FY2020-2022

Community Health Needs Assessment: Implementation Strategies

UofL Hospital

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Introduction

Forward

This Implementation Strategy document, developed from June 2019-September 2019, serves as an accompaniment to the Community Health Needs Assessment (CHNA) by identifying the strategies which UofL Hospital will employ during fiscal years 2020-22 (July 1, 2019-June 30, 2022) to address the needs identified in the most recent CHNA. The approval and adoption of this report by the University Medical Center (UMC) Board of Directors complies with CHNA requirements mandated by the *Patient Protection and Affordable Care Act of 2010* and federal tax-exemption requirements.

Executive Summary

The Community Health Needs Assessment process involved the following steps:

- The "community served" was defined utilizing inpatient data on patient county of residence and determined to be Jefferson County, KY.
- Primary data was solicited from the following groups:
    - Louisville Metro Department of Public Health and Wellness (LMPHW).
    - Residents of the community served by UofL Hospital, including individuals representing the medically-underserved.
    - Comments on UofL Hospital's previous CHNA.
- Secondary population data was gathered and reported using various sources, including the Robert Wood Johnson Foundation *County Health Rankings* and the Centers for Disease Control.
- The UofL Hospital Community Strategy Steering Committee Health prioritized health needs according to a weighted ranking system that accounted for the impact of different types of health factors.
- The University Medical Center Board of Directors approved the CHNA and the priority health needs to address on April 24, 2019.

The Implementation Strategy Process involved the following steps:

- In June 2019, UofL Hospital Community Strategy Steering Committee convened to outline strategies addressing the significant health needs identified in the CHNA.
- The goals for addressing each identified health need are listed below. Specific strategies applicable to each goal are detailed in the body of this report.
    - **Alcohol and Drug Use**
        - Goal 1: Address alcohol and drug use using both secondary and tertiary prevention responses.
        - Goal 2: Implement trauma-informed care practices to support mental health and decrease likelihood of post-discharge substance abuse.
    - **Community Safety**
        - Goal 1: Promote community safety through policy and advocacy.
        - Goal 2: Provide education that promotes safety and decreases morbidity/mortality.
        - Goal 3: Route patients to services that can interrupt cycles of violence.
- This final approved and adopted report will be made public and widely-available before November 15, 2019, including on the UofL Hospital website at: https://uoflhospital.org/community-health-needs-assessment.

Organization Description

On July 1, 2017, University Medical Center, a nonprofit affiliate of the University of Louisville, assumed management of UofL Hospital. The UMC Board of Directors consists of thirteen members, all of whom are university affiliated.

UofL Hospital is an academic teaching hospital at the heart of the Louisville Metro area in downtown Louisville, Kentucky. We offer a second-to-none cancer center, world-renowned trauma team and a uniquely streamlined, nationally accredited stroke center.

UofL Hospital also includes the James Graham Brown Cancer Center. The multidisciplinary teams here specialize in treating cancers of the central nervous system (brain and spine), breast, gastrointestinal and reproductive systems, head and neck, lungs, as well as skin. They also have a team focused on blood and marrow transplantation.

UofL Hospital is the only Level I Adult Trauma Center in the region. The Trauma Center was re-verified by the American College of Surgeons in July 2018. The Trauma Center admits more than 3,500 patients each year, with 53% of patients in calendar year 2018 residing outside Jefferson County. This makes the Trauma Center a resource not only for Louisville residents, but also for people throughout the region. Included within the trauma care provided at UofL Hospital is the only dedicated adult burn unit in Kentucky.

In February 2013, UofL Hospital was named the first Joint Commission-certified Comprehensive Stroke Center in Kentucky and the 20th in the nation. This accreditation recognizes our ability to provide the most comprehensive stroke treatments available.

Community Served

Defined Community

For the purposes of the CHNA and the Implementation Strategy, the community served by UofL Hospital is defined as the geographic area from which a significant number of the patients utilizing hospital services reside. Inpatient discharge data for UofL Hospital from July 1, 2017-June 30, 2018 (the latest fiscal year available as of the writing of the CHNA) showed that Jefferson County was the county of residence for 59.21% of inpatients, or 10,388 of 17,543 inpatients. The remaining 40.79% of patients came from southern Indiana and other counties in Kentucky, with the majority residing south and west of Jefferson County, KY. A complete breakdown of patients per zip code in Jefferson County, KY can be found in the CHNA. Because almost 60% of inpatients were concentrated in Jefferson County, KY, this is the service area for this CHNA.

Description of Community

Louisville, the major city in Jefferson County, and Jefferson County merged in 2003. The 2017 population estimate in Jefferson County was 771,158 people. The Louisville metropolitan area is often referred to as Kentuckiana because it includes counties in Southern Indiana. Louisville is southeasterly situated along the border between Kentucky and Indiana, the Ohio River, in north-central Kentucky at the Falls of the Ohio. Specific population demographics are described in the CHNA.

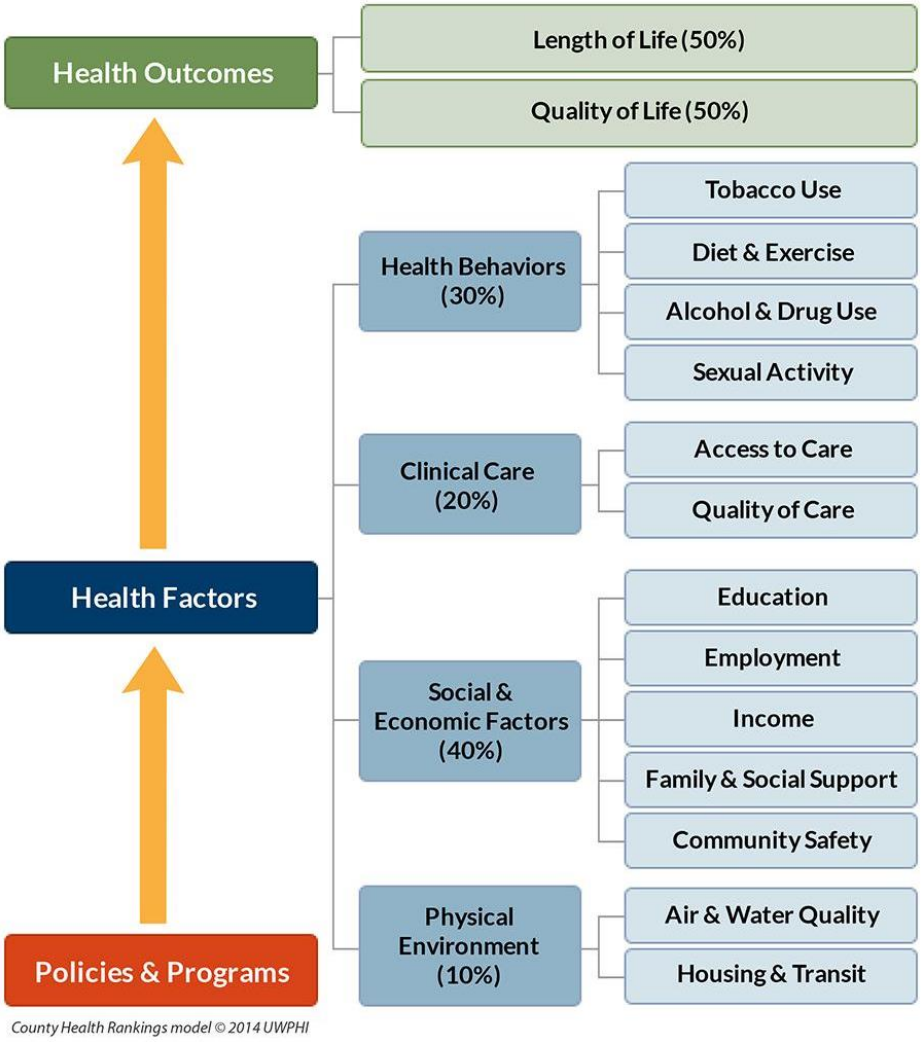
Significant Health Needs Identified in CHNA

County Health Rankings Population Health Model

The main data source for the secondary data for the CHNA was the Robert Wood Johnson Foundation *County Health Rankings*. They employ a model of population health emphasizing the many factors that, if improved, can help make communities healthier places. This model informs that most health outcomes—measured by both length of life and quality of life—are determined by the health factors in these categories: social and economic factors, health behaviors, clinical care and the physical environment.

These health factors represent what are commonly referred to as social determinants of health. The model shows that 40% of our health outcomes are determined by social and economic factors, 30% are determined by health behaviors, 20% are determined by clinical care, and 10% are determined by our physical environment. Each factor has multiple measures (tobacco use, access to care, etc.) associated with it. A fifth set of health factors, genetics, is not included in these rankings because these variables cannot be impacted by community-level intervention.

County Health Rankings Model



Purpose-Focused Prioritization Using the Population Health Model

An analysis of various health outcomes and factors can illustrate opportunities for UofL Hospital to address our community's health needs. By prioritizing which opportunities to address health needs are the most effective and applicable for the hospital's resources, we best understand how to be a community leader who can actively participate in improving the community's habits, culture and environment.

In order to prioritize the health needs of our community, we developed a ranking system. Each of the 13 health measures listed in the *County Health Rankings* model was assessed for the Louisville community. There were six prioritization factors for which each health measure was assessed:

- Magnitude
- Impact on mortality
- Impact on morbidity
- Trends
- Community input
- Strategic alignment

Each health measure (tobacco use, access to care, etc.) received a score of zero to 13 (given that there are 13 health measures in the model). A score of 13 indicates the health measure outranked all others in importance for that prioritization factor. After being assessed by each prioritization factor and receiving a score in each area, the total scores for each health measure were totaled.

In our efforts to address the health needs that heavily influence health outcomes, we created a system for ranking community health needs using a weighted scale to account for the measure of influence. The measure of influence is the percentage of effect that this category of health factors has on health outcomes. The weighted score was created by multiplying the total score for each health measure by the percentage of their influence on overall health. For example, Community Safety is a social and economic factor. If all six prioritization factors added up to a total score of 78, we then multiplied this total score by 40%—the measure of influence for a health behavior according the *County Health Rankings* model. This weighted score was compared against the other health measures. The factors with the highest weighted scores were identified as significant community health needs to be addressed by UofL Hospital.

Using such a ranking system also acknowledges the disproportionately negative impact of these social determinants on the health of the poor, vulnerable, and underserved in our communities. This will allow UofL Hospital to best address disaparties in health.

Prioritization of Community Health Needs

Below is the chart of each health measure's ranking according to each priority. The weighted score is the multiplication of the total score by the measure of influence on overall health outcomes, as described by the Robert Wood Johnson *County Health Rankings* model. A total score and a weighted score are both provided. The health needs with the top two highest weighted scores are highlighted in yellow.

Prioritization of Community Health Needs: UofL Hospital										
Health Factor	*Measure*	*Prioritization Factors*						*Total Score*	*Measure of Influence*	*Weighted Score*
		Magnitude	Mortality	Morbidity	Trend	Importance to the Community	Alignment			
Health Behaviors	Tobacco Use	12	11	9	4	6	9	51	30%	15.3
	Diet and Exercise	11	13	10	8	12	0	54	30%	16.2
	Alcohol and Drug Use	13	12	11	13	13	13	75	30%	22.5
	Sexual Activity	3	5	6	11	0	0	25	30%	7.5
Clinical Care	Access to Care	6	9	13	5	10	10	53	20%	10.6
	Quality of Care	5	10	12	7	0	11	45	20%	9
Social and Economic Factors	Education	8	0	0	1	8	0	17	40%	6.8
	Employment	4	0	0	3	7	0	14	40%	5.6
	Income	9	4	0	6	0	0	19	40%	7.6
	Family & Social Support	7	6	7	9	5	8	42	40%	16.8
	Community Safety	2	7	8	12	11	12	52	40%	20.8
Physical Environment	Air & Water Quality	0	8	5	2	0	0	15	10%	1.5
	Housing & Transit	10	3	4	10	9	0	36	10%	3.6

Final Priorities Identified by Hospital Leadership

We have chosen to identify our priorities as named in the Robert Wood Johnson *County Health Rankings* report in order to use consistent naming conventions for community health terms.

The UMC Board of Directors approved these as significant health needs for the FY2020-2022 Community Health Needs Assessment:

- **Alcohol and Drug Use**
  - The data in the health needs prioritization chart showed alcohol and drug use to have the highest total score and the highest weighted score when controlling for measure of influence. As a health behavior, alcohol and drug use impacts about 30% of health outcomes and focus here demonstrates the hospital is working upstream to address health issues. Substance use disorder continues to present itself as a major concern in the community and the hospital has already dedicated resources to addressing this need. Continuing to address substance use in this CHNA time frame will allow UofL Hospital to expand on work that began in the previous CHNA time period.
- **Community Safety**
  - The data in the health needs prioritization chart showed community safety to have the third highest total score, but the second highest weighted score when controlling for measure of. As a social and economic factor, community safety impacts about 40% of health outcomes and demonstrates the hospital is trying to address a true root cause of poor health outcomes. UofL Hospital is already deeply

involved in community safety efforts from the previous CHNA time period and would like to realize the impact of a long-term commitment to violence reduction.

Needs Not Addressed

UofL Hospital addressed the top two significant needs as determined by an assessment of multiple data sources. All health categories as outlined by the *County Health Rankings* were assessed for impact on community health and were not found to be significant health needs. Although these needs were not determined to be significant for this community, below are specific reasons why each was not listed as a significant need and would not be addressed.

- Tobacco Use
  - The data in this category did not indicate this area was as high a need as the priority health needs chosen in the previous section, although this area did rank higher than others. This is not an area for intervention in the Implementation Strategies report due to the many tobacco cessation programs already in the community.
- Diet and Exercise
  - The data in this category did not indicate this area was as high a need as the priority health needs chosen in the previous section, although this area did rank higher than others. This is not an area for intervention in the Implementation Strategies report due to more appropriate community organizations already working on interventions in this area.
- Sexual Activity
  - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to lack of significant need.
- Access to Care
  - The data in this category did not demonstrate that this was area of need for this community. Although this is area where intervention from the hospital is feasible, the lack of demonstrated need by the data analysis means this need will not be addressed in the Implementation Strategies report.
- Quality of Care
  - The data in this category did not demonstrate that this was area of need for this community. Although this is area where intervention from the hospital is feasible, the lack of demonstrated need by the data analysis means this need will not be addressed in the Implementation Strategies report.
- Education
  - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and lack of significant need.
- Employment
  - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and lack of significant need.
- Income
  - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact.

- Family and Social Support
    - The data in this category did not indicate this area was as high a need as the priority health needs chosen in the previous section, although this area did rank higher than others. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and because many community organizations already work to address social isolation.
- Air and Water Quality
    - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and the lack of significant need.
- Housing and Transit
    - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and lack of significant need.

Implementation Strategy Process

Development of Implementation Strategies

In June 2019, the Community Strategy Steering Committee, including members of the senior leadership team, identified strategies to address the priority health needs.

Each strategy is listed with an action plan, committed resources, an evaluation plan, and applicable external partners. The action plan describes the goal of the strategy. The hospital resources detail what resources UofL Hospital will commit to the execution of the strategy. The evaluation plan is an outcomes-focused description of how the strategy will be evaluated for impact on the health need it addresses. A non-exhaustive list of external partners involved in the strategy are also listed.

A final list of appropriate strategies was prepared for final review by hospital leaders. Approval and adoption details are described at the end of this document.

Strategies to Address Significant Health Needs

The charts below detail UofL Hospital's identified community needs, the goals it has set as a means of addressing those needs, and the strategies that will forward each goal.

Alcohol and Drug Use

Goal 1: Address alcohol and drug use using both secondary and tertiary prevention responses.

Strategy	*Action Plan with Objective*	*Committed Resources*	*Evaluation Plan*	*External Partner(s)*
1.1. Brief Interventions for Trauma Patients	Provide brief interventions (BI's) to trauma patients whose hospital admission included a positive toxicology screening for alcohol or illegal substances. Provide resources and referrals for patients accepting treatment.	A Trauma Social Worker has the primary job duty of completing this objective.	Track BI's in TraumaBase and report to Trauma Quality Improvement Conference annually.	American College of Surgeons
1.2. Treatment Options for Patients with SUD	Provide treatment options to patients with substance use disorder. Provide resources and referrals for patients accepting treatment.	Two Addiction Program Social Workers have the primary job duty of completing this objective.	Track the number of referrals for treatment and report to Workplace Safety Committee.	Stepworks Centerstone Healing Place
1.3. Narcan Education	Provide education on Narcan use to: 1. Hospital staff for patient education. 2. Community members.	The Community Health Liaison is leading this effort.	Track for a reduction in overdose deaths.	KY Harm Reduction Coalition Louisville Metro Public Health and Wellness

Goal 2: Implement trauma-informed care practices to support mental health and decrease likelihood of post-discharge substance abuse.

Strategy	*Action Plan with Objective*	*Committed Resources*	*Evaluation Plan*	*External Partner(s)*
2.1. Therapeutic Interventions	Provide therapeutic interventions to trauma patients to assist in processing and coping with a traumatic injury.	A licensed clinical social worker within the Trauma Institute has this primary job responsibility.	Evaluate pre and post discharge depression screenings for improvement.	(none)
2.2. Peer Support Network	Develop a network of peer supporters who can engage patients while hospitalized. Identify patients eligible for peer support and facilitate connection	Community Health Liaison, Trauma Social Worker, and Community Health Workers are building	Evaluate for improved depression scores and patient satisfaction.	Trauma Survivor Network

	to peers for lived experience support not able to be offered by clinical staff.	the pool of peer supporters.		
2.3. Provide trauma-informed care.	Trauma-informed care classes will be offered to all staff on a semi-annual basis to promote understanding and better support for patients, especially those in crisis.	Trauma Social Worker has identified evidence-based curriculum and is working with a local coalition to bring material to the hospital.	Track for improvements in staff retention and patient experience.	BOUNCE Coalition

Community Safety

Goal 1: Promote community safety through policy and advocacy.

Strategy	*Action Plan with Objective*	*Committed Resources*	*Evaluation Plan*	*External Partner(s)*
1.1. Advocate for funding of state-wide trauma system.	Advocate for a funding for a staff-supported structure of the statewide trauma system, which currently operates on volunteers and donations, to improve trauma care.	Trauma staff and physicians will work with the Government Affairs office to coordinate appropriate action.	Update progress every legislative session.	University of Louisville Government Affairs

Goal 2: Provide education that promotes safety and decreases morbidity/mortality.

Strategy	*Action Plan with Objective*	*Committed Resources*	*Evaluation Plan*	*External Partner(s)*
2.1. Trauma Center Education	Provide ongoing education internally to physicians and staff and externally to referring hospitals and emergency medical providers in order to improve care for trauma patients.	Trauma Outreach and Education Coordinator leads these efforts with support from clinical staff and physicians.	Track trauma patient referrals and improved patient outcomes.	American College of Surgeons Emergency Nurses Association
2.2. Injury Prevention Education	Provide *Stop the Bleed* classes to improve community bystander response to traumatic injuries.	Injury Prevention Manager within the Trauma Institute leads these efforts with support from clinical staff and physicians.	Track number of people educated in trauma center catchment area. Track use of tourniquets and other bleeding control techniques in trauma patients.	American College of Surgeons

Goal 3: Route patients to services that can interrupt cycles of violence.

Strategy	*Action Plan with Objective*	*Committed Resources*	*Evaluation Plan*	*External Partner(s)*
3.1. Pivot to Peace Intervention Network	Using the hospital-based violence intervention network, link patients who are recovering from violent injuries with community resources to improve patient outcomes and reduce violence.	Injury Prevention Manager and Trauma Community Health Workers will work with hospital staff to support patients.	Track patient progress for reduction of injury recidivism.	Mayor's Office for Safe and Healthy Neighborhoods
3.2. Hospital De-Escalation	Community Health Workers will respond to Emergency Department lockdowns for patients with gunshot or stabbing injuries to maintain a safe environment for patients and staff by de-escalating any tensions with patients and/or families.	Trauma Community Health Workers will work with Security, Chaplains, and the Emergency Department staff.	Track situations where de-escalation was required.	Mayor's Office for Safe and Healthy Neighborhoods
3.3. Arise to Safety	Screen all patients presenting in the Emergency Department for the presence of domestic violence (DV). Positive screening will allow for a link to an advocate with the Center for Women and Families to discuss services and resources available to that patient.	The Clinical Coordinator for SAFE Services will lead this effort with hospital staff conducting the screening.	Measure for universal DV screenings, increase the number of people identified and referred for services, and ultimately decrease DV-related homicides in the community.	Center for Women and Families
3.4. Red Dot for Safety	Identify victims of human trafficking and domestic violence. Stock patient bathrooms with Red Dot stickers and signage that states, "UofL Hospital Cares about your well-being. If you are concerned about your safety after discharge and would like to speak to a staff member in private, please place a RED DOT sticker outside of your specimen cup. A staff member will arrange to speak to you privately to discuss your concerns."	The Clinical Coordinator for SAFE Services will lead this effort.	Track the number of patients self-identifying as victims of human trafficking and domestic violence.	Center for Women and Families

Strategy	*Action Plan with Objective*	*Committed Resources*	*Evaluation Plan*	*External Partner(s)*
3.5. Behavioral Response Team	Activate a coordinated response to assist nursing staff with de-escalating aggressive patient behavior.	The Director of Capacity Management is leading this initiative with support from Psychiatric Services, Security, the Trauma Institute, and the House Supervisors.	Track for reductions in workplace violence against staff and visitors.	(none)

Aligning Strategies Using the Community Health Improvement Matrix

In order to illustrate the depth and breadth of the strategies in place to address our community health needs, we borrowed a tool from the National Association of County & City Health Officials. The Community Health Improvement Matrix allows us to see where our strategies fall in terms of the prevention and intervention levels. We have developed a matrix for each health need as a graphic representation of our work.

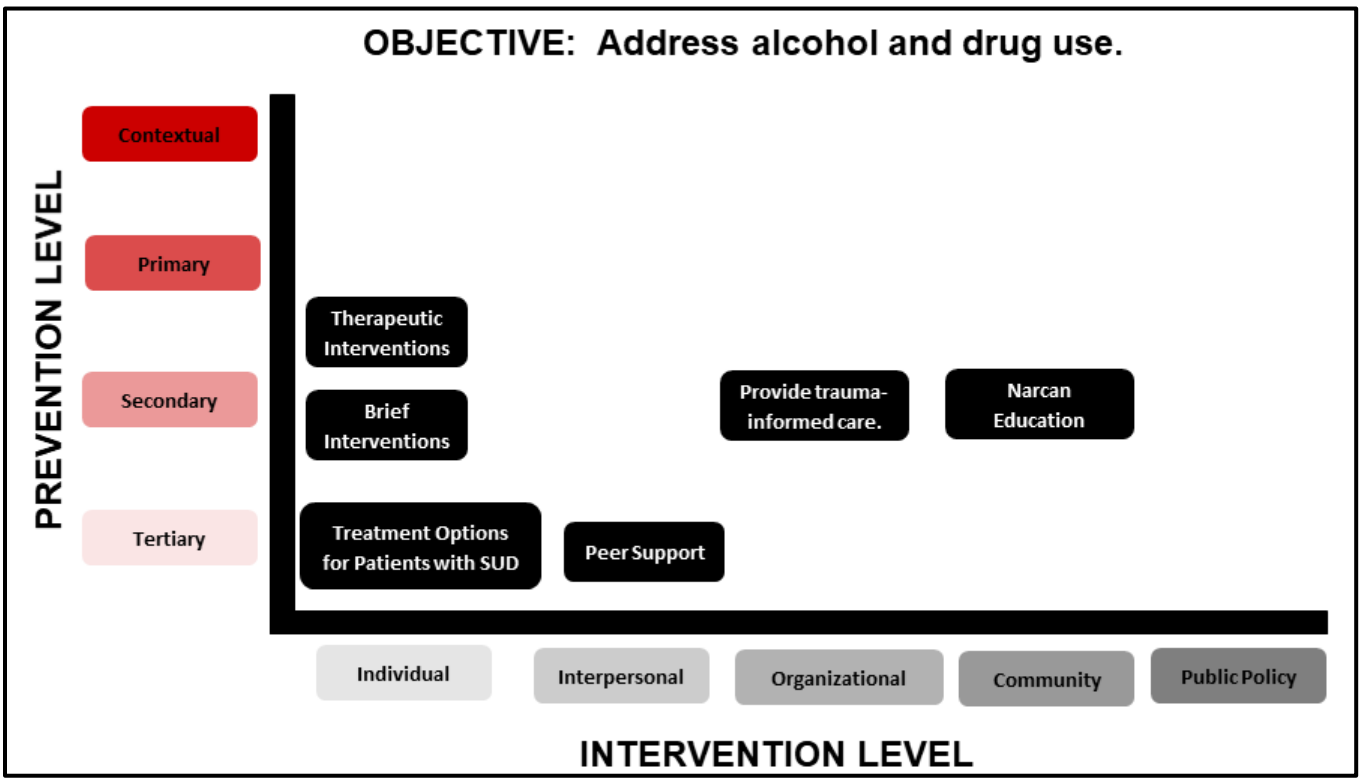
Prevention levels describe where in time we can intervene to address a health need. These levels are described as follows:

- Contextual: prevent the emergence of predisposing social and environmental conditions that can cause disease
- Primary: reduce susceptibility of exposure to health threats
- Secondary: detect and treat disease in early stages
- Tertiary: alleviate the effects of disease and injury

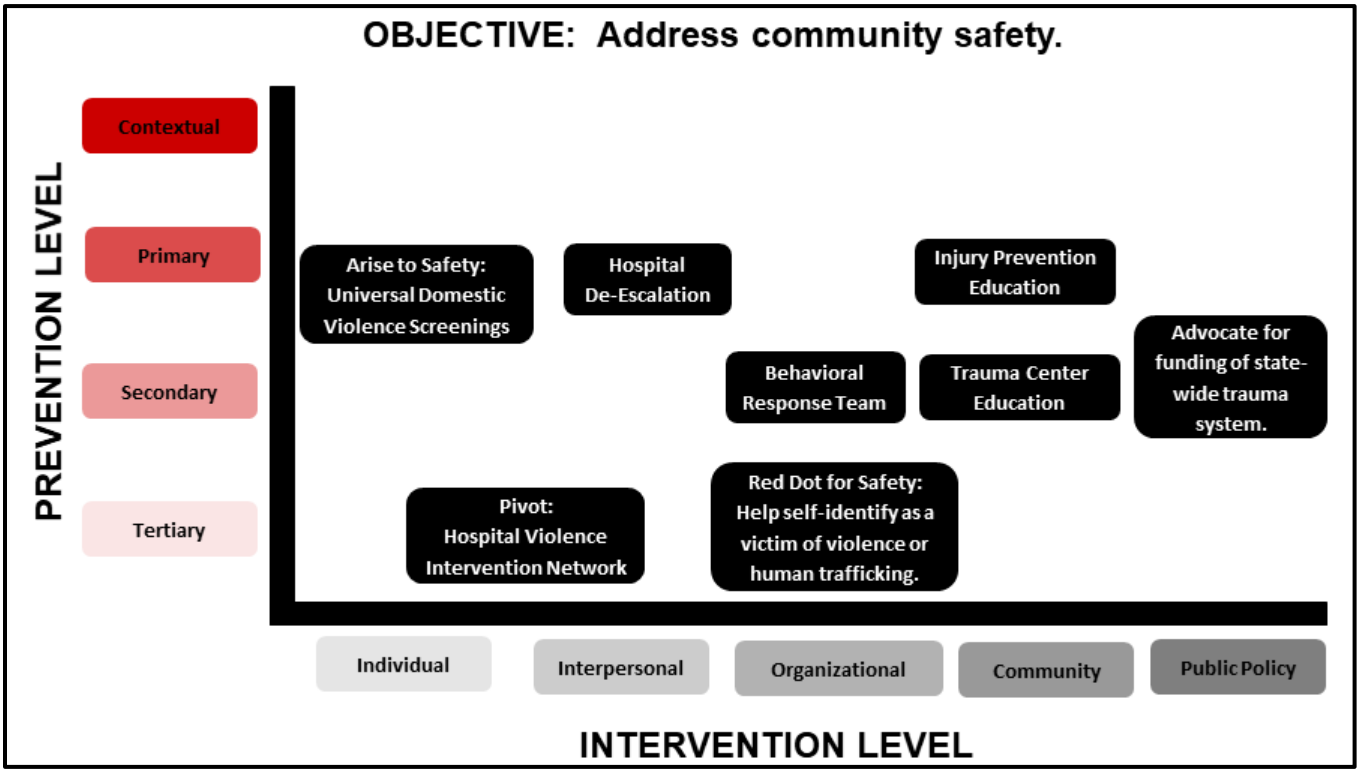
Intervention levels describe the context in which these interventions occur. These levels are described as follows:

- Individual: characteristics of the individual, such as knowledge, attitudes, behaviors, self-concept, skills, etc.
- Interpersonal: formal and informal social network and social support systems, including family, work group, and friendship networks
- Organizational: social institutions with organizational characteristics and rules/regulations for operation
- Community: relationships among organizations, institutions, and informal networks within defined boundaries
- Public Policy: local, state, and national laws and policies

Community Health Improvement Matrix—Alcohol and Drug Use



Community Health Improvement Matrix—Community Safety



Next Steps

UofL Hospital's Implementation Strategy report outlines the response to the community's health needs through June 30, 2022. This document will be made public and widely available no later than November 15, 2019 on the UofL Hospital website at https://uoflhospital.org/community-health-needs-assessment. UofL Hospital is committed to conducting another community health needs assessment and documenting its implementation strategy within three years.

Approval/Adoption

The University Medical Center Board of Directors approves UofL Hospital's Implementation Strategy that has been developed to address the priorities of the most recent Community Health Needs Assessment. The date of this approval indicates the date this plan was adopted.

Neeli Bendapudi 9/24/2019

Chair, University Medical Center Board of Directors — Date

9/24/19

Chief Executive Officer, University Medical Center, Inc. — Date

DBA University of Louisville Hospital and James Graham Brown Cancer Center