Dimension 1

Social and Economic Factors

This section covers the following topics:

- English language proficiency and health literacy
- Social factors
- Economic factors
- Cultural beliefs and attitudes
- Elder abuse

Low literacy, lack of health insurance coverage, poor social support, family instability, and homelessness are the most consistently reported factors to impact medication adherence (Krueger et al., 2005). People who have social support from family, friends, or caregivers to assist with medication regimens have better adherence to treatment. Unstable living environments, limited access to health care, lack of financial resources, cost of medication, and burdensome work schedules have all been associated with decreased adherence rates. The amount of education a person has may influence adherence; however, understanding the importance of the treatment and the treatment instructions may be more important factors than level of education (Krueger et al., 2005).

ENGLISH LANGUAGE PROFICIENCY AND HEALTH LITERACY

Low health literacy and limited English language proficiency are barriers to adherence that deserve special consideration. Health literacy is the ability to read, understand, and act on health information in order to make appropriate health decisions. Poor health literacy results in medication errors, impaired ability to remember and follow treatment recommendations, and reduced ability to navigate within the health care system.

People with low health literacy and limited proficiency in the English language are at high risk for unsafe use of prescription medications due to the complex nature of the printed information that is available (which often requires reading skill at the high school level or above in order to understand it), and because these people often do not receive sufficient time or adequate verbal communication from health care providers (National Quality Forum, 2005).

Nearly 90 million people—45% of the adult population in the US—have literacy skills at or below the 8th grade reading level (Scott, 2003). Inadequate health literacy increases steadily with age, from 16% of those aged 65-69 to 58% of those over age 85 (Gazmararian et al., 1999). Literacy levels are lowest among the elderly, those with fewer years of education, lower socioeconomic levels, minority populations, and those with limited English proficiency (Krueger et al., 2005). Nearly one in five adults in the US reported speaking a language other than English at home in the 2000 US Census (US Census Bureau, 2000).

Older adults with low health literacy may have trouble reading health information materials, following prevention recommendations, understanding basic medical instructions, and adhering to medication regimens (Scott, 2003). A study of patients aged 60 years and older at two public hospitals found that 81% could not read and understand basic materials, such as prescription labels (Williams et al., 1995).

People with low health literacy or limited English language proficiency may be unaware of the health risks associated with medication nonadherence, and may be too ashamed or embarrassed to seek help with medication instructions (Mayeaux et al., 1996). The US Healthy People 2010 goals note the need for better education for people with limited health literacy in order to avoid problems associated with improper medication use (US

Department of Health and Human Services, 2000). The need to move quickly to implement strategies to improve adherence among persons with limited health literacy has been identified as a high priority by the National Quality Forum (National Quality Forum, 2005).

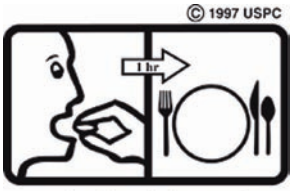
The Rapid Estimate of Adult Literacy in Medicine Revised (REALM-R) is a brief screening instrument used to assess a person's ability to read common medical words. It is designed to identify people at risk for poor literacy skills. (See discussion in Dimension 5 and Assessment Tools sections)

There are many programs and resources addressing health literacy. "Ask Me 3" is a patient education program designed to promote communication between health care providers and patients in order to improve health outcomes. "Ask Me 3" suggests three simple but important questions people can ask their health care providers:

- What is my main problem?
- What do I need to do?
- Why is it important for me to do this?

"Ask Me 3" is sponsored by the Partnership for Clear Health Communications, a national coalition of health organizations that are working together to promote awareness and solutions for low health literacy. Funding is provided by Pfizer (http://www.pfizerhealthliteracy.org). The "Ask Me 3"web site (http://www.askme3.org) includes presentation tool kits for professionals and patients, fact sheets, brochures, statistics, logos and guidelines, and other information.

Pictures and diagrams can be used to communicate information to all people, especially those with limited health literacy. Most people, even those who read well, use visual clues to reinforce learning. The United States Pharmacopeia (USP) has developed pictograms that help convey medication instructions, precautions, and/or warnings. USP Pictograms are available at: www.usp.org/audiences/consumers/pictograms/.



Take 1 hour before meals

BARRIER	STRATEGIES
Limited English language proficiency	Do not talk loudly or exaggerate speech
	Do not direct communication to companion
	Use translator
	Provide written information in relevant language
	Use nonverbal cues and body language
	Use pictures, diagrams, or pictograms to help communicate information
	Verify understanding by having the person "teach back" the instructions they have been given (explain to them what they need to do, breaking up the information into understandable parts; then ask the person to repeat what they have heard)
	Reinforce information with a family member if available and appropriate

BARRIER	STRATEGIES
Low health literacy	Create a "shame free", safe environment where the person feels comfortable talking openly
	Avoid mentioning you suspect a reading problem
	Use plain language instead of technical language or medical jargon
	Give clear verbal instructions
	Provide information written at a fifth grade or lower level; use large font size
	Use pictures, diagrams, or pictograms to help communicate information
	Use video instruction
	Verify understanding by having the person "teach back" the instructions they have been given (explain to them what they need to do, breaking up the information into understandable parts; then ask the person to repeat what they have heard)
	Involve family members in teaching sessions
	Telephone follow-up to determine how the person is doing

SOCIAL FACTORS

Social support in general, and the availability of help from family or friends, is positively associated with medication adherence (Morrison and Werthheimer, 2004). People who have social support from family, friends, or caregivers to assist with medication regimens have better adherence to treatment. A person's perception of and need for a social support network can be assessed with the Duke-UNC Functional Social Support Questionnaire, an eight-item instrument to measure the strength of the person's social support network (Broadhead et al., 1988). (See Assessment Tools section)

BARRIER	STRATEGIES
Lack of family or social support network	Involve family members
	Refer to support group

BARRIER	STRATEGIES
Unstable living conditions; homelessness Sources: Dixon et al., 1993; Caminero et al., 1996; Teeter, 1999; Tulsky et al., 2004	Meet fundamental needs for housing and food Address comorbid conditions, such as psychiatric disease and substance abuse Directly observe medication administration Offer cash incentives for adherence Encourage routine participation in health care visits Provide information about medications and side effects
Burdensome schedule	Tailor medication regimen to daily routine Reminders or compliance aids

ECONOMIC FACTORS

BARRIER	STRATEGIES
High cost or lack of availability of transport to access pharmacy	Mail order pharmacy Pharmacy delivery service
Medication cost	Switch to generics or lower-cost alternatives Refer to local programs or agencies that provide medication assistance Benefits Check Up RX (Available at: www.benefitscheckup.org/before_you_start.cfm?screen=BenefitsCheckUpRx) Pharmaceutical assistance programs (www.helppatients.org) Enroll in Medicare Part D prescription drug plan

CULTURAL BELIEFS AND ATTITUDES

Within the next ten years, the US population will grow significantly older and more diverse. The minority older population will triple by 2030, when one quarter of the elderly population will belong to a minority racial or ethnic group (US Census Bureau, January 2000). Different racial and ethnic groups have diverse beliefs and attitudes about health and medicines, which may affect adherence to therapy. A failure to appreciate these differences may contribute to misunderstanding or miscommunication about health care.

No one list can define the values that older adults may place on medications, or their beliefs about how health and healing take place. Each person must be considered individually. Listening and asking nonjudgmental questions begins the process of understanding people's diverse beliefs and practices about health and healing and how to integrate them into interventions to improve medication adherence.

"Culture" refers to integrated patterns of human behavior that include the language, thoughts, actions, customs, beliefs and institutions of racial, ethnic, social, or religious groups (California Endowment, 2003). Every culture has beliefs about health, disease, treatment, and health care providers. People from the many immigrant cultures, as well as American Indians, bring their beliefs, and the practices that accompany them, into the health care system. This often proves challenging to health care professionals who have been trained in the philosophy, concepts, and practices of Western medicine (California Endowment, 2003).

People within any cultural group are not homogeneous, even though they may hold many beliefs, practices, and institutions in common. Messages and materials must respect the variations within cultural groups. Some of the major areas of difference within groups include educational level, English language proficiency, financial resources, adherence to folk customs and beliefs, sexual orientation, geographic location, health status, and preferred language.

Respect

In cultures where elders receive great respect, such as in the American Indian community, caring requires kindness and respect without any appearance of scolding (Salimbene, 2005), even if non-adherence may endanger the elder's life. Trust-building comes with storytelling, listening, respecting silence, and honoring the desires of the American Indian elder (University of Washington, 2005). Because of the experience of many African American elders who grew up with segregated health care and social service systems in which they faced continual discrimination, it is extremely important to show respect to them in order to put them at ease and establish rapport. This includes at the least, using respectful forms of address (e.g., Mr., Mrs.) unless they give the permission to do otherwise (University of Washington, 2005).

Mistrust of the Health Care System

Based on personal history and experience, many African Americans may view receiving health care as a degrading, demeaning, or humiliating experience. Some may even fear or resent health clinics because of the long waits, medical jargon, feelings of racism or segregation, loss of identity, and a feeling of powerlessness and alienation in the system (Spector, 2000).

The African American experience in America has left many African Americans mistrustful of mainstream institutions and providers who are members of the dominant culture. The 40-year Tuskegee Experiment, which recruited African American men with syphilis to be a part of a research project in which they were promised but never given treatment, is notorious in the African American community. Memories of such practices, in addition to the widespread discrimination most have faced in their lifetimes, are likely to provide reasons for African American elders to be more than a little suspicious of health care providers, especially those who suggest any type of experimental treatment or research (Stanford University). In the American Indian or Native American culture, there is historical mistrust of mainstream institutions due to centuries of abuses such as broken treaties and forced relocations. Acknowledging this history is an important step in building trust with the person and their family (University of Washington, 2005).

Cause of Illness and Traditional Therapies

Religion, spirituality, and kinship ties may have an important role in older adults' understanding and treatment of illness. Some older adults may view illness and death as a natural part of life, or believe illness is a result of natural causes, improper diet or eating habits, exposure to cold air or wind, the will of God for improper behavior, or a lack of spiritual balance. Some older adults may delay seeking medical care, preferring self-treatment and giving God a chance to heal, or may seek care from folk healers, lay advice, home remedies, and prayer to treat illness.

For example, the Latino older adult may see illness as an imbalance between internal and external forces, and may seek medical care from folk healers (University of Washington, 2005). Many American Indians believe that harmony among the body, heart, mind, and soul contributes to one's overall health (University of Washington, 2005), and that illness may be caused by the breaking of sacred tribal taboos, unhealthy relationships with humans or nature, or by witchcraft (Salimbene, 2005). The person may turn to Western medicine for treatment of the symptoms of illness, but may also seek traditional healers to address the disharmony that caused the illness (University of Washington, 2005). In Hinduism the law of cause and effect (karma), which one creates through thoughts, words, and deeds, may result in illness or accidents as a means to purification. Karma is believed to accrue over many lifetimes; hence, an illness may be seen as a result of actions in this life or a past life. Acceptance of one's karma may influence a person's attitude toward medical intervention (University of Virginia, 2004).

In the Chinese culture, health may be viewed as finding harmony between complementary energies (called yin and yang), such as cold and hot, or dark and light (University of Washington, 2005). Cultures following Chinese or Ayurvedic health beliefs may try traditional approaches to treating illness first, such as using foods and herbs to restore yin/yang balance, and will seek Western medical care

if these treatments fail. The traditional systems of medicine are believed to remove the cause of the illness, and therefore, some Asian ethnic groups rely on traditional remedies for long-term treatment (Institute for Safe Medication Practice, 2003).

Older adults in some cultures, such as Chinese, Vietnamese, and Latino, are more likely to try home therapies, such as herbal remedies or certain foods, before trying traditional Western medicine. If a person believes the health care provider may disapprove, they may not be forthcoming with information about the use of nontraditional remedies. This may result in drug-food or drug-drug interactions with prescribed medications.

Information Dissemination

Cultural beliefs may also dictate how medical information is disseminated or received. For example, in some Arab cultures it is preferable for a family or community member to act as a "buffer," communicating directly with the health care provider and then discussing findings with the patient. In the Latino culture, the mother determines when a family member requires medical care; the male head of the household gives permission to seek medical care (University of Washington, 2005). For other cultures, more than one reliable source must provide the information, such as a doctor, spiritual leader, or family elder.

Medication

For some people the size and color of the medication, or the dosage form, may be important. For instance, some Cambodians equate pill size with potency; a large tablet may be thought of as too large a dose. This example is similar to the common, but erroneous, Western belief that a greater number of milligrams (mg) in a pill or capsule make a medication stronger. Chinese older adults may believe that Western medicine is too strong and may not take the full dose or complete the course of treatment (University of Washington, 2005). Some cultures from Latin America view injections as more effective than oral medications (Institute for Safe Medication Practice, 2003). In some countries, medications are in short supply, so prescribing smaller amounts may be the norm; if people from these countries do not clearly understand the role of chronic medications, they may discontinue them prematurely (Tobias, 2003).

Lesbian, Gay, Bisexual and Transgender

When considering cultural communities, the Lesbian, Gay, Bisexual and Transgender (LGBT) community often is forgotten. Approximately 10% of the older population identifies with LGBT concerns. It is important to distinguish between gender identity (male, female, transgender) and sexual orientation (lesbian, gay, bisexual). The sexual orientation of transgender people may fall anywhere within the range exhibited by nontransgender people (i.e., lesbian, gay, bisexual).

Trust in the provider can attract or discourage LGBT older adults from acting on health messages and adherent behavior. Two actions generating trust and credibility include the use of welcoming language, and respect for privacy and confidentiality. Using terms such as partner instead of family, and avoiding heterosexual-relationship terms (e.g., married, family, husband/wife) engenders a greater feeling of trust. Many LGBT people have experienced discrimination and sometimes violence. Targeted messages must convey a nonjudgmental stance, respectful of individual preferences and identity. An appropriate tone should impart a safe environment, especially if the message promotes services, courses, or community activities.

Cultural Competence

The Office of Minority Health, in the U.S. Department of Health and Human Services, has developed National Standards for Culturally and Linguistically Appropriate Services in Health Care (CLAS Standards). The 14 CLAS Standards serve as a guide to quality health care for diverse populations, and include a recommendation that health care organizations ensure cultural competence in their professional staff by offering them education and training in the field. The CLAS Standards, along with an in-depth discussion of how they were formulated, are available at www.omhrc.gov/assets/pdf/checked/finalreport.pdf (US Department of Health and Human Services, 2001).

No one becomes culturally competent overnight or with one or two hours of training; certain attitudes need to be learned, skills transmitted, and knowledge absorbed (California Endowment, 2003). Cultural competence training often involves attitude changes and the examining of personal biases and stereotypes as an initial step to acquiring the skills and competencies necessary for quality cross-cultural care, which requires careful guidance and skillful group facilitation (California Endowment, 2003). Skills that enhance a health care provider's ability to recognize different cultural values, beliefs, and practices and to address these factors in interventions are likely to lead to more successful treatment outcomes (Bonder et al., 2001).

General knowledge about specific cultures can increase understanding; however, a fact-centered approach risks replacing one stereotype with another. The new stereotype may be more positive but still fail to capture the complex nature of an individual's culture. Often, information taught as cultural awareness isn't as generalizable as it seems, and cultural beliefs and behaviors are ever changing (Interplay, 2005).

BARRIER	STRATEGIES
Cultural beliefs	Establish a positive, supportive, trusting relationship with the person Seek an understanding of the causes of illness from the person's cultural point of view Elicit information about use of nontraditional therapies in non-judgmental way Determine person's preference regarding group learning or individual, private instruction In providing information consider: - Whether primary importance is placed on the individual or on the community - What roles for women, men, and children are generally accepted - Whether the preferred family structure is nuclear or extended, one generation or multigenerational, and who receives the information Acquire the skills and competencies necessary for quality cross-cultural care

ELDER ABUSE

Elder abuse occurs more often within the family setting rather than in outside institutions. In relationship to medication adherence, abuse may include withholding medications, overmedicating the older adult, or neglecting to provide access to medical treatment.

The following have been identified as risk factors for elder abuse based on current research (Center for Substance Abuse Prevention):

- Living arrangements, such as cohabitation of family member and older adult or an older adult who is living alone
- Social isolation of abuser and victim
- Presence of Alzheimer's disease or related dementia
- Presence of mental illness or increased levels of hostility in the abuser
- Alcohol abuse on the part of the abuser
- Dependency of the abuser on the victim
- History of marital violence, also known as intimate partner violence.

A 2000 nationwide survey of Adult Protective Service Departments found 13.2% of elder abuse cases involved caregiver neglect or abandonment (Teaster, 2000). Identifying the characteristics of the caregiver may help predict elder abuse. The problems caregivers face and their views of the care recipient may trigger abuse (Anetzberger, 2000).

Social isolation is a risk factor for abuse. Social isolation may be a strategy for keeping the abuse secret, or may result from the stresses of caring for a dependent older family member. Social isolation is problematic because it cuts off family members from the outside help and support they may need to cope with the stresses of caregiving (American Psychological Association).

Caregiver substance abuse is a risk factor associated with elder abuse and neglect. Caregivers may turn to substance abuse as a coping mechanism for the demands required in their role as care provider. For spouses who are care providers, substance abuse increases the likelihood of partner violence. Especially among men, problem drinking increases the chance of partner abuse eightfold (Sharps et al., 2001)

When elder abuse is suspected, interventions should emphasize changing the dynamics of the relationship. Addressing the needs of the victim and the abuser begin to change this dynamic. At the same time, abusers must be held accountable (Center for Substance Abuse Prevention). Reporting abuse to the local or state Adult Protective Services begins the process.

BARRIER	STRATEGIES
Elder abuse	Report abuse to local or state Adult Protective Services