C., Botswick, L., and Porter, J. (2015). *Cure Violence: A Public Health Model to Reduce Gun Violence.* Annual Review of Public Health 36: 39-53. Downloaded from publhealth.annualreviews.org.

EVALUATION PLAN OVERVIEW

The evaluation plan for this program is intended to be iterative with reports being provided in annual phases starting in 2022 through at least the end of the current program funding (estimated through 2025). Each phase will be broken into two separate components with differing timelines for the community- and hospital-based portions of the program, as shown in the timeline in Figure 2. The Phase I evaluation will provide an overview of the program during the initial feasibility phase, covering multiple years from the start on the program since an evaluation has not yet been completed on the program to date. Additional details on the planned phases are outlined below. The evaluation reports will contain both process and outcome components to document the implementation, activities, and barriers for the program, as well as program outputs and outcomes. The evaluation reports will also evolve over time, particularly for the community-based portion of the program and will reflect the changes and expansion of the program implementation beyond the feasibility phase.

414LIFE was implemented as a public health program and *not* as a research study and was therefore not implemented with a direct control group as would be the case as in an experimental design such as a randomized control trial (RCT), often considered a "gold standard" for research. In addition, the initial feasibility implementation of the community-based program was limited in scope in terms of resources and although the program started with target neighborhoods of Old North Milwaukee and Garden Homes, the reach of the team expanded during the initial program years to provide outreach and mediation across the city. These aspects of the implementation limit the ability to track outcomes based on comparison areas and change over time in the target neighborhoods, as the intervention had a wider reach than the initial focus neighborhoods. Therefore, the evaluation will focus on effectiveness of 414LIFE in a "real world" scenario for the implementation of the program. Each evaluation will include process and immediate output metrics, as well as the individual and neighborhood-level outcomes and a comparison group where feasible.

The data collected during the initial feasibility implementation for the community-based program was limited both by the data collection system that was available, as well as the depth of the data collection during the initial program implementation during the feasibility phase. This has been enhanced through the transition to the new Cure Violence (CV) database that was implemented in August 2021. As part of the planning for the evaluation, additional data collection measures are being considered for potential implementation, such as primary data collection from program participants and a community survey and the planned additional data collection and evaluation components are indicated with each phase as outlined below. However, it is important to note that the specific indicators, measures and program targets will be subject to change with the completion of each phase of the evaluation as more is learned about the program and to better reflect the implementation of the program expansion.

Stakeholders

The following provides an overview of some of the primary stakeholders that are connected to this evaluation effort. The list is not intended to be all-inclusive but provides an indication of some of the agencies sponsoring aspects of the work.

- Office of Violence Prevention, Milwaukee Health Department
- Division of Violence Prevention, Comprehensive Injury Center, Medical College of Wisconsin
- Froedtert Hospital
- Milwaukee Health Care Partnership
- Milwaukee Common Council
- Governor's Office, State of Wisconsin
- Additional funding organizations
- Multiple agencies and community-based organizations addressing violence prevention in Milwaukee

Evaluation Team

The evaluation for the 414LIFE Program will be carried out by the CIC's Division of Data Surveillance and Informatics (DDSI). Although part of the CIC, the DDSI is conducting the evaluation as a neutral entity that does not have a direct tie to the implementation or funding for the program. Multiple positions are being added to the DDSI to develop a data and evaluation team, including a program evaluator position that will act as the lead under the guidance of the director of the DDSI and CIC's data science faculty member.

Timeline

The timeline below provides an overview of the planned phases of the evaluation for both the community- and hospital-based portions of the program. The target completion date is dependent on the hiring of the program evaluator and related positions into the DDSI to support the data collection and evaluation work. In addition, the timeline will be updated based on what is learned during the Phase I initial evaluation cycle. The follow-up period is included to assess outcomes such as re-injury or involvement in future incidents of violence to allow for adequate time for follow-up initially and over a multi-year period.

Figure 2. Overall Evaluation Timeline

Phase	Program Period	Min. Follow-up Period	Follow-up End Date	Target Completion Date
Community-Based				
Phase I	Jan 2019 - July 2021	NA	NA	December 2022
Phase II	Aug 2021 - July 2022	1 year	July 2023	December 2023
Phase III	Aug 2022 - July 2023	2 years	July 2024	December 2024
Phase IV	Aug 2023 - July 2024	3 years	July 2025	December 2025
Hospital-Based				
Phase I	May 2019-Apr 2021	1 year	April 2022	November 2022
Phase II	May 2021-Apr 2022	2 years	April 2023	November 2023
Phase III	May 2022-Apr 2023	3 years	April 2024	November 2024
Phase IV	May 2023-Apr 2024	4 years	April 2025	November 2025

COMMUNITY-BASED PROGRAM EVALUATION

The community-based program evaluation will include a process evaluation of the implementation and expansion of the 414LIFE Community-Based Violence Interruption program, as well as key output and outcome measures for the program. The outcome measures are planned for expansion after the initial report based on both enhanced data collection, as well as the additional resources being added to the program in 2022. The specific measures and targets are subject to change as decisions are made about the program expansion and based on what is learned with the completion of each evaluation phase. Figure 3 provides an overview of the logic model for the community-based program and the following section breaks down the phases of the evaluation plan.

Figure 3. 414LIFE Program Logic Model – Community-based

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	LONG-TERM OUTCOMES/ IMPACT
What is going into the program (e.g., resources)	*What the program is doing, what services are being delivered*	*Immediate results that are part of the program process - What is directly produced through the activities*	*Shorter-term goals or results*	*Longer-term "big picture" goals or results. Often measured over multiple years.*
• Community violence interrupters (VI), outreach workers (OW), case managers (CM), supervisors, other • Trained staff with a high level of credibility and familiarity with neighborhoods	**Conflict Mediation & Violence Interruption**	• Number of mediations • Location of mediations • Number of mediation follow-ups • Level of violence involved in conflict • Type of conflict	• Outcome of mediations • Percent of high-risk participants • Participant goals completed by type (education, employment, housing, health, legal, etc.) • Participants are not victims of community gun violence after involvement in program • Participants have low level of involvement with the criminal justice system for engaging in violence	**Safe and healthy neighborhoods** **<u>Individual Behavior Change</u>**: Reduction in violence • among program participants • in homicides and nonfatal shootings in target neighborhoods
	Community Outreach & Events	• Number of and location community events • Number of participants at community events • Number of presentations or public education • Marketing and public education efforts (number and reach) • Number and type of participant-only activities		

experiencing high levels of violence • Funding (City of Milwaukee contract for 414LIFE Program through the Office of Violence Prevention and other public and private sources) • Support from the City of Milwaukee's Office of Violence Prevention • Support from Mayor's Office and Common Council • Training and support from the evidence-based Cure Violence model • Partnerships with community-based organizations, public health and safety agencies, and public officials		• Number of publications/educational materials dispersed • Number of hours spent canvassing and location	• Participants avoid situations that increase risk of violence • Participants apply non-violent responses to conflict • Youth express increased confidence in their ability to avoid or prevent violence • Success stories of avoiding violence • Community members in the target areas are motivated to reduce acts of violence • Community members in the target area are actively involved in violence prevention efforts • Reduction in homicides and nonfatal shootings in target areas	**<u>Community Norm Change:</u>** Violence is de-normalized • in the areas receiving the program intervention
	Participant Outreach & Case Management	• Number of individuals eligible for the program • Number participants entering the program • Number of contacts with participants and location • Number of participants with identified needs and goals by type • Number of participants discharging from the program		
	Violent Incident & Shooting Response	• Number of violent incident responses • Location of responses • Outcome of the incidents		
	Prevention & Programming in Schools	• Number of workshops offered by type • Location of sessions offered • Number of students attending sessions		

Phase I:

The primary questions being addressed in this phase include:

- How was the 414LIFE community-based program implemented in Milwaukee?
- What was the reach of the community-based program, including by geographic area and target population?

The Phase I evaluation report will be based on the time period from the start of the project in October 2018, with data tracking primarily initiated in January 2019, through July 2021. This phase will focus on the initial feasibility implementation of the program prior to the program expansion and to the transition to MCW in July 2021. The initial report will include data from the original data system and tracking processes that were implemented at the start of the program but were limited in scope and content. The evaluation will focus on the initial implementation of the program model, selection of the target area(s) and implementation within and outside of the focus areas, hiring and training of program staff, documentation of program processes, as well as barriers and facilitators to program implementation.

The Phase I evaluation report will also include core output measures as shown in Appendix A, with a specific focus on the reach of the community-based program in terms of the primary activities of Conflict Mediation and Interruption, Community Outreach and Events, Participant Outreach and Case Management, Violent Incident and Shooting Response, and Prevention and Programming in Schools. The evaluation will be contextualized based on the demographics (age, race/ethnicity, sex, income, etc.), assessed risk/need level, and related characteristics of the program participants to assess whether the program is reaching the target population, as well as where the program activities took place across Milwaukee to address the reach of the program both within and outside of the target areas.

The Phase I report will be limited due to both the constraints of the initial data collection system utilized at the onset of the program, as well as having limited data available for follow-up with the first cohorts of program participants. Follow-up of the first cohort is not possible in terms of specific outcomes (such as injury due to community violence after initial program involvement) and based on the available data will not allow for direct follow-up with program participants, although the intent will be to include such measures in future evaluation phases as outlined below. The program is currently working to modify this approach with the new CV database that was implemented starting in August 2021, which will provide enhanced capacity for later evaluation reports. In addition, the initial report will look at changes in the initial target areas of Old North Milwaukee and Garden Homes for homicides and nonfatal shootings, as these are common measures used in other evaluations of the CV model and these were the focus areas for outreach during the first two years. However, after the first two years of the initial feasibility implementation of the program, the

outreach activities became more spread out making it difficult to do a direct comparison to other neighborhoods or geographic areas without the intervention or even to compare the historical trends within the target areas before and after implementation of the program. As the program expands and decisions are made in collaboration with OVP regarding the geographic focus of the community-based program, this approach will be reconsidered for future planned evaluation reports. In addition, the rise in violence across Milwaukee during the initial period of the COVID-19 pandemic since March 2020 will also be taken into consideration as part of the evaluation.

Phase II:

The primary questions being addressed in this phase include Phase I questions plus:

- Did the mediation/interruption activities demonstrate successful outcomes to potentially violent or retaliatory situations?
- Did the program reach high-risk individuals as intended and assist in addressing their goals and needs?
- Did program participants avoid situations involving violence after program participation?

The Phase II evaluation report will be based on the time period for one year from when the program transferred to MCW and the new CV database was implemented including August 2021 through July 2022. This phase will continue to focus on the initial feasibility portion of the program prior to the program expansion and to the transition to MCW in July 2021. The report will expand on the Phase I report to include data for the first year of the new CV database implemented in August 2021. The second phase will support an initial one-year follow-up period for participants that started the program and were tracked after August 2021. This will require the availability of resources to support primary data collection from program participants through follow-up surveys or interviews, as well as the availability of data to track additional outcomes for program participants such as future involvement in the criminal justice system. The elements of the comparison group will need to be defined after review of the initial program participant data. This will necessitate the tracking of individual-level data for program participants. The proposed approach will be subject to change and modification based on program expansion and what is learned through the Phase I evaluation of the program.

Phase III and IV Evaluation:

The primary questions being addressed in this phase include Phase I and II questions plus:

- Did community members in the target area demonstrate commitment to violence prevention after program implementation?
- Did the target areas demonstrate a significant reduction in homicides and nonfatal shootings after program implementation?

The Phase III and IV evaluation reports are currently planned to be based on the time periods starting from August 2022 forward, with continued follow-up on the program participants starting from August 2021 to include a multiple-year follow-up period. As with Phase II, this will require the availability of resources to support primary data collection from program participants through follow-up surveys or interviews, as well as the availability of data to track additional outcomes for program participants such as future involvement in the criminal justice system. The additional questions added in these later phases to address community perception and norm changes will be dependent on whether the program expansion includes a concentrated geographic focus for program activities, that differs from the initial feasibility implementation of the program. Tracking of these outcomes will also require resources to gather primary data through surveys of community members both within and outside of the focus areas. This will again be subject to change and modification based on program expansion and what is learned through the Phase I and II evaluations of the program.

Indicators and Targets

The evaluation questions, primary indicators for program outcomes and initial targets for the community-based program are listed in Figure 4 below. The indicators and targets are subject to change for Phases II-IV based on the program expansion, enhanced data collection, and what is learned during the earlier phases of the evaluation, including the development of baseline data for the targets. The indicators from the earlier phases will also be included in subsequent phases. A full list of the initial output and process measures is available in Appendix A.

Figure 4. Evaluation Questions and Primary Indicators for Community-Based Program Outcomes

Indicators	Definition	Target	Starting Phase
Did the mediation/interruption activities demonstrate successful outcomes to potentially violent or retaliatory situations?			
Outcome of mediations	Percent of mediations resolved or conditionally resolved after initial or follow-up contact.	At least 65% of the mediations were resolved or conditionally resolved after initial or follow-up contact.	Phase II
Did the program reach high-risk individuals as intended and assist in addressing their goals and needs?			
Percent of high-risk participants	Percent of participants assessed as high-risk when initially entering the program.	At least 80% of participants were assessed as high-risk when initially entering the program.	Phase II
Change in risk level for high-risk participants	Percent of high-risk participants assessed at a lower risk level prior to discharging from the program.	At least 25% of high-risk participants were assessed at a lower risk level prior to discharging from the program.	Phase II
Participant goals completed by type	Percent of participant goals completed by type: violence/safety, health, legal, financial/employment, education, housing, social	On average, participants completed at least 50% of their goals prior to program discharge; At least 50% of all goals were completed by type across participants discharging from the program.	Phase II
Did program participants avoid situations involving violence after program participation?			
Participants are not victims of community gun violence	Percent of participants recorded as being victims of community gun violence after the start of program participation.	Less than 25% of participants were recorded as being victims of gun violence within 1 year after the start of program participation.	Phase II
Participants have low level of involvement with the criminal justice system for engaging for violence	Percent of participants recorded as having been arrested or charged for violent offenses or use/possession of a weapon after the start of program participation.	Less than 25% of participants were recorded as having been arrested or charged for violent offenses or use/possession of a weapon after the start of program participation.	Phase II
Participants avoid situations that increase risk of violence	Percent of responding participants indicating that they avoided situations that had the potential for increased risk of exposure to violence	At least 50% of responding participants indicated that they avoided situations that had the potential for increased risk of exposure to violence within 1 year of participation in the program.	Phase II
Participants apply non-violent responses to conflict	Percent of responding participants indicating they have applied non-violent responses to conflict	At least 50% of responding participants indicated they have applied non-violent responses to conflict since the start of program participation	Phase II
Youth express increased confidence in their ability to avoid or prevent violence	Percent of responding youth who were exposed to 414LIFE programming in schools expressing an increase in confidence in their ability to avoid or prevent violence.	At least 50% of responding youth who were exposed to 414LIFE programming in schools expressed an increase in confidence in their ability to avoid or prevent violence.	Phase II
Success stories of avoiding violence	Success stories for program participants who have avoided involvement violence after program participation	At least three examples of program participants who have avoided involvement in violence after program participation.	Phase I
Did community members in the target areas demonstrate commitment to violence prevention after program implementation?			
Community members in the target areas are motivated to reduce acts of violence	Percent of responding community members in the target areas demonstrating a motivation to reduce acts of violence.	At least 50% of community members in the target areas demonstrate a motivation to reduce acts of violence.	Phase III
Community members in the target area are actively involved in violence prevention efforts	Percent of responding community members in the target area indicate they are actively involved in violence prevention efforts.	At least 50% of community members in the target area indicate they are actively involved in violence prevention efforts.	Phase III
Did the target areas demonstrate a significant reduction in homicides and nonfatal shootings after program implementation?			
Reduction in homicides and nonfatal shootings in target areas	The target areas demonstrated a more significant reduction in homicides and nonfatal shootings than matched comparison areas.	The target areas demonstrated a more significant reduction in homicides and nonfatal shootings than matched comparison areas.	Phase III

Data Collection

Data for the outcome evaluation will be based on a combination of sources including but not limited to the data collected in the original and updated Cure Violence Database, the Froedtert Trauma Registry, criminal justice data through partners and DataShare housed at MCW, surveys collected as part of programming in schools, and data collected directly through follow-up surveys or interviews with program participants. The evaluation team is also assessing the feasibility of conducting community surveys as part of future evaluation reports. The availability of resources and data from various sources will impact the evaluation reporting.

HOSPITAL-BASED PROGRAM EVALUATION

The hospital-based program evaluation will focus on both the implementation of the 414LIFE version of the Hospital-Based Violence Intervention (HBVI) Program, as well as key output and outcome measures for program participants and the program overall. The data collection and outcome measures are planned for expansion after the initial report based on both enhanced data collection, as well as the growth of the program. The specific measures and targets are subject to change as decisions are made about the program expansion and with the completion of each evaluation phase. Figure 5 provides the overview of the logic model for the hospital-based program and the following section breaks down the phases of the evaluation plan.

Figure 5. 414LIFE Program Logic Model – Hospital-based

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	LONG-TERM OUTCOMES/ IMPACT
What is going into the program (such as resources)	*What the program is doing, what services are being delivered*	*Immediate results that are part of the program process - What is directly produced through the activities*	*Shorter-term goals or results*	*Longer-term "big picture" goals or results. Often measured over multiple years.*
• Hospital responder staff and supervisors • Trained staff with high level of familiarity with the specific needs of community members who have been the victims of gun violence • Funding (Froedtert Hospital and Milwaukee Health Care Partnership) • Support from the City of Milwaukee's Office of Violence Prevention • Support from Mayor's Office and Common Council • Information from evidence-based Hospital Violence Intervention programs • Collaborating partners & partner organizations	**Hospital response**	• Number of referrals by referral source • Program participants accepting services • Total time spent per case • Location of injury for program participants • Level of engagement for participant and family/loved ones • Number of participants with identified issues or needs by type (retaliation, mental health, housing, transportation, etc.) • Involvement in Trauma Quality of Life (TQOL) Clinic • Engagement with 414LIFE Community-Based Team	• Number of participants meeting program criteria • Number of issues addressed for participants as part of program participation • Number of issues resolved for participants as part of program participation • Participants indicating improvement in key SDoH issues • Participants indicating engagement in substance use or mental health services or treatment • Reinjury rate for participants due to community violence • Level of involvement for participants with the criminal justice system for violence • Resolution to specific quality of life or other issues identified as part of program participation (retaliation, transportation, etc.) • Improvement in SDOH issues (employment, education, housing). • Improvement in mental health and substance use outcomes after program participation	**Safe and healthy neighborhoods** **Individual Behavior Change**: Reduction in violence • among program participants

Phase I-IV:

The primary questions being addressed in this phase include:

- How was the 414LIFE hospital-based violence intervention program implemented in Milwaukee?
- What was the reach of the hospital-based program, including by geographic area and target population?
- Did the program reach high-risk individuals as intended and assist in addressing their goals and needs?
- Did program participants demonstrate significantly lower levels of reinjury and involvement in violence after program participation?

The Phase I evaluation report will be based on the time period from the start of the HBVI in May 2019 through the first full two years of the program, through April 2021. This phase will focus on the initial feasibility portion of the program prior to the expansion and will include a minimum one-year follow-up period for program participants. The evaluation will focus on the initial implementation of the feasibility program and the program model, how it was implemented, analysis of specific activities engaged in by the hospital responders (HR) with referred patients and/or their families, alignment with the target population, hiring and training of program staff, documentation of program processes, as well as barriers and facilitators to program implementation.

The evaluation report will include core output and outcome measures as shown in Figure 6 below, with a specific focus on the reach of the hospital-based program in terms of the primary activities of the hospital responder. Since the program was implemented at Froedtert Hospital and the Medical College of Wisconsin for all gunshot wound survivors injured or living in Milwaukee[6] meeting the eligibility criteria rather than as a randomized controlled trial (RCT), there is not an existing control group. Therefore, a matched comparison group will be selected from the Froedtert Hospital Trauma Registry for the time period prior to the start of the program and these patients will be matched to program participants based on demographics (age, gender, race/ethnicity), as well as method of injury and residency. This will allow for the comparison of outcomes (such as reinjury) between program participants and gunshot wound survivors with similar characteristics that were not exposed to the 414LIFE hospital program. The Phase I report will include a minimum of a one-year follow-up period for program participants. The later phases will address similar questions as outlined above and will build on the follow-up period for program participants to a multi-year period. Phases II-IV will also expand the data collection available to support the evaluation. These phases will also account for the planned expansion and growth of the program with additional funding, as well as the intersection with other initiatives such as the implementation of the Trauma Quality of Life (TQOL) Clinic that will also have the potential to influence outcomes for program participants. The outcomes and outputs for the

[6] Survivors of non-gun related violence with a high likelihood of retaliation may also be included in the hospital-based portion of the program.

program will also be contextualized based on the demographics (age, race/ethnicity, sex, etc.), type and mechanism of injury, and related characteristics of program participants to assess whether the program is reaching the target population, as well as where the program activities took place across Milwaukee to address the reach of the program.

Indicators and Targets

The evaluation questions, primary indicators for program outcomes and initial targets for the hospital-based program are listed in Figure 6 below. The indicators and targets are subject to change for Phases II-IV based on the program expansion, enhanced data collection, and what is learned during the earlier phases of the evaluation. The indicators from the earlier phases will also be included in subsequent phases. A full list of the initial output and process measures is available in Appendix B.

Figure 6. Evaluation Questions and Primary Indicators for Outcome Measures for Hospital-Based Program

Indicators	Definition	Target	Starting Phase
Did the program reach high-risk individuals as intended and assist in addressing their goals and needs?			
Number of participants meeting program criteria	Number of participants meeting program eligibility criteria (e.g. gunshot wound survivor, race, age, etc.)	90% of individuals referred met the eligibility criteria when initially referred to the program.	Phase I
Number of issues addressed for participants as part of program participation	Number of resources or referrals provided to participants to address identified issues or needs by type (retaliation, mental health, housing, transportation, etc.); Percent of identified needs where resources or referrals were offered to participants	On average, resources or referrals were provided to participants to address at least 50% of their identified issues or needs by type.	Phase I
Number of issues resolved for participants as part of program participation	Number of identified issues or needs resolved by type (retaliation, mental health, housing, transportation, etc.); Percent of identified needs indicated as resolved by type	On average, at least 25% of identified issues or needs by type were addressed across program participants.	Phase I
Participants indicating improvement in key Social Determinants of Health (SDoH) issues	Percent of responding participants who indicated they had improvements in identified challenges related to SDoH after program participation	At least 50% of responding participants indicated they had improvements in identified challenges related to SDoH after program participation.	Phase II
Participants engaging with treatment or resources related to substance use or mental health issues	Percent of participants with identified needs referred to substance use or mental health resources after program participation	At least 50% of responding participants with an identified need were referred to substance use or mental health resources.	Phase II
Did program participants demonstrate significantly lower levels of reinjury and involvement in violence after program participation?			
Reinjury rate for participants due to community violence	Percent of participants recorded as being victims of gun violence after the start of program participation.	Program participants demonstrated a significantly lower level of reinjury than a matched comparison group. Less than 5% of participants were reinjured following program participation.	Phase I
Level of involvement for participants with the criminal justice system for violence	Percent of participants recorded as having been arrested or charged for violent offenses or use/possession of a weapon after the start of program participation.	Program participants were less likely to be arrested or charged for violent offenses or use/possession of a weapon after the start of program participation, than a matched comparison group	Phase I

Data Collection

Data for the outcome evaluation will be based on a combination of sources including but not limited to the Froedtert Hospital Trauma Registry, the Electronic Medical Record (EMR) through EPIC, the 414LIFE Program Evaluation dataset, criminal justice data obtained from partners and through DataShare housed at MCW, and potentially data collected directly through follow-up surveys with program participants. The availability of resources and data from various sources will impact the evaluation reporting.

DISSEMINATION

The dissemination plan for the evaluation includes at least the items outlined below to support the sharing of the results of the across multiple stakeholder groups. All work products will be shared with the sponsoring agencies in draft form for review and comment at least 30 days prior to dissemination, with a request to review and comment within 15 days to allow time for modifications to be made. Modifications based on feedback received will be considered for incorporation, as long as they do not alter the substantive findings of the evaluation, unless the feedback identifies a factual error or inaccuracy. Additional work products or presentations can be considered, based on identified need and staffing capacity, through discussions between the project team and the requesting agency or organization.

- Written evaluation report
- Executive summary and/or infographic of key findings
- Presentation of results to key stakeholder groups and community organizations
- Presentation of results to Milwaukee Common Council

The evaluation results will need to be accessible to a variety of audiences and the intent is for the findings to be shared widely through different mediums and forms of communication. It will be critical that the results of the evaluation can be shared broadly and made available and accessible to members of the Milwaukee community.

As the evaluation work progresses, there may be interest in developing academic publications or presentations based on aspects of the evaluation work. Such plans will be shared and coordinated with the sponsoring agencies.

APPENDIX A

Input and Output Indicators for Community-Based Program

Indicators		Definition	Starting Phase
How was the 414LIFE community-based program implemented in Milwaukee?			
Implementation	Comparison of program implementation to Cure Violence model	Extent to which the program adhered to the 5 required components of Cure Violence model.	Phase I
	Number of staff members by type	Number of outreach workers (OW), violence interrupters (VI), case managers (CM), supervisors, other positions during the evaluation period	Phase I
	Percent of team members trained	Percent of staff trained within 2 months of hire	Phase I
	Content and delivery of trainings for new staff	How new and existing staff were trained on the CV model, internal policies/procedures, data collection and entry into CV database	Phase I
	Funding to support direct program services	Direct funding to support program activities during the evaluation period	Phase I
	Perceived barriers and facilitators to implementation	Perceived barriers and facilitators to program implementation among team members and partner orgs	Phase I

What was the reach of the community-based program, including by geographic area and target population?			
Conflict Mediation & Violence Interruption	Number of mediations/interruptions	Number of mediations compared to the prior year	Phase I
	Location of mediations	Percent of the mediations for conflicts that occurred in the target area(s)	Phase I
	Number of mediation follow-ups	Average mediation follow-ups per unresolved mediation per year	Phase II
	Level of violence involved in conflict	Level of violence involved in the conflict that led to the mediation (e.g. shots fired, verbal dispute, individuals with history of violence)	Phase II
	Type of conflict	Description of the type of conflict (group, individual, retaliation, other)	Phase II
Community Outreach & Events	Number of community events	Number of community events the team holds or participates in per year	Phase I
	Location of community events	Percent of community events occurred in the target area(s)	Phase I
	Number of participants at community events	Average estimated number of participants at community events compared to the prior year	Phase II
	Number of presentations or public education	Number of presentations or public education activities completed per year	Phase II
	Marketing and public-education efforts	Number, type, and target audience for public education efforts	Phase I

	Number of participant-only activities	Number of activities per year that only include participants	Phase II
	Number of publications/educational materials dispersed	Number of publications/educational materials dispersed per year	Phase II
	Number of hours spent canvassing	Number of hours OW spend on average per week canvassing	Phase II
	Location of outreach or canvassing activities	Percent of total time recorded canvassing spent in the target area(s)	Phase II
Participant Outreach & Case Management	Number of individuals eligible for the program	Number of individuals screened for eligibility and percent eligible for the program per year	Phase II
	Number of participants entering the program	Number of participants entering the program for case management per year	Phase I/II
	Number of contacts with participants	Average number of successful contacts VIs, OWs, and CMs have per participant per week	Phase II
	Location of contacts with participants	Percent of contacts with participants that occur within the target area(s)	Phase II
	Number of participants with identified needs and goals by type	Number of participants with goals set by type: violence/safety, health, legal, financial/employment, education, housing, social	Phase II
	Number of participants discharging from the program	Percent of program participants discharging from the program by type and reason	Phase II

Violent Incident & Shooting Response	Number of violent incident responses	Number of responses to violent incidents per year	Phase II
	Location of responses	Percent of the violent incident responses occurred in the target area(s)	Phase II
	Outcome of the incidents	Outcome of the incident (injury, fatality, assault with no injury)	Phase II
Prevention & Programming in Schools	Number of workshops offered by type	Number of workshop sessions held in schools per year	Phase II
	Location of sessions offered	Percent of the workshops in schools in the target area(s)	Phase II
	Number of students attending sessions	On average number of students attending each workshop	Phase II

APPENDIX B

Input and Output Indicators for Hospital-Based Program

Indicators		Definition	Starting Phase
How was the 414LIFE hospital-based program implemented in Milwaukee?			
Implementation	Implementation of hospital-based model	Review of the components of hospital-based model	Phase I
	Number of staff members by type	# hospital responders (HR), supervisors during the evaluation period	Phase I
	Percent of team members trained	Percent of staff trained within 2 months of hire	Phase I
	Content and delivery of trainings for new staff	How new and existing staff were trained on the hospital-based model, internal policies/procedures, data collection and entry into REDCap	Phase I
	Funding to support direct program services	Direct funding to support program activities during the evaluation period	Phase I
	Perceived barriers and facilitators to implementation	Perceived barriers and facilitators to program implementation among team members and partner orgs	Phase I

What was the reach of the hospital-based program, including by geographic area and target population?			
Hospital Response	Number of referrals by referral source	Number of individuals referred by source by year and percent of GSW patients referred to program	Phase I
	Program participants accepting services	Percent of referrals that did not reject program services and reason for rejection (if applicable)	Phase I
	Total time spent per case	Average hours per HR per case	Phase II
	Location of injury for program participants	Participants will be distributed across Milwaukee and will mirror the distribution of reported homicides and nonfatal shootings	Phase I
	Level of engagement for participant and family/loved ones	Participants and families/loved ones demonstrate an average or high level of engagement	Phase II
	Number of participants with identified issues or needs by type	Number of participants with identified issues or needs by type (retaliation, mental health, housing, transportation, etc.)	Phase I
	Involvement in Trauma Quality of Life (TQOL) Clinic	Participant was referred and attended sessions with TQOL	Phase I
	Engagement with 414LIFE Community-Based Team	Participant was connected to 414LIFE Community-based team	Phase I