Community Mental Health Assessment

Worcester, Massachusetts



Worcester Division of Public Health | September, 2015

Worcester Community Assessment of Mental Health Needs

PURPOSE:

As part of the 2012 Greater Worcester Community Health Improvement Plan, the completion of a "Mental Health Assessment" was identified as a priority for gaining a better understanding of the challenges faced by the large proportion of the population who encounter the mental health care system in Worcester, MA. **Primary Authors** Esteban Cardemil, Ph.D., Clark University Rosalie Torres Stone, Ph.D., Clark University, UMass Medical School Kristen Keefe, M.A., Clark University

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This Community Assessment of Mental Health Needs was conducted November 2014 through May 2015. It serves as a basis for future health improvement efforts by the Worcester Division of Public Health and its partners as they relate to mental health. It is also intended that this document serve as a resource for community organizations and individuals working to improve mental health in Worcester. The data presented are as up-to-date as available at the time of publication. Future assessments including updates to this data will be included as part of the comprehensive regional Community Health Assessment published every three years and updated annually.

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Acknowledgements

Stakeholder Advisory Committee Ascentria Care Alliance Clark University Center for Health Impact Common Pathways Community Legal Aid Fallon Community Health Plan Family Health Center of Worcester, Inc. Pernet Family Health Service, Inc. Latin American Health Alliance The Hector Reyes House Southeast Asian Coalition Spectrum Health Systems, Inc. The Bridge of Central Massachusetts, Inc. Worcester Division of Public Health UMass Memorial Medical Center Worcester Police Department Worcester Youth Center

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Funding for this assessment was generously awarded to the Worcester Division of Public Health by the Fairlawn Foundation of the Greater Worcester Community Foundation.

Worcester Community Mental Health Assessment Executive Summary

The 2015 Worcester Community Mental Health Assessment is a community-based overview of the challenges Worcester residents, providers, and Executive Directors report seeing on a daily basis, the different perspectives residents hold about mental health and treatment, the various approaches to coping with stress that residents demonstrate, and the barriers and facilitators relevant to accessing mental health services.

The current study was conducted by Drs. Esteban Cardemiland Rosalie Torres Stone, as well as Kristen Keefe, M.A., as a collaborative effort among the Worcester Division of Public Health (WDPH), Clark University, and the Systems and Psychosocial Advances Research Center (SPARC) of the University of Massachusetts Medical School. The project was part of the WDPH's larger, ongoing Community Health Improvement Plan (CHIP); the final report will be released to the public in Fall 2015.

This Executive Summary briefly summarizes the main findings obtained from this work:

- Key challenges facing Worcester residents on a daily basis
- Numerous barriers in the provision of mental health services, and
- Recommendations that can inform policy regarding the delivery of mental health services

The results of the Worcester Mental Needs Assessment demonstrate that addressing the mental health needs of the Worcester community can be successfully addressed by:

- Developing mechanisms for enhancing collaboration among mental health care provider and other related service providers regarding mental health
- Expanding access and tailored services to meet the specific needs of the community in order to improve mental health outcomes

Quantitative data highlighted the elevated rates of poor mental health days and hospitalizations

among Worcester residents. Groups that demonstrated elevated hospitalization rates were men, as well as individuals from White, non-Hispanic and Black, non-Hispanic backgrounds. Men also documented elevated suicide rates, as compared with women. Significant numbers of Worcester residents also reported being unable to access health services due to cost concerns.

The Qualitative data focused on four different areas:

- 1. Identifying the most common daily challenges facing Worcester residents, which included:
 - Economic stress
 - Exposure to violence and trauma
 - Substance use disorders
 - Medical comorbidity
 - Non-Western conceptions of mental health and treatment
 - Stigma, especially for immigrant and refugee groups, as well as military veterans

- 2. Understanding how Worcester residents understand mental health **issues**, which highlighted that:
 - Some community residents, especially immigrant and refugee residents, do not always recognize symptoms of stress as psychological in nature and possibly treatable.
 - Stigma is a common concern, and may be particularly pronounced in immigrant and refugee populations, as well as military veterans.
- 3. Learning about the common coping strategies used by Worcester residents. **Results indicated:**
 - Numerous adaptive coping strategies including both individually-oriented strategies (e.g., exercise, meditation, relaxation) as well as more socially-oriented approaches (e.g., support from friends and family, structured social activities).
 - Religious and spiritual coping emerged as particularly salient for racial and ethnic minority populations.

- 4. Identifying the barriers to utilization of mental health services. Findings demonstrated that commonly experienced barriers included:
 - Long waiting lists
 - Navigating the mental health system
 - Language barriers
 - Logistical barriers (i.e., hours of operation, transportation, and insurance copays).

Taken together, these results from the Worcester Community Assessment of Mental Health Needs led to the following recommendations to improve the mental health needs of the Worcester community:

- Greater and broader coordinated care 1.
- Increased use of case managers, 2. patient navigators/advocates, community health workers
- 3. Greater network/community among providers
- More mental health education 4.
- 5. Culturally competent care
- Extended hours of operation and 6. better transportation support
- More opportunities for social interaction 7.

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Project Overview

"Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society." (Healthy People 2020)

One of the goals of Healthy People 2020 is to improve the mental health of the U.S. population through prevention and access to appropriate, quality mental health services. However, as 2020 approaches, the burden of mental disorders remains high, with estimates of lifetime prevalence rates of any mental disorder ranging as high as 46.4% (Kessler, Merikangas, & Wang, 2008). In 2012, there were an estimated 43.7 million adults aged 18 or older in the U.S. with any mental disorder in the past year, representing approximately 18.6 percent of all U.S. adults (SAMHSA, 2012). The most prevalent disorders include anxiety disorders, externalizing disorders, mood disorders, and substance use disorders (Kessler et al., 2008). Importantly, large numbers of individuals experience subthreshold symptoms of disorders that are significant enough to warrant clinical attention. For example, approximately 40% of people in 35 states reported experiencing serious psychological distress (SPD) over the past 30 days (Center for Disease Control and Prevention [CDC], 2007).

Despite the existence of numerous efficacious psychosocial and pharmacological treatments for mental disorders, many individuals in need do not receive adequate treatment (Wang, Demler and Kessler 2002). For example, in the National Comorbidity Survey – Replication (NCS-R) study, only 30.5% of individuals who met criteria for a DSM-IV disorder in the past year received treatment for it and those in treatment often received suboptimal treatment (Kessler et al., 2008). Although treatment rates were higher for individuals with severe symptom levels, the majority of these individuals did not receive any treatment (59.5% received no treatment). Among respondents in the Behavioral Risk Factor Surveillance survey who indicated they had serious psychological distress, only 37.7% received mental health services in the preceding year and 53.4% were currently receiving no treatment (CDC, 2007). Importantly, research has consistently documented disparities in access, utilization, and engagement of mental health services. In particular, racial and ethnic minorities (including immigrant and refugees), individuals from lower socioeconomic backgrounds, and men are less likely to receive adequate mental health care (Gonzales & Papadpoulos, 2008; Kessler et al., 2008; Snowden, 2012, Berdahl & Torres Stone, 2009).

Research on barriers to mental health care has advanced our understanding of the barriers that exist for many individuals who wish to access services. And yet, despite this increased information, there remain significant numbers of individuals who are not receiving the mental health care they need. While there likely exist many potential solutions to this public health problem, one avenue that has received relatively little attention is the role that community-based participatory research (CBPR) can play in addressing gaps and barriers in the health care system (Wallerstein & Duran, 2006). CBPR has been defined as "a systematic effort to incorporate community participation and decision making, local theories of etiology and change, and community practices into the research effort" (Wallerstein & Duran, 2006, p.313). With regards to improving the health care system, CBPR can play an important role in the development of locally conducted needs assessments (Cardemil et al., 2007). These locally conducted needs assessments can provide communities with a more

nuanced understanding of the needs that are relevant to their particular populations, can lead to collaborative efforts to address mental health needs, and they can empower communities to make the changes needed (Cardemil et al., 2007; Doombos, Zandee, DeGroot, & Maagd-Rodriguez, 2013).

In recognition of the benefits of a community-based needs assessment, we conducted the Worcester Mental Health Needs Assessment (WMHNA). The WMHNA was a study funded by the Fairlawn Foundation as part of the Worcester Department of Public Health's Community Health Improvement Plan (CHIP), whose aim is to advance Worcester to the healthiest city in New England by the year 2020.

The purpose of this study is to increase our community's understanding of the perceived mental health experiences and issues faced by Worcester residents. Because of the relative lack of information on this topic, we used quantitative and qualitative methods to engage members of several community based organizations (e.g., medical clinics, churches, and mental health and social service agencies) in a CBPR approach. Therefore, the WMHNA attempts to identify strategies for informing the Worcester community about the study and to ensure that the interests of community members and potential study participants are considered.

To develop and complete the project, a community stakeholder advisory board was developed representing a cross section of the target community. The community stakeholder advisory board was actively involved in all phases of the research process particularly in identifying study questions, participants, interpretation, and dissemination of findings.

Quantitative Methodology

The quantitative data for this mental health needs assessment were obtained from two primary sources: the Behavioral Risk Factor Surveillance System (BRFSS) from the Center for Disease Control (CDC) and the MassCHIP from the MA Department of Public Health.

BRFSS is a CDC-run health-related telephone survey system that collects data at the state and local levels from U.S. residents. The survey focused on a variety of health-related risk behaviors, chronic health conditions, and use of preventive health services (www.cdc.gov). For the 2015 Worcester Mental Health Needs Assessment, data were gathered that focused primarily on mental health topics.

The Mass CHIP gathers yearly health data from a variety of sources at the state and local levels. The data are provided in variety of formats, including raw counts, age-adjusted estimates of frequencies per 100,000 individuals, and standardized ratios. While useful, raw counts do not take into consideration the relative size of the population being studied and so do not allow for relative comparisons. Age-adjusted estimates of frequencies per 100,000 allow for relative comparisons across groups, while standardized ratios allow for relative comparisons of rates between Worcester and the overall Commonwealth of Massachusetts. Because Commonwealth of Massachusetts frequencies are set as the comparison point (standardized ratio=100), standardized ratios for Worcester populations above 100 indicate higher rates than in Massachusetts as a whole, while standardized ratios below 100 indicate lower rates. Standardized ratios are presented for both hospitalization (i.e., standardized hospitalization ratios or SHR) and suicide rates (i.e., standardized mortality ratios or SMR).

Qualitative Methodology

The qualitative data for this mental health needs assessment come from 61 individuals who represented Worcester residents and/or consumers of mental health services, as well as providers of mental health and community-based services in Worcester. Individuals participated in either a focus group or an individual interview with research staff. The interviews were based on prior work conducted by Cardemil and colleagues (2015) that explored the relationship among how individuals conceptualize and experience their mental health challenges, their attitudes and beliefs about coping with these challenges, and their experiences with the mental health care system. Interviews were semi-structured in format and delivered in an open and informal nature that allowed for a dynamic exchange of ideas (Miles, 1994; Mishler, 1986). Study participants were encouraged to respond in the form of narratives (Mishler, 1986) about their personal experiences with life stressors, mental health challenges, and the mental health care system. Probes were used to elicit additional details and explanations. Interviews were recorded and transcribed, and major themes that emerged across the interviews were identified (Miles, 1994). In this report, we summarize findings from our analyses of the qualitative data collected via focus groups and individual interviews.

Procedure

Recruitment of service providers in Worcester was conducted with the help of our community stakeholder advisory board, comprised of a number of Executive/Program Directors of Worcester-based services. In order to ensure that multiple perspectives were considered, we prioritized recruitment of providers across a broad range of service-providing organizations. These organizations included health and mental health centers, social services agencies, immigrant and refugee assistance programs, legal consultation services, faith-based organizations, and law enforcement. Inclusion criteria included experience as a service provider in Worcester; there were no exclusion criteria.

Worcester residents and/or consumers of mental health services were recruited with the help of providers and Executive/Program Directors on our community stakeholder advisory board. In addition to recruiting individuals via clinician referral, research staff posted flyers advertising the project at local community organizations and via online "listservs." Inclusion criteria included being 18 years or older; no exclusion criteria applied. However, the research staff was only able to accommodate data collection in English, Spanish, and Vietnamese. Research staff utilized clinical judgment to determine individuals' current mental health status and capacity to give consent.

All individuals provided informed consent prior to participating. In the focus group setting, research staff reviewed the consent form with the group as a whole, and each participant signed an individual copy of the materials. Participants who expressed discomfort with the group setting were given the option of an individual interview instead. Informed consent procedures for participants completing an individual interview took place at Clark University or in another private space to ensure confidentiality. All demographic information was obtained through participant self-report. Participants also agreed to be audio recorded during the interview process. In isolated instances, participants refused to be audio recorded; research staff took detailed notes throughout these interviews instead. Finally, individuals were paid \$25 per completed interview or focus group.

All procedures and materials were reviewed and approved by the Institutional Review Boards at

Clark University, University of Massachusetts Medical School, and the MA Department of Mental Health. Additionally, when participating organizations necessitated independent review of the project, research staff ensured that all necessary organizational requirements were met.

Materials

Following the provision of informed consent, participants completed a demographic questionnaire prior to starting the interview. Focus groups lasted approximately 1.5 hours and covered a range of topics. Interviews lasted about 30 minutes and explored the same topics as those discussed in the focus groups. Among resident/consumer focus groups and interviews, participants were asked to discuss common challenges experienced in the Worcester community, their ideas about mental health, coping strategies for dealing with stress, their experiences with mental health services in Worcester, and recommendations for improved service-delivery. See Table 1.

Table 1. Focus Group / Interview questions for Worcester residents

1.	Let's talk about the common challenges people experience on a day to day basis – that you have experienced, your family and/or friends have experienced, or that you've heard other individuals in the community have experienced, and so on.
2.	You've talked about your life stressors and challenges. As you can imagine, we think that these things are deeply connected to mental health. What do you think about mental health more generally?
3.	What are the different ways in which you or other individuals in your community manage these stressors?
4.	What have your experiences or others' experiences that you know been with trying to access mental health services in Worcester?
5.	Do you have any recommendations about the provision of services in Worcester, or services that don't exist that you'd like to see exist, or additional social assistance programs?

Provider and Executive Director focus groups and interviews explored similar topics though, in addition to exploring their perception of consumers' attitudes and experiences, providers were asked to discuss barriers and facilitative factors in delivering care. See Table 2.

Table 2: Focus Group / Interview questions for Providers and Executive Directors

- 1. What are the most common challenges you see people experiencing in the Worcester community?
- 2. How do you understand consumers' and residents' ideas and attitudes towards mental health? How do you see stigma interfering with help-seeking?
- 3. What are the most common ways you see people coping with their life stressors and mental health challenges?
- 4. What are your perceptions of individuals' experiences in trying to access mental health services in Worcester?
- 5. What gaps do you see in the system or in your particular organization? How could service provision in the Worcester community be improved?

Participants

A total of 61 individuals participated in the project, including both Worcester residents and/or consumers of mental health services, as well as a broad range of service providers in the Worcester community. In total, 26 Worcester residents and consumers participated in the study. These participants ranged in age from 24 to 74, with a mean age of 56.6 years (SD = 13.4). The sample was racially and ethnically diverse, with 88% of the participants self-identifying as racial/ethnic minorities and just over two-thirds of the sample indicating they were U.S. immigrants. Slightly more than half the sample were men (58%), just under half were single (42%), and more than half of participants (77%) had less than a college degree. Participants were also predominantly from low-income backgrounds, with half of the sample reporting that they earned less than \$10,000 per year.

When asked to describe their mental health challenges, including particular diagnoses they felt fit their experiences, approximately half of the sample (n=15) endorsed having struggled with mental health issues. Among these fifteen participants, individuals described their psychological difficulties in a variety of ways: some with diagnoses (i.e., depression, anxiety, bipolar disorder, and post-traumatic stress disorder); others according to symptoms (i.e., trouble concentrating or forgetfulness). Relatedly, seventeen participants acknowledged having accessed mental health services, which included both specialty services as well as receiving medication from their primary care providers (PCP). It was typical for individuals having accessed mental health treatment to report engagement with multiple service modalities (i.e., psychiatry, individual therapy, and group therapy). Specifically, 16 participants had seen a psychiatrist or their PCP for medication, 11 had engaged with psychotherapy, and 6 had sought substance abuse treatment.

With regards to service providers, 8 participants were mental health providers, 15 were non-mental health providers, and 12 were Executive/Program Directors from participating organizations. All of the mental health providers had received an advanced degree past college (i.e., Masters or Doctoral degree), and the majority practiced both individual- and group-based therapy. Collectively, they provided services to a broad range of adult consumers, who were predominantly from low-income backgrounds and diverse with regard to race/ethnicity. The non-mental health providers encompassed a wide range of community-based services including case management, social services, legal consultation, law enforcement, and faith-based support. Just over half of the non-mental health providers (n=8) supported the immigrant and refugee populations in Worcester. Similarly, participating Executive/Program Directors represented a breadth of service agencies in Worcester, including health centers, community mental health centers, a health insurance provider, and social services agencies. The consumers served by their organizations included the following: patients of health/mental health centers (both youth and adult), individuals with serious mental illness requiring employment assistance, immigrant and refugee populations, and victims of violence.

Data Analysis Process

Following data collection, research staff transcribed the interview and focus group audio recordings. To ensure that multiple perspectives were considered throughout the analysis process, the principal investigators and project manager each independently transcribed several audio recordings to become familiar with the data. The research team was engaged in active discussion about emergent patterns in the data prior to formally identifying the most commonly endorsed themes (Braun & Clarke, 2006; Patton, 2002). The research aims and focus group/interview questions organized our coding of the data and facilitated identification of the final thematic scheme presented in this report.

Limitations

Our study contained several methodological limitations. First, this study was conducted with a purposive adult sample of 61 Worcester community residents/and or consumers, a broad range of services providers, and Executive Directors who reported on different experiences with the mental health care system; and thus findings from this study cannot be generalized to all Worcester adults. This is important because variation in individual experience with mental health systems influence what participants perceive as important mental health needs. Second, given time and budget constraints, our sample was limited to Worcester residents who were able to speak one of three languages (English, Spanish, or Vietnamese). We were able to recruit and interview Burundi- and Arabic-speaking providers in an effort to overcome this limitation. However, there are particular immigrant communities whose perspectives we were unable to acquire. Finally, it is likely that most of the individuals who participated in the WMHNA had strong opinions about mental health and mental health care that they wished to share with the researchers. This unavoidable characteristic raises the risk of bias in our findings, especially since it is more likely that individuals will hold strong, negative opinions.

However, we mitigated these concerns by recruiting a wide range of participants through word of mouth, clinician referrals, and flyers. We also focused our analyses on those themes that were identified across the three groups i.e., Worcester community residents/and or consumers, providers and Executive Directors.

Quantitative Findings

Behavioral Risk Factor Surveillance System

Data from the BRFSS indicate that between 2011 and 2013, 15-18% of Worcester respondents noted having more than 15 days of poor mental health in the past month, numbers that were markedly higher than for respondents from the Commonwealth of Massachusetts as a whole (10-12%). Relatedly, between this time period, 9-12% of Worcester respondents reported more than 15 days in the past month during which they felt limited by physical or mental burden. These numbers were also higher than those reported for Massachusetts as a whole (6.5-7.0% between 2011-2013). Finally, a substantially higher proportion of Worcester respondents than Massachusetts respondents indicated needing to see a doctor in the past year, but were unable to do so because of cost (10-15% in Worcester vs. 8.5-9.5% in Massachusetts) (Table 3).

Year	15+ days of poor mental health	15+ days limited by physical or mental health	Needed to see doctor but could not					
2011	16.3 (11.7 - 20.9)	8.9 (6.5 - 11.3)	11.2 (8.3 - 14.1)					
2012	17.8 (13.4 - 22.1)	12.0 (8.0 - 15.9)	14.9 (10.5 - 19.4)					
2013	15.6 (11.5 - 19.8)	9.8 (6.9 - 12.8)	10.4 (6.2 - 14.7)					
2011	10.4 (9.7 - 11.1)	6.5 (6.0 - 7.0)	9.5 (8.8 - 10.2)					
2012	10.9 (10.2 - 11.6)	6.6 (6.1 - 7.1)	9.2 (8.6 - 9.9)					
2013	11.2 (10.3 - 12.0)	7.0 (6.3 - 7.7)	8.5 (7.8 - 9.3)					
	Year 2011 2012 2013 2011 2012 2012 2013	Year15+ days of poor mental health201116.3 (11.7 - 20.9)201217.8 (13.4 - 22.1)201315.6 (11.5 - 19.8)201110.4 (9.7 - 11.1)201210.9 (10.2 - 11.6)	Year15+ days of poor mental health15+ days limited by physical or mental health201116.3 (11.7 - 20.9)8.9 (6.5 - 11.3)201217.8 (13.4 - 22.1)12.0 (8.0 - 15.9)201315.6 (11.5 - 19.8)9.8 (6.9 - 12.8)201110.4 (9.7 - 11.1)6.5 (6.0 - 7.0)201210.9 (10.2 - 11.6)6.6 (6.1 - 7.1)201311.2 (10.3 - 12.0)7.0 (6.3 - 7.7)					

Table 3: 2011-2013 BRFSS data on three mental health indicators

Note: Data presented indicate percent of all respondents and include 95% confidence intervals.

Mass CHIP: Hospitalization rates

According to the Mass CHIP, between 2008 and 2012, there were 25,371 visits to hospital emergency departments for mental health causes. These numbers have been steadily increasing (4,103 in 2008, 4,718 in 2009, 5,071 in 2010, 5,375 in 2011, and 6,104 in 2012) at a rate that surpasses the overall population growth during this time, as evidenced by age adjusted rates per 100,000 that have been increasing at a similar rate (2,788.10 in 2010, 2,930.38 in 2011, and 3,309.21 in 2012). These numbers have been consistently higher than those reported for the Commonwealth of Massachusetts (Table 4).

Geography	Year	Total Count	AAR / 100,000*
Worcester	2008	4103	2287.58 (2217.72-2357.43)
Worcester	2009	4,718	2619.00 (2544.58-2693.43)
Worcester	2010	5,071	2788.10 (2711.14-2865.07)
Worcester	2011	5,375	2930.38 (2851.94-3008.81)
Worcester	2012	6,104	3309.21 (3226.39-3392.03)
Mass. Tot.	2008	127,114	1936.42 (1925.82-1947.03)
Mass. Tot.	2009	130,780	1966.29 (1955.66-1976.92)
Mass. Tot.	2010	137,877	2084.43 (2073.43-2095.42)
Mass. Tot.	2011	143,805	2160.53 (2149.35-2171.71)
Mass. Tot.	2012	155,219	2160.53 (2149.35-2171.71)

Table 4: 2008-2012 Mass CHIP data on hospitalization rates

*Note: Data include 95% confidence intervals.

Men had higher total hospitalization counts than women during this period, with age-adjusted rates being about 1.5-1.7 times higher for men than for women. The Worcester SHR were higher than those reported by the Commonwealth of Massachusetts for both men and women, with a particularly notable spike in SHR in 2012 among men in Worcester (SHR=150.07) (Table 5).

Between 2010 and 2012, the majority of these hospitalizations were of individuals from White, non-Hispanic backgrounds (n=11,513), a finding that is unsurprising given the demographic distribution of Worcester (i.e., White, non-Hispanic individuals represent the largest racial/ ethnic group). Age adjusted rates reveal that White, non-Hispanic individuals continue to demonstrate the highest rate of hospitalizations (3,365.72 per 100,0000), with Black, non-Hispanic individuals also demonstrating elevated rates (3029.82 per 100,000). Individuals of Hispanic, Asian/Pacific Islander, and American Indian backgrounds showed markedly lower

age adjusted rates of hospitalization (1789.89, 402.64, and 863.85 per 100,000, respectively). Examination of the standardized hospitalization ratios indicates that White, non-Hispanic individuals had higher hospitalization rates in Worcester than in the greater Commonwealth of Massachusetts (SHR=148.67), while individuals of Hispanic (SHR=73.88) and American Indian (SHR=60.48) backgrounds had lower hospitalization rates.

		Men		Wom	ien
Geography	Year	AAR / 100,000	SHR	AAR / 100,000	SHR
Worcester	2008	2730.47	118.35	1879.84	108.44
		(2620.81-2840.13)	(113.62 -123.23)	(1791.52-1968.16)	(103.42 - 113.64)
Worcester	2009	3323.10	139.38	1957.07	114.24
		(3202.97-3443.23)	(134.34 - 144.57)	(1867.24-2046.89)	(109.08 - 119.59)
Worcester	2010	3423.01	133.91	2170.94	120.34
		(3301.39-3544.62)	(129.18 - 138.78)	(2076.02-2265.85)	(115.19 - 125.66)
Worcester	2011	3636.69	139.28	2242.23	118.62
		(3512.62-3760.76)	(134.54 - 144.13)	(2145.75-2338.71)	(113.61 - 123.80)
Worcester	2012	4216.25	150.07	2438.72	122.47
		(4083.84-4348.66)	(145.34 - 154.92)	(2338.24-2539.19)	(117.52 - 127.58)
Mass. Tot.	2008	2202.44	-	1680.99	-
		(2186.36-2218.52)		(1667.05-1694.92)	,
Mass. Tot.	2009	2280.83	-	1661.43	-
		(2264.58-2297.08)		(1647.63-1675.24)	
Mass. Tot.	2010	2436.32	-	1748.76	-
		(2419.38-2453.26)		(1734.60-1762.92)	
Mass. Tot.	2011	2519.71	-	1817.12	-
		(2502.51-2536.91)		(1802.69-1831.54)	
Mass. Tot.	2012	2709.05	-	1917.92	-
		(2691.35-2726.74)		(1903.13-1932.70	

Table 5: 2008-2012 Mass CHIP Hospitalization rates divided by sex

MassCHIP: Suicide rates

Between 2008 and 2012, there have been 70 documented suicides in Worcester. Comparing standardized mortality ratios with the Commonwealth of Massachusetts indicates a slightly lower rate in Worcester (SMR=95.84). Men had markedly higher suicide rates than women (13.57 vs. 2.48 per 100,000); however, the SMR for men was not notably different from the overall Massachusetts SMR. In contrast, the SMR for women in Worcester was lower than that for Massachusetts (SMR=64.53). Suicide rates were too low to reliably compare rates across different racial/ethnic groups; however, it is notable that individuals of Hispanic background had SMR approximately 70% higher than the larger Commonwealth of Massachusetts.

MassCHIP: Providers

Data from Mass CHIP indicate that in 2009, there were 92 licensed physicians in Worcester with a specialization in psychiatry, which comes to a crude rate of 51.15 physicians per 100,000 in the population. Numbers are markedly lower for licensed physicians in Worcester with a specialization in child or adolescent psychiatry. In 2009, there were 14 such physicians,

which comes to a crude rate of 7.78 physicians per 100,000 in the population. Both numbers compare favorably with Massachusetts as a whole, as well as several other comparably sized Massachusetts cities (Fall River, Holyoke, Springfield).

Qualitative Findings

Common Challenges in Worcester Community

Economic Difficulties: Poverty, work, safe and affordable housing

When asked about the most common challenges Worcester residents face on a daily basis, economic difficulties were identified by all participants as a primary challenge. Economic difficulties were discussed in relation to accessing health and social services (e.g., lack of transportation, insurance coverage, and co-pays), meeting basic necessities, and acquiring affordable and safe housing. One Executive Director described these challenges succinctly:

"For incoming people at this organization, there are so many people below the poverty level... poverty related issues is the primary challenge we see. Their stress levels are huge. They are constantly in distress because they don't know when their next meal is coming. Poverty is connected to health issues. They don't have a healthy lifestyle because [they are] struggling to get back on their feet. [They] may not have time to see a doctor or take their kids to a doctor."

For those with mental health challenges, finding and keeping work can be challenging. Despite a strong desire to work, some consumers of mental health services have less experience managing daily interactions with others, including supervisors. One mental health consumer noted:

"Since people are low income, they want to work to make more money, but working isn't easy...have to get there, deal with people, deal with a supervisor, and that can be very challenging for a person with mental illness"

In addition, some consumers worry that working may put at risk some of the benefits they receive from the government. As one mental health provider explained about the consumers at her organization:

"And for [consumers in our agency], they're pretty much all on disability because the hospital set them up with that. And they do, they say, 'I'd love to get a job.' And these are people in their 20s, they could work, and they want to work, and they know it will be meaningful, and they know it will help move them in the direction they want to move in. But they don't want to lose their [Supplemental Security Income (SSI)] because it pays more, but also, it's income. What if I get this job, and I can't do it? I'm not going to risk losing my actual income to get a job that I may not be able to do." Finding and keeping safe and affordable housing was identified as an important challenge for many Worcester residents. One consumer stated:

"I have a friend who has a neighbor upstairs that deals drugs, so finding affordable safe places to live is important."

As with the complicated relationship between work and SSI, for many Worcester residents, eligibility to receive subsidized housing is attached to their disability status. An unintended consequence of this connection is that increased work can jeopardize eligibility for housing vouchers. As one mental health provider stated:

"I had a client recently who decided to work a couple of hours a week. And because she decided to work a couple of hours a week, they removed her housing voucher, and she had to move out of her apartment because she couldn't afford the rent anymore. She tried to, you know, better her life in a way, and it felt like it was a punishment. So why keep trying?"

Some Worcester residents struggle with finding stable housing and need to turn to homeless services. The provision of these services has not been without its challenges, however. One theme that emerged from some of the providers is the sense that homeless shelters are not as safe as they ought to be. This concern about safety can be exacerbated for some residents with mental health challenges. One member of law enforcement noted that:

"In reference to some homeless people, some don't want housing... 'I want to live outside, I don't want to be around people, the voices tell me that when I'm around a lot of people, lots of noise, I feel threatened. I need to get away to process my thoughts, a quiet place away from people. I don't want to go to a shelter, my voices tell me it's not safe there.""

In addition to concerns about safety, complicated systems issues across the state have increased the stress on the ability of Worcester to serve the homeless. One mental health provider explained:

"The homeless population in Worcester has, like, I don't know, quadrupled, I think, in the last couple of years because a lot of other cities can't hold clients. They were coming to Worcester because Worcester had better services. But now they've delayed...you could apply for a homeless shelter if you were in Worcester for about six months, but some of the places now you have to have been a Worcester resident for two years, and you can't really prove residency when you are homeless."

In sum, economic difficulties were identified as a primary source of stress for Worcester residents. This theme emerged across all of the interviews and focus groups, with residents and providers alike. The complex nature of economic challenges encapsulated general stress related to inadequate finances, difficulty finding and keeping employment, and acquiring affordable and safe housing.

Exposure to violence and trauma

A second important theme that emerged across the interviews and focus groups was the elevated rates of lifetime and current exposure to violence and trauma. For some immigrants who come from countries with extensive civil strife, the trauma can be extensive. As one non-mental health provider described:

"Immigrant and refugee families have seen lots of violence before coming to the United States. They come from war countries. Some have experienced genocide but are survivors. We have so much to learn about resilience from them."

In addition, many Worcester residents are exposed to community violence, whether it is on the street or in their homes (e.g., domestic violence). Their experiences have indicated that this violence has been increasing over the years. As one consumer noted:

"I grew up in Worcester, with the doors on my house not locked...we'd come home and a friend of my mother or father would be sitting down, drinking a cup of coffee and eating pastry, waiting for us to come home...now, two deadbolts, a dog...you know? People have no regard for decency, for human life...in the 14 years that I've been on Lincoln St., it is unbelievably worse, to the point where you can't really walk down the street at night...well, you can, but it's not recommended."

One religious pastor highlighted the violence, both at home and in the streets, to which many youth are exposed. He stated:

"We see a lot of children dealing with trauma, trauma coming from their own home, child neglect; trauma from kids where terrible things have happened to them -- beaten up, shot, stabbed, their friends have died."

Unsurprisingly, military veterans were a group of individuals for whom experiences of trauma was a salient theme. One provider who works with the veteran population said:

"A lot of our clients through homeless Veteran program have multiple levels of trauma. There might be civilian trauma, childhood sexual trauma, to trauma when they were drinking and drugging and using on the streets, to trauma in the military. And the only one of those traumas that is honorable ... would be military trauma. So there's a whole harboring of secrets they endure, looking at someone who had a whole lot of trouble prior to entrance and it has not really been addressed due to the secretive nature, or their resistance, or shame and embarrassment by the veteran."

For many residents, these traumatic experiences produced significant psychological and physical symptoms that necessitate and complicate treatment. One provider highlighted the interconnected nature of traumatic experience. She noted:

"You know, a lot of our clients, again, live in very... in areas where they see a lot of violence, you know, community violence. And it's like a retraumatizing of whatever experiences they've had coming in from their country of origin or experiences of domestic violence or whatever. That brings it all out again."

Importantly, however, exposure to high levels of trauma in these immigrants' countries of origin does not invariably lead to significant difficulties. Many immigrants and refugees demonstrate impressive levels of resilience. As one Executive Director noted:

"I want to dispel the myth that all refugees are so traumatized that they need mental health services right away. That's not true. Many refugees arrive and are stable and productive and work."

Medical comorbidities

Several providers who work closely with consumers of mental health services noted the high rates of medical comorbidity that affect this population. They noted that many psychiatric medications have significant long-term side effects, including weight gain, which can lead to or exacerbate chronic medical conditions, like diabetes. These medical challenges may be particularly difficult for residents as they get older. One provider note that:

"I also think that with people as they are getting older, that medical illnesses are a big issue. I think they get more limitations about being able to attend appointments, for example. More trips to [the] hospital, more cocktail of medications, you know, that they have to take. I think that is a challenge in general, actually, because it is more difficult to understand your treatment... Some of the [psychiatric] medications may interfere with some of the other medications they are taking for the medical illness."

Struggles with alcohol and substance abuse

Many of the providers we interviewed highlighted the struggle with substance use that they witnessed among many residents with whom they have worked. One mental health consumer expressed his concern that not enough is being done to address the substance use difficulties people experience. He said:

"It's rampant...if you want to count marijuana, it's from staggering low ages right through the elderly...crack, heroine – rampant, it's everywhere...(on level of policy-makers) there's blindness to the problem...complacency...that is such a 50s and 60s "don't mention anything" attitude...people have to start living in reality...everything is not okay, things aren't okay around us...as soon as you look over your shoulder – if they took a really good look – they'd realize how bad things really were..." Much of this substance use was conceptualized as self-medication to help manage symptoms of mental illness and general stress. As one mental health provider noted, "People manage chaos through whatever ...'escape' means with substances." One mental health consumer explicitly linked substance use to managing life stressors. He said:

"You have life in front of you, a lot of decisions to make daily, so much on your mind at one time...only way most people deal with it is drugs, that's how I've always dealt with it...it's the easiest, most cowardly way to walk out of it I guess, and not deal with any of the issues...just pop something and go into a different place...it's hard, you have all that stress and pressure, and not everybody can deal with all that."

Some providers also noted how society's changing attitudes and laws towards marijuana can complicate treatment with individuals who engage in substance abuse. One provider who works with military veterans said:

"For some of our clients, unfortunately, substances are a component of coping...more and more marijuana cards [medical marijuana], since you can pick up a card on Union Street for \$200.00. Folks don't even mention it, you have to specifically ask if they are using it like you would ask about tobacco."

Making sense of mental health issues

Conceptualizations of mental health

The next part of the interview centered on conceptualizations and attitudes toward mental health. In this portion, residents, providers, and executive directors were asked to discuss how they thought members of the Worcester community conceptualized mental health issues. Interestingly, several providers noted that community residents did not always recognize symptoms of stress as psychological in nature and possibly treatable. For example, a religious pastor, in reference to experiences of trauma, said:

"They don't know that they have trauma. It's our responsibility to direct them to Worcester services but we have to be careful how we do it...we have to build trust with the mother and the child first."

Similarly, a mental health provider who worked with immigrant and refugee populations noted that many of these individuals struggle with the effects of pre-immigration trauma, but are not familiar with Western notions of mental health and illness, and so focus on physical symptoms. He stated:

"So lots of people have come from civil war torn countries that have extensive traumatic experiences, and they are in a new country where they don't speak the language, they don't recognize the new faces around them, and it's unsafe to sleep. I would say so many of the clients that come in, one of their most salient needs is that 'I am not able sleep.'" Other providers noted that although some residents may not think that they are struggling with a "mental illness," they are aware that something is wrong in their lives. Often mental illness manifests itself in crisis mode when people are less equipped to handle it. One mental health provider stated:

"I think people have an awareness that they are in trouble. They may not necessarily put their finger on what is going on. But they usually then describe this big picture of stressful situations. It could be jobrelated, it could be family-related, it could be substance abuse related, illness, other kinds of illness that also come into play. So, I think people have some awareness that they're in trouble and something is going wrong. They may not necessarily, like I said, put their finger on it and say that this is anxiety or this is depression or alcohol is making things worse."

Negative attitudes and stigma

When asked about attitudes towards mental health, stigma emerged as a common theme across residents, providers, and executive directors. As one mental health consumer stated:

"There is a lot of stigma in Worcester... Employers don't want to hire individuals with mental illness [because] they think we're crazies who won't be able to do the job right."

This sentiment was echoed by a law enforcement officer, who explained that:

"If you've never been exposed to someone with mental illness, mental illness is viewed as a threat, it's unpredictable."

Of note, interviewees suggested that mental health stigma is much more pronounced in immigrant and refugee populations, many of whom equate mental illness with "being crazy" and as being inherently shameful. As one non-mental health provider described about some of her clients who are served by her organization:

"There is a lot of stigma – once they are settled – they are still in contact with each other. They feel like they have worked so hard to get to the United States that they can't have a problem. They can't be looked down upon. They don't want to get help with any of their symptoms because they don't want to be labeled as mentally ill."

This perspective was shared by some of the residents we interviewed, particularly the Latino and Vietnamese residents. One Vietnamese resident clearly described the stigma in her community:

"For my individual opinion, the Vietnamese people usually think mental health issue as they usually think of the word "CRAZY." Therefore, most people are ashamed of having mental illness and deny that they have mental health issue... Because the Vietnamese, including myself, we think mental illness is being insane, crazy." Military veterans were a group for whom stigma posed unique challenges. In addition to having the general stigma about mental health challenges, many veterans worry about the consequences to their military career if they were to seek help. One provider who works with military veterans noted:

"Veterans, particularly if they remain an active service member in the Guard or Reserves, are willing to tell us about their mental health issues but don't want us to document it on their records because the military has access to their medical records. You get mixed messages from the military: on the one hand, you are encouraged to disclose your mental health condition but everything changes after that. Sometimes disclosure limits their ability for promotion and changes their career path. "

Interestingly, there seemed to be a sense among providers that stigma has improved over the years. One mental health provider noted this quite explicitly, stating:

"And, actually, what I've seen in the 20-something years that I have been working in the public sector here and with the Latino community, is that I have seen a little bit less of the reluctance to say, 'I go to [psychiatric clinic].' You know, I recall, like 15 years ago, let's say, people would be more like, 'I don't even tell anybody in my family that I come here because they think that everybody who comes here is crazy.' So I think we've moved a little bit, in terms of, maybe because there's more media, information, you know...that people are less likely, 'I can't even mention that I go there.'"

A consistent theme emerged across the interviews of both providers and executive directors that stigma can be effectively addressed if consumers are able to make it to the first appointment. The psychoeducation that takes place, coupled with the attention to stigma-related concerns by the provider, can make a significant difference in the experience of consumers. A non-mental health provider, who has referred numerous residents to mandated psychological treatment, articulated this point quite well. He said:

"If guys can just get there the first time...overcome the stigma, the fear... it gets easier, they get more comfortable with it."

Coping with stressors: Prominent role of religion and spirituality and community

In our interviews and focus group discussions, a number of coping strategies emerged as being particularly prominent among Worcester residents. Some of the coping strategies were conceptualized as unhelpful and included alcohol and substance use/abuse, self-injury, and isolation. Many of the coping strategies were adaptive, however, and included a number of individually-oriented strategies (e.g., exercise, meditation, relaxation) as well as more sociallyoriented approaches (e.g., support from friends and family, structured social activities).

Religious and spiritual coping

Religious and spiritual coping was noted as a particularly useful and adaptive coping strategy that was especially common among Worcester residents of racial and ethnic minority backgrounds. One non-mental health provider stated:

"Sometimes the temple is a way to cope with life stressors... gives you nirvana, stability...religion – if [they're] having a bad day they might go to the Temple."

This sentiment was expressed by several residents. One Vietnamese resident stated:

"Or if I am angry, I usually go by the temple, such as Linh Son or Pho Hien temple to look at Buddha statues, then I feel calm right away. Having Buddha in my heart helps me let go what I need not to remember."

A Latino resident expressed similar ideas:

"Without God I'm nothing. I pray a lot. He helps me by putting positive people in my path."

The role of religious and spiritual coping appeared to be multifaceted, as it encompassed both internal connection to higher powers, as well as helped residents develop and maintain social connections among like-minded communities. One Executive Director noted that:

"People don't just turn to a church or a synagogue, sometimes it's spiritual in nature. They have a belief that God is out there...for many of them, they have lost their family so they need turn to religion as part of their family (community that helps you). Religion becomes their family."

Community-based support services

Consistently, providers and consumers highlighted the helpful nature of non-mental health community agencies to provide support, necessary skills training, and system navigation. Moreover, community organizations offer important opportunities for positive social interactions that can alleviate some of the struggles with isolation and forming new relationships. As one Executive Director stated of the clients she serves:

"One way that our clients cope with their stressors is by using our services. There is never a waiting list at Clubhouses. You can get residential support if you have DMH eligibility – you have open access – if you have mental illness you can come in."

Community supports were seen as particularly helpful for immigrant and refugee groups, and important in situations where families were separated (voluntarily or involuntarily) or had limited resources to interact with each other. As one non-mental health provider noted:

"They have their own communities to deal with [stress] themselves, but not necessarily family members. Sometimes families are located in different parts of the country. They often don't want to go against the community they built so they don't want to complain about day- to- day stressors."

Barriers and Facilitators to Mental Health Services

Participants identified several barriers to utilizing mental health services, including a dearth of providers, long waiting lists, navigating and understanding the mental health system, language barriers, lack of coordinated care, transportation, affordability of care (insurance/copays), patient engagement (e.g., perceptions of uncaring providers) and hours of operation.

Long wait-lists to see providers

Many participants expressed frustration with the difficulties in scheduling appointments with mental health providers. This frustration was expressed regarding both psychiatric and psychotherapeutic services, and it was noted as particularly concerning for communities of color. One mental health provider we interviewed stated:

"I think the most common challenge is, I think, lack of resources. When people decide – especially we see that in the public sector, psychiatry, definitely...When people decide they need services or they try to seek services, there's a number of waiting lists, you know. And people, sometimes – especially with the Latino community, which is the community that I work with, people sometimes look for services when they really needed it yesterday, so there is a certain urgency that goes with looking at, getting the services. And, what happens is that many times there are waiting lists among the providers in town, and then either the crisis gets resolved or they have to suffer through it, end up in the hospital. You know, that I think is, access, I think is one of the biggest challenges."

This difficulty with access to services was also noted in reference to emergency services. In response to a question about barriers, one Worcester resident stated:

"Waiting times. If someone has to go to EMH you can wait for up to 9 hours. Correct me if I'm wrong but UMass has the only Emergency Mental Health unless Community Health link has one. We have Urgent Care and Ready Meds popping up all over the place. We should create Ready Psych Meds. We need more sites for emergency mental health services."

Although access to services was noted broadly, there emerged a concern about access to psychiatric services, particularly for youth and adolescents. Some of the dearth in providers was understood as high turnover among providers, with psychiatrists being particularly unlikely to stay in Worcester for extended periods of time. However, the primary explanation for the low numbers of providers was low reimbursement for mental health services. This low reimbursement for mental health providers was noted by an Executive Director, who commented how puzzling it was, given the high need in the community. He stated:

"But for some reason, the money that gets paid to do outpatient mental health is very similar to what it was 30 years ago. Not adjusted for inflation. So, as a result, it's very difficult to make money in the business of outpatient mental health, and so many people, rather than coming into the field, have left the field. So there are fewer agencies, and just fewer available services, I think, in Worcester now, probably than there were when I started my career."

This low reimbursement can have consequences for the quality of care that is provided. As one mental health provider mentioned:

"Unfortunately, a lot of the really risky, at-need population gets either interns or right out of school clinicians because the pay is misery. I mean, it's pennies. And the only people that will take those jobs are students, or people that are just getting out of school because they are desperate for a job. So the clients end up getting clinicians that aren't necessarily trained to deal with the severity of their behavioral, mental health, substance abuse, all the comorbidity, all of their needs."

Difficulty navigating the system

Participants consistently described the difficulties Worcester residents experience when attempting to navigate the complex health and mental health systems. This difficulty was often noted as particularly stark for immigrant and refugee populations, many of whom come from countries with very different healthcare systems.

One Vietnamese resident stated:

"I have a doctor and Mass health insurance. When my doctor prescribed a medication, I took his prescription to everywhere, but no one had it. They kept telling me to go here and go there. This caused me so much stress that caused my nerves stretched thin. I came to this place that was supposed to sell the medication, but I was sent to another place and another place. I really need help to get my medical needs [met]."

Many providers and Executive Directors expressed similar frustration with the complex systems. Concerns were expressed about the challenges of coordinating care across providers and between organizations. The absence of any system to facilitate coordination of care was noted expressly by many providers. One Executive Director lamented the current state of affairs when she said:

"I think a lot of the agencies are so specialized in what they do, I think sometimes they are trying to fit a square peg into a round hole...and I think organizations need to be more client-centered, and really understand the client as a unique individual...I can't tell you how many times...the therapist will say, 'Oh, I don't work with that, you have to go here...clients are feeling abandoned, pushed-off." One mental health provider who works with military veterans acknowledged how complicated and daunting the system can be for patients. She yearned for a facilitator who could help patients with the inevitable challenges, stating:

"I crave for my clients a patient, experienced coordinator. Someone who is comparable and analogous to an articulate, well-educated person who has the time to help navigate what might feel like a daunting, complicated, intimidating system – private or VA. People do better with someone who is in the room, who [will] help them talk to their doctor when they're anxious about all the things that they're dealing with – to debrief after the appointment, follow up appointments, prepare for the next appointment. The experience would be much more productive."

This desire for a facilitator or patient navigator was articulated by many providers in different ways. One non-mental health provider described this need for South Asian populations:

"We need more health navigators and outreach workers who are focused on specific populations like the Burmese and Vietnamese population. It's very hard to have different people come to their homes who don't understand their background situation. We need to include different agencies to help bridge the gap between primary care, housing and mental health."

Cultural and linguistic competence

Engaging patients in care, however, especially the immigrant and refugee population, has to be done in a culturally responsive way. As one mental provider stated:

"In some cultures, parents have a hard time – once we engage them they see it differently but care has to be done in a certain way – cultural matching helps tremendously; someone who is trained appropriately – leads to good engagement...if people don't feel validated they don't come back."

Unfortunately, a consistent theme emerged whereby providers noted the dearth of culturally competent services. One non-mental health provider stated that:

"There isn't the cultural competency once the services are offered. There isn't a comfortable feeling for the other person on the other line to discuss all the other problems you have. No one-on-one comfort level. "

Language barriers also make it difficult to access services, especially if interpreters are not available on site. One mental health provider stated that:

"Access to quality care in language of origin is really difficult. We have to use a lot of phone interpreters. That really does, it delays the process of growth and betterment, because it takes twice as long just to get through a session." In-person interpreter services are not a panacea, either, as they can interfere with the therapy process in which consumers are expected to share intimate details of their lives with the provider. As one Latino resident noted:

"Do you think that I want to share the details of my life with a third person in the room? I need to talk to [the interpreter], he talks to the psychologist, and then back and forth. It is hard to open up to one other person, never mind two other people."

Logistical barriers: Transportation, operating hours, insurance

A number of logistical barriers to engaging with services were noted by residents, providers, and Executive Directors. These logistical barriers were more salient for consumers from lower socioeconomic backgrounds and included issues with transportation, operating hours, and insurance co-pays. With regard to transportation complications, one Worcester resident who was a consumer of mental health services stated:

"Transportation can be challenging. I have to take two buses to work and two buses back. I have to be at work at 11:15am, so I have to be at the bus stop by 9:45 to catch a 9:55am bus to the HUB and then catch a 10:30 bus to work."

Several providers acknowledged that bus services can be irregular and that it can increase stress on consumers who are trying to get to appointments at specific times. This challenge is exacerbated in the wintertime, when the weather can adversely affect public transportation in ways that can make it impossible to travel to appointments.

Further complicating access to services are the limited hours of operation that most mental health centers and clinics offer. The majority of services are offered during working hours (e.g., 9-5) which can be difficult for consumers with inflexible employment schedules. Given that psychosocial services are typically offered on a recurring basis, the generally inflexible hours does not facilitate engagement with services. One mental health provider articulated this issue clearly:

"Hours of operation. I know that at my center, that's one of the biggest problems. We are open 8:30-5, so that means a lot of appointments are at 4:30. And if your kids are in school, or if you're working, and you need therapy, unfortunately, we can't service you. And that seems insane to me."

Finally, several providers noted that insurance limitations do not facilitate access to services. Insurance limitations exist regarding what providers can be seen, what services can be provided, and how long treatment can be offered. In addition, co-pays can be exorbitant for the financially stressed. One mental health provider commented:

"People don't know the difference between providers, aren't sure what they have coverage for, don't have minutes (on their phones) to make these calls to insurance companies...and people are psychologically compromised."

Summary of Findings

Summary of Quantitative Findings

Taken together, the quantitative data suggest that between 2008 and 2012, greater numbers of Worcester residents, as compared with the Commonwealth of Massachusetts as a whole, endorsed markers of poor mental health, including days of poor mental health and hospitalizations for mental health issues. Of note, hospitalization rates were higher among men than women, as well as White, non-Hispanic individuals and Black, non-Hispanic individuals. Men also had higher documented suicide rates than women.

Interestingly, notably higher numbers of Worcester residents indicated difficulty seeing a doctor due to cost constraints, despite the fact that the number of psychiatric specialty providers in Worcester compares favorably with other similarly-sized cities.

Summary of Qualitative findings

Findings from the focus group and interview data reveal that the most common challenges facing Worcester residents included economic challenges and elevated rates of lifetime and current exposure to violence and trauma. In addition, substance use and medical comorbidity also emerged as common themes.

With regards to conceptualizations of mental health, results indicated that some community residents do not always recognize symptoms of stress as psychological in nature and as possibly treatable. In particular, many immigrant and refugee residents struggle with the effects of pre-immigration trauma, but are not familiar with Western notions of mental health and illness, and so focus on physical symptoms. Stigma emerged as a common theme across residents, providers, and Executive Directors. Of note, interviewees suggested that mental health stigma is more pronounced in immigrant and refugee populations, as well as among military veterans. Interestingly, there seemed to be a sense among providers that stigma has improved over the years.

In our interviews and focus group discussions, a number of coping strategies emerged as being particularly prominent among Worcester residents. Adaptive coping strategies included a number of individually-oriented strategies (e.g., exercise, meditation, relaxation) as well as more socially-oriented approaches (e.g., support from friends and family, structured social activities). Religious and spiritual coping emerged as particularly salient for racial and ethnic minority populations.

Participants identified numerous barriers to utilizing mental health services, including long waiting lists, navigating the mental health system, language barriers, and several logistical barriers (i.e., hours of operation, transportation, and insurance copays).

Recommendations

Taken together, the results from the 2015 Worcester Mental Health Needs Assessment Study led to a number of systems-related recommendations whose implementation could improve the mental health needs of the Worcester community. The recommendations vary in a number of important characteristics, including focus, comprehensiveness, and cost. Moreover, some organizations are already implementing some versions of the recommendations (e.g., integrated behavioral health care). Nevertheless, there exists considerable opportunity for enhancing existing versions of these recommendations, as well as disseminating them more broadly.

Greater and broader coordinated care

The theme of greater coordinated care was consistently articulated by Worcester residents, as well as providers of mental health and community-based services. Greater coordinated care was desired in a variety of different ways, but at its most basic, it would include greater integration of general health and mental health services. This integration, termed integrative behavioral health care in the literature, has received significant attention in Worcester, given that the University of Massachusetts Medical School is a national leader in this area. Integrated care has been linked to improvements in clinical outcomes, compliance with medical regimes, lower total medical costs to patients, patient and provider satisfaction, and access to behavioral health care particularly for groups that are difficult to engage (Blount, 2003). Although some agencies have moved to an integrated behavioral health care model, its application could be more widespread in the community, given the success that some agencies are having with it. As one Executive Director noted:

"What seems to be working the most smoothly for us is when behavioral health and medical work together for a patient, whether that's an integrated or coordinated service...when we're both on the same page, that seems to work better for patients...so, our medical providers understand what the condition of access to behavioral health is in Worcester, so they are reasonable about distinguishing between those patients in dire need for it versus those for whom it'd be helpful...and behavioral health cooperates by finding appointments for patients who are higher priority of need."

An interesting perspective on greater coordination of care was offered by an Executive Director, who suggested expanding the focus from the individual to families. She indicated that it would be beneficial to check in on parents during pediatric visits. She said:

"What we need is a mental health component to a well-baby doctor's visit. We can screen the mother for depression during this visit. It doesn't have to be a whole postpartum screening but we could ask some questions. Ask her about the kinds of supports she has, ask her if the baby's father is involved. It would really show that someone cares about her. When it comes to mental health, we have to look at the family as whole. We need to consider the well being of the mother as well." Importantly, although integrated behavioral health care has improved the coordination of overall health care within agencies, there remains a deficit of coordinated care across agencies. One Executive Director described a system of agency collaboration that could improve patient care:

"If patients have insurance that the agencies are able to accept, both agencies have set up a system of referral that equally distributes referrals to the agencies based on, "one for you, one for you, one for you", etc...so the patients who are referred get appointments as fast as is reasonably possible...it requires a commitment of labor, but ultimately it is less labor-intensive and financially burdensome to agencies, and better for consumers...whether it's that kind of a model or something else, something that provides a one-track waitlist...where everyone is recognizing that nobody is trying to screw anybody else and there is plenty to go around."

Deficits in coordinated care extend to mental health services offered by other agencies, as well social services more broadly, including law enforcement, legal aid, housing, and employment services. One mental health provider stated:

"I think we have moved more to community support services, where different insurances will cover providing some, like, case management support, and helping people with transportation, helping people with making appointments. There has been more of a movement towards that, and I think that has been helpful. For people who have the right insurance, you know. But some of the programs, that for example, Medicare and Medicaid combined, they offer a little bit more of that support.

Another mental health service provider expressed a desire for more collaboration with law enforcement. He said:

"I'd like to see, I went to a presentation by the Quincy police department a while back. They have integrated licensed clinicians in their programs. So if they get like a domestic violence call, or a child neglect/abuse call, the police officer and the clinician go to the house or the situation or wherever. I mean, it's really collaboration because the people don't feel like they're being attacked."

In Worcester, such a collaborative effort exists: the Massachusetts Mental Health Diversion and Integration Program (MMHDIP) -- a collaboration involving the local law enforcement, service providers, consumer advocates, and research professionals. This collaboration has been effective in reconnecting individuals with mental health services and preventing recidivism while noting several challenges to integrating modalities and service delivery systems (e.g., lack of health insurance, stigma with being involved with the criminal justice system and how it limits access for individuals to programs of housing, poor communication with agencies, etc.) (Grudzinskas et al., 2005). Finding ways to expand this collaborative effort would be welcome.

Greater network/community among providers

In addition to increased coordinated care, a strong desire was articulated for greater network and community among providers, both within and across agencies. This desire was articulated by both providers and Executive Directors, many of whom had examples of what has worked well in prior years and from other communities. Case studies have shown that inter-organizational networks are effective in responding to conflicting institutional pressures from the state and the profession particularly in major shifts in the state's funding mechanism from fee for service to managed care. Networks were linked to better cost containment without compromising the quality of patient care and stronger levels of cooperation across the organizations (Provan et. al. 2004). One mental health provider referenced the Worcester Latino Coalition as an example of a successful cross-agency networking alliance that helped improve the care of Latinos. She stated:

"In the past, many years ago, we had had the Worcester Latino Coalition, for example. And that was people from different worlds, you know. People who were either Latino or who were interested in making sure that the Latino community was served. And that was kind of like a networking place, where a lot of us used to come in ... and projects were born out of that. And I think the reason why 20 years later we are doing better, you know, and there is more access, is because of, partly because of, the Latino Coalition. For example, interpreter services and Language link were created through the Worcester Latino Coalition initially, like 20 something years ago. So it was kind of that networking, and I think that's missing now. And I wonder if that is something that would be helpful somehow. Not just with Latinos, but multicultural you could call it."

Recognizing the difficulty of getting agencies to collaborate, several providers highlighted the benefits of small efforts. One suggestion was a monthly provider breakfast. One mental health provider described it as such:

"Something that I liked that APW was doing, that I think more places should do, is a provider's breakfast that happens once a month and somebody from each agency around comes, and they do a presentation on what services they have. I'm a therapist, and I have some awareness of social programs in Worcester, but I am not an expert. I can't tell you where to go for housing. I can talk to you about what it feels like to not have your therapist know where to go. But if I knew more resources, because I feel like...there is worcesterresource.org, but I don't fully understand how much is out there."

The benefits of inter-agency networking could be large. One Executive Director stated this expressly. She said:

"Cross-training each other...at least try to get each other trained...we invite agencies to come in to talk to us, to help them understand what

role we can play to help them support their clients...then it's a much easier referral when we've met someone from that agency as well...I think that's the spirit of social work – working as a team to help fight injustices for our clients."

Use of case managers, patient navigators/advocates, community health workers

A third recommendation that emerged from our findings is the greater use of case managers, patient navigators, and community health workers. These health professionals could help facilitate consumer navigation of the health care system, trouble shoot insurance complications, help coordinate additional services, and provide outreach to consumers who may have difficulty attending sessions. Patient navigation is emerging as an effective intervention to reduce health disparities, as it can identify and target specific barriers to treatment engagement (e.g., Druss et. al., 2010).

One mental health provider described how helpful patient advocates can be. He said:

"We hired ... what we call advocates – that are sort of the brokers between us and other agencies. They really are the ones that know what programs exist. And if I have a client that has in need of X, Y, or Z, I know that I can call whatever advocate is on their team, and then that advocate will make an appointment and then contact that agency to try to get services in order."

Case managers and patient advocates could also help with some of the cultural barriers that exist between providers and recent immigrants and refugees. As one non-mental health provider articulated;

"The Burmese don't have the words in their own language to describe mental health...They have their own way of adapting to mental illness. They lack a Western understanding of how the body works in Western terms. Having someone advocate for them is helpful...sometimes it's someone who has had experience with the group who doesn't necessarily have to be of the same culture."

One idea that emerged from an interview with an Executive Director was the idea of a public health nurse. She said:

"In some countries, they have a public health nurse visit the home after the birth of a child. Because of our funding limitations, we can only conduct home visits with mothers 21 years old and under. Public health nurses should be available to everyone. This would allow us to catch a lot of things early on."

Provide more education around mental health and mental health services

Providers, mental health consumers, and residents felt that there is a need for more mental health literacy about both mental health conditions and services offered in Worcester. Mental health literacy is linked to increased willingness to seek help from a psychiatrist or counselor.

Yet, many people, especially recent immigrants and cultural minorities, lack knowledge of what mental illness is, how to recognize early signs, what treatments are available and how and when to seek professional help (Collier et al., 2012; Jorm, 2012). As noted earlier, residents do not always recognize symptoms of stress as psychological in nature and as possibly treatable. One non-mental health provider noted:

"We need community education for those in crisis...We don't always know how to talk about it, mental health can range from bipolar to schizophrenia to hardly presenting at all....People think that mental health treatment is for people screaming in the stress; crazy people."

Moreover, some immigrants and refugees struggle with the effects of pre-immigration trauma, but are not familiar with Western notions of mental health and illness. One non-mental health provider said:

"We have to educate them about mental illness. It's ok to have these symptoms, and it's ok to see a doctor - anything to do with government – they're fearful if something is wrong with them they will be deported or lose my kids, if something is wrong with me...mental health is not seen as something that can be worked on...."

A consumer highlighted the lack of information about available mental health services. She noted:

"We need increased awareness of our mental health services in Worcester. We have a lot of services but people don't know about them. I don't think enough people know about the Genesis Club. People have to know that services for mental health don't have to be just clinically based. There are other services out there that can help it doesn't just have to be therapy focused. We need to know what else is out there. As a former college student, I wish I knew of the services that were out there off campus, out in the community."

Culturally competent care

Providers who worked with communities of color and special populations (veterans) consistently articulated the need to deliver services in a culturally responsive way. This includes understanding the political histories and culture of immigrant and refugee populations, and ideally, being proficient in the language of the consumers. Considerable research has documented the historical, cultural, and contextual challenges that are particular to different immigrant and refugee populations, including stressors related to migration and readjusting to a resettlement country, perceptions of both traumatic experiences and adaptation processes, gender differences in the presentation of mental health problems, and culturally-informed views of mental (Cardemil et al., 2007; Hsu et. al., 2004; Bernal & Saez-Santiago, 2006; Hays, 2008; Sue, 2003).

A Vietnamese resident noted the difficulties inherent in trying to communicate with providers. He noted: "My difficulties are in daily activities, especially as an elder. I find that because we are an Asian, as a Vietnamese, we speak Vietnamese only and now live in American society, the most difficult is the language barrier. When you go to agencies, some do provided translation but most of them do not. So that will create obstacles when you try to communicate. Even if they have translators, it's still difficult. But most places do not have translators."

It was generally recognized that increasing the number of culturally and linguistically competent providers takes time, and so creative problem-solving is needed in the short term. Some support around cultural difference could be provided by patient advocates (see above). As one non-mental health provider stated:

"We need facilitators (social workers), someone who understands and can educate the client around mental illness (PTSD) - that it isn't normal to carry the weight of the family... someone that can understand the sociohistorical background of the population, someone "who gets it," and not phony; a navigator for mental health services. Someone who can explain that the services are not connected and they don't have to fear deportation for seeking DCF or mental health services."

The majority of literature addressing cultural competence has focused on ethnic and racial minority groups. However, active duty service members and veterans also constitute a distinct subculture because of their own language and slang, military status (active vs. reserve component), norms, values and beliefs stemming from military service (e.g., secrecy and stoicism). These factors can impact psychological assessment and treatment (Strom et. al., 2012). Providers who worked with military veterans identified them as another group that has unique needs and preferences, and so acquiring understanding and skill in working with this population is essential. One provider noted that:

"There are veterans who don't want to get services in the community and prefer to be treated at the VA. The community providers don't understand veteran culture. They feel better understood around other veterans."

Extended hours and better transportation support

Two recommendations emerged that directly targeted some of the logistical barriers identified in the interview. In particular, extending hours of operation was conceptualized as a systems change that could yield significant benefit. Some ways to facilitate this might be to expand the ability of non-licensed professionals to deliver some form of supportive care. One mental health provider described the limits imposed on her organization with regards to creative approaches to finding evening and weekend hours. She said: "We'd be able to provide night and weekend hours if we were able to hire unlicensed clinicians who were working towards their licensure. But through our DMH funding, our contract, our clinicians need to be licensed. You need to get a special waiver, and they only give you a certain number of waivers. So if you've got this job that's like, 11-7, Tues through Sat, we're probably not going to get a licensed clinician in that position. It's not going to happen because we can't afford to pay a lot for it, and it's not hours that people want."

Finding ways to enhance transportation services was also suggested. Research has consistently found that transportation difficulties, as well as other structural and logistical barriers, serve as barriers to access (e.g., Mojtabai et al., 2011; U.S. Department of Health and Human Services, 2004). Although MassHealth subsidizes transportation through its Prescription for Transportation program (i.e., PT-1), it has its limits. One mental health provider said:

"I think being able to provide transportation, it's a big one. The PT-1, yeah. That is very well utilized, yeah. Even that presents a little bit of a challenge, because you have to call for an appointment three days earlier, and then you don't know what's going to happen three days after. And again with some of my clients that have a lot of medical issues, they may call and think they can come in, but then something presents itself, and they have to cancel. And so it's not like you can get up in the morning and call a cab. So that has some challenges, but it facilitates...it's much better."

Create more opportunities for positive social interactions

Both providers and residents lamented the lack of opportunities for positive social interactions that were not related to mental health issues and where alcohol was not centrally involved. There is increasing evidence that communities with high levels of social cohesion have better physical and mental health than those with low levels of social cohesion (Wilkinson & Marmot, 2003; Stansfield, 2006). A mental health provider noted:

"I think Worcester doesn't have a lot of places to go that aren't about getting drunk. They had New Café and they added alcohol now, they've got alcohol there. And I was really excited because they have like game nights and paint nights there, and I went in and I saw that they had alcohol there....So trying to find something for them to do once the mental health stuff isn't in the way... places to go meet people."

Some of the difficulties stem from lack of information and experience in seeking these opportunities out. As one mental health consumer noted:

"I don't know what to do...I drank in a bar for 32 years...I know there are other things to do, but how do you go about them? And now it's just me because I've disassociated myself from pretty much everybody that I

know...so, who do you do things with? Where do you go (to make new friends)?"

High costs associated with some activities were noted as an obstacle to getting more engaged in social activities. One mental health provider suggested that finding ways to subsidize these opportunities would make a difference:

"Open-access to recreational opportunities and fitness facilities...that would help people in so many ways, not just in terms of their physical health, but also in terms of social connectivity and having a safe place to go...if we had ways to subsidize that, I think that would be huge."

In summary, the recommendations enumerated in the 2015 Worcester Mental Health Needs Assessment offer potential to improve the access to high quality care for all in need. Given the data suggesting that Worcester residents are experiencing numerous stressors, as well as substantive barriers to mental health care, it is imperative that the community come together to advance the cause of those most in need. As a pastor at a local church stated quite eloquently:

"We need organizations that serve as a bridge to create effective communication between services. Right now there is water, and our people can't swim. We need this bridge to be a strong bridge to connect services and get things done – a bridge that people can trust. People are accounted for and people are accountable. We have a lot of people in the community who help but don't have the funds to do it all. We are not asking for a hand out but a hand up!"

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