Chapter I. Introduction

1.1 Introduction

A huge array of studies has found that racial and ethnic minorities experience worse health status but receive less healthcare as well as healthcare of lower quality than non-minorities, even when differences in income and insurance status are controlled (Institute of Medicine, 2002). The Surgeon General’s Report Mental Health: Culture, Race, and Ethnicity---A Supplement to Mental Health: A Report of the Surgeon General (2001) finds similar racial and ethnic disparities in mental health status.

The problem of disparities in mental health status as well as in access to care and quality of mental healthcare among the elderly are important public health issues since mental health problems are highly prevalent in this increasing population, have severe negative impacts and can be treated. Left untreated, late-life mental health problems are associated with increased disabilities and mortality, poor health outcomes, higher health expenditures, and compromised quality of life.

The baby-boomers are becoming “older-boomers” and the proportion of minorities is increasing rapidly in the U.S. population. By the year 2010, there will be 40 million people in the United States over the age of 65 (Spencer, 1989). Over 20 percent will experience mental health problems (American Association for Geriatric Psychiatry, 2003), problems that are not an inevitable part of aging. By 2025, minority persons will constitute 33% of the Medicare population, up from 15% in 1995 (IOM, 2002). To achieve one of the two main goals of Healthy People 2010, to eliminate health disparities, disparities in mental health status among the elderly must also be eliminated.

Eliminating disparities in healthcare is one important approach to reducing
associated disparities in *health status*. Appropriate and timely treatments of mental and physical health problems among elderly people have been found to improve late-life health and decrease social and economic burden (Callahan et al., 2005; Dombrovski et al., 2007). Healthcare services can actually increase as well as decrease health status disparities. Disparities in healthcare access, utilization, or quality can lead to a widening of the racial/ethnic gap in health status. However, healthcare can also be an important part of the solution.

Many studies have been conducted to describe and explain racial and ethnic differences in health and healthcare. In the field of mental health, most studies have focused on children or non-elderly adults. Most research on mental health among the elderly has been limited to clinically diagnosed patients or has focused on disparities in quality of care among those receiving treatment, not taking disparities in needs or access into consideration. Such studies miss the large proportion of the population that has mental health needs but do not meet specific criteria for diagnoses. This problem is especially significant for older adults since the prevalence of mental disorders that meet *diagnostic criteria* decreases with aging, while the prevalence of depressive *symptoms* increases with aging (Alexopoulos, 1997; Katon et al., 1992). Depressive symptoms have been widely found to be associated with functional disability and other long-term outcomes among the elderly (Gallo et al., 1999). There is a large knowledge gap about the reasons and potential policy interventions relating to disparities in mental health needs, barriers to access, effects of healthcare access and utilization on mental health status, and quality of mental healthcare (e.g. recognition of and communication about mental disorders) among community-dwelling elderly people.
1.2 Mental Health among American Elderly

Mental illness in later life is a significant public health problem in the U.S. This dissertation focuses on depression. Depression is a serious illness affecting approximately 15 out of every 100 adults over age 65 in the U.S. (Alexopoulos, 2000). In primary care settings 10 to 25 percent of older patients have depression (Spitzer et al., 1994; Callahan et al., 1994; Simon, 1995; Unutzer et al., 2000; Luber et al., 2001). Depressive symptoms are even more prevalent among this population. Studies have found that 8 to 20 percent of older adults in the community (Alexopoulos, 1997) and up to 37 percent in primary care settings suffer from depressive symptoms (Katon et al., 1992). It is predicted that unipolar depression will be second only to ischemic heart disease as the leading cause of disability adjusted life years worldwide by 2020 (Murray et al., 1997).

Without adequate treatment, depression will present a significant drain on economic, social and health services resources. The economic burden of depression increased from $77.4 billion in 1990 to $83.1 billion in 2000 (Greenberg, 2000, 2003). Depression is one of the leading causes of disabilities in the U.S.

The prevalence of depression in older adults is significantly high, while it is largely undetected and untreated (Van Etten, 2006). Early recognition, proper diagnosis and timely access to appropriate treatment are necessary to improve mental as well as general health status, to reduce healthcare expenditures by avoiding hospitalizations or long-term care, and to enhance quality of life for this growing population. A total of 27 million people received treatment for mental disorders in the U.S. in 2002. Fifty-nine
percent of them reported that treatment provided great help (National Healthcare Disparities Report (NHDR), 2005).

### 1.3 Racial/Ethnic Disparities in Depression Prevalence among the Elderly

Inconsistent evidence has been found relating to racial and ethnic disparities in depression prevalence in the general population (e.g. Blazer et al., 1998; Myers et al., 2002; Mojtabai, 2004; Gallo et al., 1998; Dunlop et al., 2003; Riolo et al., 2005). Few studies have been done among the elderly population (see Table 2.2).

The current literature on the prevalence of depression and racial/ethnic disparities among the elderly focuses on the population with clinically significant mental illnesses meeting the criteria of diagnostic instruments (such as the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) and the Geriatric Depression Scale (GDS)). This may bias the results of studies on disparities in mental health status and services, since a large proportion of people with mental health needs but not meeting the diagnostic criteria are missed in such studies. Subsyndromal depression has been found to be part of a spectrum of depressive illness and to be associated with greater medical burden and poorer health outcomes (Lyness et al., 2006). Also, the presentation of depression varies across racial/ethnic groups. This may bias the estimates of differences in depression prevalence based on measurements developed for whites (Coyne and Marcus, 2006).
1.4 Racial/Ethnic Disparities in Access and Quality of Healthcare among the Elderly

It has been widely established that minorities have greater barriers to care. For example, minorities are consistently less likely to have supplementary insurance, a usual source of care, and many fewer visits to specialists compared with whites among Medicare beneficiaries (NHDR 2003, 2004, 2005). To eliminate disparities in barriers to access care is important for improving health care access and use, and for decreasing associated disparities in health status. A usual source of care (USOC), as a structural indicator of access to care, has been widely found to be associated with higher healthcare utilization, lower total costs, and better health outcomes. The effect of having a usual source of care has been found to be independent from that of health insurance (DeVoe et al., 2003). It is important to identify other potential risk factors for disparities in having a usual source of care across racial/ethnic groups among the elderly.

USOC could be a resource of social support for older adults due to their increasing vulnerability (e.g. increasing disability and higher prevalence of chronic conditions). There may be unobserved variables (such as people’s adaptation style and health beliefs) that are important for access to care, realized access (healthcare utilization) and health outcomes. A few years ago it was reported that medical skepticism (about benefits of care) is associated with lower likelihood of having a USOC. All previous studies have failed to control for such potential endogeneity among USOC, healthcare utilization and health outcomes, and their results may be biased. No research has examined the effect of having a USOC on mental health status in the elderly.

Quality of care has been a popular topic in the field of health services research. Minorities have been consistently found to experience lower quality of mental healthcare,
in the probability of receiving any care, adequacy of treatment according to practice
guidelines, utilization of new prescription drugs, referral to specialists, and follow-up
services after hospitalization (Harman, 2001; Wang et al., 2006; Cooper-Patrick et al.,
1999). No studies have been carried out using nationally representative samples to
examine racial and ethnic disparities in physician recognition of having mental health
problems among people with mental health needs. Likewise, there have been no studies
of racial and ethnic disparities in communicating about mental disorders between
physicians and patients among people who were recognized by physicians as having such
disorders.

Having a usual source of care helps establish a continuous relationship between
patients and medical caregivers, which may be associated with fewer unmet needs, fewer
delays in receiving health care and better quality of care (Bartell and Smith, 2004). Few
studies have examined the relationship between having a USOC and physician
recognition and communication about mental disorders among people with mental health
needs and whether such relationships differ across racial/ethnic groups (O’Mally et al.,
2003).

This dissertation has the following four goals: (1) to examine racial and ethnic
disparities in mental health needs (depression prevalence) based on different measures;
(2) to estimate disparities in barriers to healthcare (defined as having a usual source of
care) among community-dwelling Medicare beneficiaries in the fee-for-service system;
(3) to test the effect of access to care on mental health status (prevalence of screened
depression) in this population; and (4) to examine disparities in quality of mental
healthcare (defined as recognition of depression among physicians and communication
about mental disorders between physicians and patients), and the role of a usual source of care on disparities in quality of care among the elderly.

Factors at the individual, system, and community levels are included to explore sources of disparities in mental health needs, access and quality of healthcare among the elderly. The Current Medicare Beneficiary Survey (MCBS) and associated claims, the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), and the Area Resource File (ARF) are used for the analysis.

1.5 Outline of this Dissertation

There are five chapters in this dissertation. Chapter 1 presents a brief introduction of mental health in general and racial/ethnic disparities in mental health and healthcare among the elderly. Chapter 2 illustrates the background of the problem and reviews the knowledge gaps in the literature, and then describes the focus and significance of this dissertation. Chapter 3 presents the conceptual model and the four primary specific aims of the dissertation. For each main specific aim, there are one or two hypotheses. Datasets and the analytical models are discussed, and dependent and independent variables are defined. Chapter 4 presents the results. Chapter 5 makes conclusions based on the results and discusses the analysis. Study strengths and limitations and policy implications are also included in the last chapter.