



**Community Health Needs Assessment
& Implementation Plan**
Executive Summary
FY2022-FY2024

Approved by: Board of Directors, June 15, 2021

Executive Summary

Overview

The University of Maryland Rehabilitation & Orthopedic Institute (UM Rehab and Ortho) is Maryland's largest and most comprehensive rehabilitation and orthopedic specialty hospital and has been serving Maryland for more than 120 years. The highly specialized staff provides an interdisciplinary continuum of care, with four distinct rehabilitative specialty units including Stroke, Brain Injury, Spinal Cord Injury/Multi-Trauma, and Comprehensive Medical Rehabilitation in a restorative environment. The University of Maryland Rehabilitation & Orthopedic Institute is a leader in the research and treatment of musculoskeletal disease, joint replacement, and sports injuries.

In FY2020, UM Rehab provided care for 1,986 inpatient admissions, 4,185 outpatient surgical cases, and 30,120 outpatient visits. The University of Maryland Rehabilitation & Orthopedic Institute is licensed for 137 beds. In FY2020, the UM Rehab & Ortho provided multiple community resources through its Adapted Sports Program, dental services with 5,78 visits by disabled adults and children, and support groups for the disabled population with 918 people in attendance. In addition, UM Rehab & Ortho provides a community outreach section on its public web site to announce upcoming community health events and activities and to post the triennial Community Health Needs Assessment (CHNA).

<https://www.umms.org/rehab/community/health-needs-assessment>

Our Mission

University of Maryland Rehabilitation & Orthopaedic Institute delivers innovative, high-quality, and cost effective rehabilitation and surgical services to the community and region. We provide a/an:

- Interdisciplinary continuum of care including inpatient and outpatient surgery, rehabilitation and additional services as required.

- Proactive environment for patient safety, implementing improvements as patient safety risks are identified.
- Site for public and professional health care education and research.

Vision

UM Rehabilitation & Orthopaedic Institute's vision is to become widely recognized as an integral component of the University of Maryland Medical System in its role as a:

- Regional hospital specializing in the provision of acute, chronic and outpatient rehabilitation services;
- Regional hospital specializing in the provision of a full array of orthopaedic services for adults and children;
- High quality provider of specialized medical/surgical programs.

Values

- Quality and Compassionate Care
- Excellence in Service
- Respect for the Individual
- Patient Safety
- Quality in Research and Education
- Cost Effectiveness

Source: <https://www.umms.org/rehab/about/mission-vision>

Our Community Health Improvement Mission:

To empower and build healthy communities for the disabled adult population

Process

I. Establishing the Assessment and Infrastructure

To complete a comprehensive assessment of the needs of the community, the Association for Community Health Improvement's (ACHI) 9-step Community Health Assessment Process was utilized as an organizing methodology. The UM Rehab & Ortho's Community Health Leadership Team served as the lead team to oversee the Community Health Needs Assessment (CHNA) with input from other University of Maryland Medical System Baltimore City-based hospitals, community leaders, the academic community, the public, health experts, and the Baltimore City Health Department. University of Maryland Rehabilitation & Orthopedic Institute adopted the following ACHI 9-step process (See Figure 1) to lead the assessment process and the additional 5-component assessment (See Figure 2) and engagement strategy to lead the data collection methodology.

Figure 1 –ACHI 9 Step Community Health Assessment Process



According to the Patient Protection and Affordable Care Act (“ACA”), hospitals must perform a community health needs assessment either fiscal year 2011, 2012, or 2013, adopt an implementation strategy to meet the community health needs identified, and beginning in 2013, perform an assessment at least every three years thereafter. The needs assessment must take into account input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health, and must be made widely available to the public. For the purposes of this report, a community health needs assessment is a written document developed by a hospital facility (alone or in conjunction with others) that utilizes data to establish community health priorities, and includes the following: (1) A description of the process used to conduct the assessment;(2) With whom the

hospital has worked; (3) How the hospital took into account input from community members and public health experts; (4) A description of the community served; and (5) A description of the health needs identified through the assessment process.

Figure 2 – 5-Step Assessment & Engagement Model



Data was collected from the five major areas outlined above to complete a comprehensive assessment of the community's needs. Data is presented in Section III of this summary and includes primary and secondary sources of data. The University of Maryland Rehabilitation & Orthopedic Institute participates in several local coalitions including, Baltimore City Mayor's Commission on Disability as well as partnerships with many community-based organizations. This assessment report was approved by the UM Rehab Community Health Leadership Team in June and by the Board of Directors on June 15, 2021.

II. Defining the Purpose and Scope

Primary Community Benefit Service Area

The larger regional patient mix of University of Maryland Rehabilitation & Orthopedic Institute consists of disabled adults from the metropolitan area, state, and region. For purposes of community benefits programming and this report, the Community Benefit Service Area (CBSA) of UM Rehab & Ortho includes disabled adults from Baltimore City and the counties of Baltimore, Howard, and Anne Arundel. It is estimated that 7.3% of Marylanders under 65 years of age have some type of disability. This prevalence accounts for 441,808 Marylanders who need some type of support and/or resources to improve their daily quality of life.

See Figure 3.

Figure 3 – Community Benefit Service Population



FY2021 Community Health Needs Assessment
Community Benefit Service Area



III. Collecting and Analyzing Data

The ACA provides guidelines for the contents of the CHNA and Implementation Plan. One requirement is that each hospital describes their process for conducting the needs assessment. When considered together, all the steps taken to determine the needs of a community are called the “methodology”.

Typically, there are two types of information or data that are used to conduct a needs assessment. “Primary data” is collected specifically for the purpose of the CHNA. Data that has been gathered for another purpose, but is useful to the CHNA process, is called “secondary data”. Data can be primary or secondary; it also can be categorized as either “quantitative” or “qualitative”.

Quantitative data is information that can be counted or measured. In general, this includes whole numbers, rates, or percentages. Alternatively, qualitative data requires more effort to compile and measure and usually does not result in a whole number or percentage. Qualitative research assesses how people think or feel about an issue. Usually, it supplements quantitative data. To conduct this needs assessment, UM Rehab & Ortho analyzed primary and secondary data and conducted quantitative research. This use of various types of data is called “mixed method data collection”.

The primary data collected for this CHNA included key informant interviews, focus groups, and a community assets assessment. Secondary data included health outcomes, socio-demographic data, behavioral data, and environmental data and were collected from a variety of sources.

Ultimately, the CHNA included the analysis of secondary data and feedback from 1,348 patients, caregivers, and staff; focus groups with patients, caregivers, staff, and community partners.

Secondary Data Analysis

The UM Rehab & Ortho utilized a number of internal and external sources for secondary data on demographics, socioeconomic data, and health status. These data were compiled from the University of Maryland Medical Center, the Maryland Department of Health and Mental Hygiene, US Census Bureau, and reports summarizing the activities, successes, and lessons learned of programs and services.

Survey Methodology

Two surveys were used to secure feedback about community health needs, gaps in health and social services, and UM Rehab & Ortho's programs and services. One survey was to former patients, members of support groups and members of the UNM Rehab & Ortho's Patient Family Advisory Council. The second survey was sent to community partners and leaders. The two surveys asked general questions about the respondent's top health concerns and perceived barriers to healthcare.

Focus Groups

Focus groups collect qualitative data from more than one person at the same time. Typically, the groups are made up of people who have similarities in one or more areas. Six focus groups were conducted for the CHNA. The groups consisted of people who receive services from UM Rehab & Ortho or who care for someone who receives treatment at the hospital. The remaining three groups were comprised of UM Rehab & Ortho staff.

- Perceptions of the barriers to healthcare
- Health and Social Issues affecting the community
- Gaps in services

The group's responses were recorded and content analysis was conducted to identify key themes and important points.

RESULTS

Secondary Data

Because the majority of UM Rehab & Ortho patients reside in Baltimore City, Baltimore County, Anne Arundel County, and Howard County, the secondary data assessment focused on these communities.

Table 1 below offers a summary of key demographic statistics for these areas.

	Baltimore City	Baltimore County	Anne Arundel County	Howard County
Population	620,777	827,370	579,234	325,690
Non-Hispanic Whites	30.5%	60.2%	73.6%	55.9%
Non-Hispanic Blacks	62.4%	30.3%	18.3%	20.4%
American Indian	0.3%	0.4%	0.4%	0.4%
Asian	2.6%	6.3%	4.2%	19.3%
Median Income	\$50,379	\$76,866	\$100,798	\$121,160
Percent Below Poverty Level	21.2%	8.9%	5.8%	5%

Source 2020 US Census

These data demonstrate the significant diversity in the population the hospital serves—ranging from the wealthiest to the most economically-underserved communities in the state. On average, patients from Baltimore City earn more than \$70,000 less than patients from Howard County. Moreover, they are five times more likely to be living below the poverty level.

	Anne Arundel Co.	Baltimore City	Baltimore Co.	Howard Co.
	58,838	95,416	92,959	24,919
Disability is defined as living with mild to severe visual, hearing, ambulatory, cognitive, self care and independent living.				

Source: *Local Disability Data for Planners* (<http://disabilityplanningdata.com>)

The surveys administered to the general public and staff of UM Rehab & Ortho contained six questions that queried about perspectives on the top health concerns in the community and top personal barrier to accessing health care. The results found that the leading health concerns among respondents were:

1. Diabetes
2. Smoking
3. High blood pressure

The top five barriers to healthcare were:

1. Lack of insurance
2. Cost of healthcare
3. Lack of transportation
4. Provider was not a member of the insurance plan
5. Difficulty getting and appointment

Summary of the Focus Groups

Key Focus Group Themes

The focus group discussions centered on the experience of having a disability and/or caring for someone with a disability. Participants talked about how the disability experience changed their lives, the most difficult obstacles they face in daily life, their experiences navigating the health care system, and ideas for making health care and the community friendlier to people with disabilities. The following major themes emerged from the patient focus groups:

- Diabetes
- Heart disease

- Wound care
- Foot care
- Depression

The top five barriers to healthcare were:

- Insurance
- Transportation
- Lack of information about services
- Reading issues
- Lack of advocacy

Process to Prioritize Need and Develop Implementation Plan

The UM Rehab & Ortho CHNA development team employed a three-prong approach to prioritize the identified needs. First, they conducted preliminary research to determine which identified needs: (1) already were being provided by another entity in the community and (2) were reasonably accessible to patients. Next they considered what barriers to access existed and which barriers could be addressed with current resources and partnerships. Finally, the team considered remaining gaps and a plan for addressing the needs. The resulting list of prioritized needs is listed below. To develop the implementation plan, the team considered available and required resources, magnitude of need, and potential impact of the identified priority areas. Those determined to have the greatest need were prioritized into three major categories. Programming is identified in the Implementation

Plans that follow.

Priority Area: Quality of Life – Social Support

- 1) Decrease social isolation resulting from onset of chronic disease/injury**
- 2) Improve overall quality of life for individuals who have sustain or care for an individual who has sustained a chronic injury**

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
<p>Decrease participants feeling of isolation, depression and anxiety Increase participants sense of empowerment, control, coping skills, and sense of adjustment.</p>	<p>Provide support and assistance with social isolation post injury or diagnosis: Diagnosis and peer group specific support groups for individuals who have sustained, a stroke, brain injury, spinal cord injury, amputation, have addiction or dependency , caregiver support group</p>	<p>Individuals over 16 years of age who have had a spinal cord injury, brain injury, stroke, or amputation and caregivers</p>	<p>Support groups are offered monthly by rehabilitation staff. Topics are solicited by participants on a regular basis and program evaluation information is obtained regarding satisfaction and effectiveness of the program buyer.</p>	<p>Reach: # of participants # of caregivers</p> <p>Outcomes: Percent of participants with post-group survey reporting:</p> <ul style="list-style-type: none"> - Feeling less lonely, isolated or judged - Gaining a sense of empowerment and control - Improving your coping skills and sense of adjustment - Talking openly and honestly about their feelings - Reduced distress, depression, anxiety or fatigue - Developing a clearer understanding of what to expect with their condition - Getting practical advice or information from experts and peers 	<p>Amputee Coalition of America, Christopher and Dana Reeves Foundation</p>

Priority Area: Quality of Life – Active Lifestyle

**Increase the proportion of adults who are not overweight or obese
Decrease occurrence of secondary complications attributed to sedentary behavior**

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
<p>Increase awareness and benefits of Adapted Sport for individuals with chronic disease/injury such as spinal cord injury, stroke, brain injury, amputation</p> <p>Increase community awareness regarding the availability and benefits of adapted sports</p> <p>Increase awareness in healthcare providers and students regarding the availability and benefits of adapted sports Increase self-reported quality of life and overall wellness in individuals participating in adapted</p>	<p>Provide engaging opportunities for individuals with SCI, BI, CVA, and amputation to be introduced to adapted sports programming, so that they can participate in similar activities: Adapted Sports Festival, Amputee Walking School, Wheelchair Basketball Clinic, Wheelchair Tennis Clinic and Wheelchair Rugby.</p> <p>Provide opportunities for community involvement in adapted sports programs offered through UM Rehab & Ortho</p> <p>Provide education and opportunities</p>	<p>Adults with physical disabilities</p> <p>Allied Health Professionals</p> <p>Allied Health Students</p>	<p>The Adapted Sports Program maximizes participation for individuals with disabilities in adapted recreational and competitive sports, in order to promote independence, self-confidence, health and overall well-being through structured, individual and team sports</p> <p>Programs offered are Adapted Sports Festival, Wheelchair Basketball Clinic, Wheelchair Rugby Team, Adapted Golf Program, Amputee Walking/Running Clinic</p> <p>Education programs offered to community organizations and allied health academic programs</p> <p>Post participation surveys will be utilized to obtain information regarding increased awareness of physical and social benefits of participation in adapted sports</p>	<p><u>Reach:</u></p> <p># of community members/programs educated</p> <p># of allied health professional and students educated regarding the availability and benefits of adapted sports</p> <p># of participants in the Adapted Sports Programs offered through UM Rehab</p> <p><u>Outcomes:</u></p> <p># of participants identifying positive impact to quality of life and overall health as a benefit of participation in UM Rehab’s adapted sports programs</p>	<p>United States Olympic Committee- United States Paralympic Committee</p>

sports programs offered by UM Rehab

Increase number of participants in the various adapted sports programs offered by UM Rehab

An additional support group around healthy to include nutrition and healthy food.

for healthcare professionals and students to participate in adapted sport events in order to experience first-hand the benefits of physical activity and social inclusion

Priority Area: Transition to Community – Patient Navigation

1) Decrease preventable hospitalization related to management of chronic medical conditions

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
<p>Increase number of educational sessions made available to disabled population (provide at least 6 sessions annually) Increase participants confidence, understanding and skills in managing chronic medical conditions Initiate Mobile Market twice/month to improve access to healthy</p>	<p>Provide education and information for individuals and caregivers through engaging, evidenced-based programs: Living Well with Chronic Conditions - (Stanford’s Chronic Disease Self- Management Program) Mobile Market</p>	<p>Adults with chronic disease/injury such as spinal cord injury, stroke, brain injury, and diabetes</p>	<p>Classes are offered as a 6 week course covering the following topics:</p> <ul style="list-style-type: none"> • Managing Medication • Managing Stress • Attending Doctor Appointments Regularly • Healthy Eating and Exercise • Improving Quality of Sleep <p>Mobile Market provides healthy produce in partnership with UMMC and Hungry Harvest. Produce is available for a significantly reduced rate and buyer</p>	<p>Reach: # of participants # of sessions offered Outcomes: % of participants who report improved confidence in managing their chronic health condition % of participants that reported having a better understanding of how to manage the symptoms of their chronic health condition % of participants that reported knowing how to set up an action plan and follow it.</p> <p>Outcomes: 1) \$ amount spent through WIC/SNAP benefits & zip codes of purchasers 2) Total \$ amount sold 3) Self-reported servings of produce/day through survey of Mobile Market 4) # of BP screenings at Mobile Market</p>	<p>Maryland’s Maintaining Active Citizens (MAC), Maryland Department of Health and Mental Hygiene, Stanford University UMMC, Hungry Harvest</p>

Priority Area: Transition to Community – Dental Clinic

1 - Decrease emergency room visits related to dental issues

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
<p>Increase the number of dental treatments available to special needs population Increase awareness of proper brushing Flossing home care and proper diet of patients that had comprehensive treatment under general anesthesia</p>	<p>Provide dental care and treatment for special needs adults and children within Maryland: UM Rehab & Ortho Dental Clinic</p>	<p>Special needs adults and children in need of dental care</p>	<p>Dental services are provided for special needs adults and children who may not receive care otherwise. Many dentists in the community are not comfortable performing dental services to disabled patients.</p>	<p>Reach: # of patients served (Adults & Children) Outcomes: % of patients receiving preventive dental care. % of high caries risk patients that had treatment under general anesthesia that return for 3 month recall over year period that will have no new lesions.</p>	<p>UM Dental School</p>

Priority Area: Community Education/Awareness

1- Reduction in accident/injury rate in teen population

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
<p>Increase the number of high and middle schools scheduled for presentations Increase the number of students participating in the scheduled presentations Trend changes in behavior identified by students after presentation</p>	<p>Provide education and information through engaging, evidence-based programs: Think First for Teens</p>	<p>Middle and high school students in Baltimore City and Baltimore County, and potentially expanded area to other counties</p>	<p>Think First program director currently has contacts in several county and city high schools, as well as 1 middle school to date. Presentations are coordinated through health or physical education departments at the identified schools, with presentations then scheduled in auditorium or single class room formats. Presentations include clinical experts describing the permanent nature of SCI and TBI, as well as the importance of thinking before you act, and understanding the consequences of your actions. There is a guest speaker that attends as well. The injured speakers have sustained spinal cord or brain injuries, have been trained to appropriately share the life changes that are permanent and impact them as a result.</p>	<p>Reach : # of schools scheduled # of students attending presentations Outcomes: % of students identifying a positive impact of the program by identifying ways to avoid high risk behaviors and comply with injury prevention strategies.</p>	<p>Think First National Injury Prevention Foundation Baltimore City Public Schools, Baltimore County Public Schools SCI/TBI guest speakers (previous patients)</p>