Identifying communication strategies that positively influence basic lifestyle behaviors has become increasingly important for improving the health of millions of Americans. Today, we live in a progressively diverse nation that faces a multitude of health challenges. Chronic disease conditions such as cardiovascular disease and diabetes are affecting all American communities and, in many cases, unequally. Speaking of Health: Assessing Health Communication Strategies for Diverse Populations explores the dynamic nature and challenges of effective communication and emphasizes that creating clear and effective messaging is a complex and difficult task that may not be easily categorized by racial, cultural, or social differences. Further, the report examines the need for more science-based communication interventions and the need for additional research to better explore the relationship between social and cultural backgrounds and health-related beliefs and behaviors.

To address these challenges, the Institute of Medicine assembled a panel of experts in anthropology, psychology, mental health, cancer prevention and control, health behavior change and theory, communication and the media, social marketing, and public health. The Committee on Communication for Behavior Change in the 21st Century: Improving the Health of Diverse Populations was charged with assessing health communication strategies for diverse populations by focusing on three specific charges:

- Review existing health communication and health behavior change theories and research applications, especially as they relate to culturally diverse populations; Define research areas that would benefit from expanded or new research efforts;
- Consider up to three specific examples of health communication interventions to evaluate whether and how those strategies affect culturally diverse groups; and
Recommend how health communication strategies may be designed to achieve sustained gains in public health across cultural groups.

Speaking of Health is intended to better inform policy makers, researchers, funders and sponsors, advocacy organizations, practitioners, and others in the development, implementation, and evaluation of health communication strategies that promote public health among all the nation’s diverse communities. The report addresses the many challenges of improving health communications in a racially and culturally diverse society.

THE DIVERSITY OF AMERICA

Over the past century, changes in demographics suggest that the cultural landscape of the U.S. population is migrating toward a larger, older, more ethnically diverse, and better-educated population. Diversity among this population is frequently defined by broad social and demographic categories such as race, ethnicity, socioeconomic status, age, and gender. Although these categories maintain political importance, some experts consider them crude and inaccurate since behaviors are highly influenced by life experiences and cultural processes.

Despite efforts by researchers and health professionals to reduce health disparities across diverse populations, significant disparities continue to exist. As America continues to grow and its diversity continues to increase, a greater number of individuals will confront a higher risk of death and disease. Frequently, these disparities fall most heavily on some ethnic groups and on those with lower levels of education. Tables 1-1 and 1-2 illustrate the 10 leading causes of death by ethnic group and gender. These tables show that heart disease and cancer have the highest rates of disease; however, significant variations between racial groups exist. Several factors may contribute to these disparities, including health behaviors, access to and availability of prevention and treatment services, environmental and occupational risks, community support and cohesion, differences in insurance coverage, and underlying biological risk factors. Other factors such as belief systems, religious or cultural values, life experiences, and group identity shape powerful filters through which information is received. These factors are important to consider in developing health communication campaigns.

HEALTH COMMUNICATION STRATEGIES

Health communication strategies, as defined in this report, are approaches that seek to persuade or motivate people to change their behavior in order to improve their health. In the past century, telephone, radio, television, VCR, DVD, CD-ROM, the Internet, and more recently wireless communication options such as “instant messaging” have supplemented, or in many cases replaced, traditional communication channels such as printed text and face-to-face communication.
### Table 1-1. Age-Adjusted Rates for 10 Leading Causes of Death by Ethnic Group – Males*

<table>
<thead>
<tr>
<th>Disease</th>
<th>All</th>
<th>Non-Hispanic Whites</th>
<th>Non-Hispanic Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart</td>
<td>328.1</td>
<td>329.5</td>
<td>344.3</td>
<td>212.7</td>
</tr>
<tr>
<td>All cancer</td>
<td>251.6</td>
<td>251.4</td>
<td>350.1</td>
<td>151.4</td>
</tr>
<tr>
<td>Cerebrovascular diseases</td>
<td>62.4</td>
<td>60.5</td>
<td>89.7</td>
<td>44.6</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>58.1</td>
<td>61.3</td>
<td>51.4</td>
<td>27.3</td>
</tr>
<tr>
<td>Unintentional accidents</td>
<td>50.6</td>
<td>49.1</td>
<td>64.2</td>
<td>47.2</td>
</tr>
<tr>
<td>Pneumonia and influenza</td>
<td>28.0</td>
<td>28.0</td>
<td>33.0</td>
<td>18.6</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>27.7</td>
<td>25.0</td>
<td>50.1</td>
<td>34.5</td>
</tr>
<tr>
<td>Suicide</td>
<td>18.2</td>
<td>20.3</td>
<td>10.8</td>
<td>10.7</td>
</tr>
<tr>
<td>Kidney infections</td>
<td>16.2</td>
<td>14.8</td>
<td>33.8</td>
<td>12.9</td>
</tr>
<tr>
<td>Chronic liver disease and cirrhosis</td>
<td>13.7</td>
<td>12.7</td>
<td>15.6</td>
<td>23.0</td>
</tr>
</tbody>
</table>

* Rate per 100,000
Source: Centers for Disease Control and Prevention (2001).

### Table 1-2. Age-Adjusted Rates for 10 Leading Causes of Death by Ethnic Group – Females*

<table>
<thead>
<tr>
<th>Disease</th>
<th>All</th>
<th>Non-Hispanic Whites</th>
<th>Non-Hispanic Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart</td>
<td>220.9</td>
<td>218.1</td>
<td>297.0</td>
<td>146.5</td>
</tr>
<tr>
<td>All cancer</td>
<td>169.9</td>
<td>172.1</td>
<td>205.6</td>
<td>101.4</td>
</tr>
<tr>
<td>Cerebrovascular diseases</td>
<td>60.5</td>
<td>59.6</td>
<td>80.0</td>
<td>36.6</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>38.2</td>
<td>41.5</td>
<td>24.5</td>
<td>15.3</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>23.3</td>
<td>19.5</td>
<td>51.7</td>
<td>32.6</td>
</tr>
<tr>
<td>Unintentional accidents</td>
<td>22.7</td>
<td>23.1</td>
<td>24.4</td>
<td>15.5</td>
</tr>
<tr>
<td>Pneumonia and influenza</td>
<td>20.8</td>
<td>21.1</td>
<td>21.7</td>
<td>13.5</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>17.6</td>
<td>18.8</td>
<td>12.4</td>
<td>8.4</td>
</tr>
<tr>
<td>Kidney infections</td>
<td>11.2</td>
<td>9.7</td>
<td>26.6</td>
<td>8.8</td>
</tr>
<tr>
<td>Septicemia</td>
<td>10.5</td>
<td>9.5</td>
<td>23.0</td>
<td>6.8</td>
</tr>
</tbody>
</table>

* Rate per 100,000
Source: Centers for Disease Control and Prevention (2001).
To examine the effectiveness of current campaigns on shaping the health behavior of diverse populations, the committee considered three examples for purposes of analysis. These examples include: large-scale public health communication campaigns; mammography; and diabetes. Each examination considered the use of communication technology, as well as the transmission or exchange of messages within interventions designed to influence behavior and improve health.

In total, 18 large-scale campaigns were analyzed, including federally funded campaigns such as the National High Blood Pressure Education Program and the National Youth Anti-Drug Campaign, state-sponsored anti-tobacco campaigns, and privately funded programs. The committee considered several issues associated with these large campaigns, such as how they have reached diverse audiences and their success in affecting the health behaviors of individuals from different groups. Communication research on changing behavior was examined to determine whether any evidence exists indicating that taking diversity into account was more effective.

OUTCOMES OF THIS REPORT

Speaking of Health considers the fundamental question of whether there is any added benefit in addressing the behaviors associated with health disparities by using communication that takes diversity into account. There are multiple dimensions to consider when creating a health communication campaign, ranging from economic contexts and community resources (such as access to health services) to commonly held attitudes, norms, efficacy beliefs, and practices pertinent to health. Although some health campaigns have been successful by focusing on demographic factors and individual identities, future campaigns should consider a broader, more meaningful way of describing diversity among a population. Understanding cultural backgrounds and life experiences of communities and its individuals will enhance the current knowledge-base for designing and evaluating communication strategies.

THE STATE OF THE EVIDENCE

Substantial evidence exists that demonstrates a proportional relationship between the less socially or politically advantaged populations and an increase in compromised health status. However, current data does not effectively address whether there is any added benefit in addressing health disparities by using communication that takes diversity into account. Based on these findings, the committee concluded that more research should be undertaken to evaluate the comparative effectiveness of communication programs designed specifically to influence diverse populations with programs using a generic approach. The committee’s recommendations on the development of a research program are provided below.
RECOMMENDATIONS

To address the multifaceted nature of assessing health communication strategies among diverse populations, the report recommendations are divided into seven categories: overall, theories of communication and health behaviors; ethics; communication campaigns; new communication technology; diversity; and infrastructure. Each recommendation category collectively creates an index of challenges, which clarifies and evaluates the potential of health communication strategies to meet the growing diversity of America.

OVERALL
Recommendation 1: An intervention analysis comparing the effectiveness of existing communication programs, new and ongoing programs, and potential alternative strategies targeting diverse communities must be undertaken.
Recommendation 2: Until more convincing evidence is available, the committee believes it is sensible for many existing programs to continue to pay attention to diversity, particularly when diversity is associated with substantial disparities in health status and outcomes.

THEORIES OF COMMUNICATION AND HEALTH BEHAVIORS
Theory Recommendation 1: The theories of communication and health behaviors should be considered in a more consistent and aggressive way during the development and implementation of communication programs in general and for diverse populations.
Theory Recommendation 2: Research investigating how theoretical principles are applied in practice during the development and implementation of communication strategies should be conducted.

ETHICS
Ethics Recommendation 1: Health communication programs should explicitly consider ethical guidelines in their decisions about implementation.
Ethics Recommendation 2: Affected individuals and communities should be encouraged to participate actively in the construction of health communication campaigns in their community.

COMMUNICATION CAMPAIGNS
Communication Campaign Recommendation 1: Under-resourced and underexposed campaigns are unlikely to be effective and may deflect researchers from employing the most appropriate strategies. This concern is magnified in the context of a campaign that intends to address multiple diverse segments, when resource demands are even higher.
Communication Campaign Recommendation 2: Practitioners should employ evidence-based, multi-component programs that integrate communication with access to services, where feasible, and especially where the appropriateness for diverse populations has been demonstrated.

Until more convincing evidence is available, the committee believes it is sensible for many existing programs to continue to pay attention to diversity...

Under-resourced and underexposed campaigns are unlikely to be effective and may deflect researchers from employing the most appropriate strategies.
...research methods are needed to estimate the untapped potential and costs of communication technology used to improve health care for diverse populations.

Communication Campaign Recommendation 3: The NIH should fund additional exploratory research to examine the suitability of communications approaches before developing full-scale campaigns.  
Communication Campaign Recommendation 4: Ongoing tracking studies should be incorporated within campaigns.

NEW COMMUNICATION TECHNOLOGY
Technology Recommendation: Investments are needed in research, training, and delivery of technology-based communication interventions to improve the health of diverse populations. Further, research methods are needed to estimate the untapped potential and costs of communication technology used to improve health care for diverse populations.

DIVERSITY
Diversity Recommendation 1: Policy makers and program planners should continue using demographic factors to understand whether health benefits are equally distributed and to identify intergroup differences as well as the monitoring of trends with regard to these categories.  
Diversity Recommendation 2: Other measures, such as life experiences and cultural processes, are needed to understand health behavior variations. This may require the systematic education of policy makers concerning the appropriate domains of diversity for the purposes of communication interventions.  
Diversity Recommendation 3: Greater support should be provided for qualitative, ethnographic research that examines historical, social, and cultural contexts of diverse communities’ health behavior.

INFRASTRUCTURE
Infrastructure Recommendation 1: Interdisciplinary teams to design and implement communication strategies in diverse populations should be encouraged by funding agencies.  
Infrastructure Recommendation 2: Infrastructure should be constructed to support a national strategy for prioritizing and implementing large-scale campaigns.
For More Information…
Copies of Speaking of Health: Assessing Health Communication Strategies for Diverse Populations are available for sale from the National Academies Press; call (800) 624-6242 or (202) 334-3313 (in the Washington metropolitan area), or visit the NAP home page at www.nap.edu. The full text of this report is available at http://www.nap.edu

Support for this project was provided by the Institute of Medicine. The views presented in this report are those of the Institute of Medicine Committee on Communication for Behavior Change in the 21st Century: Improving the Health of Diverse Populations and are not necessarily those of the funding agencies.

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COMMITTEE ON COMMUNICATION FOR BEHAVIOR CHANGE IN THE 21ST CENTURY: IMPROVING THE HEALTH OF DIVERSE POPULATIONS

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