**Moving from Perception to Action in the
United Health Foundation's State Health Rankings**

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ABSTRACT

SUSAN C. ZELT:
Moving from Perception to Action in the United Health Foundation's State Health Rankings
(Under the direction of Thomas Ricketts)

The United Health Foundation (UHF) produces an annual State Health Rankings (SHR)
report, generating substantial media and public attention. The report uses a methodology that
weights the contributions of several risk factors and outcome measures to produce an overall
score for each state; the states are then ranked according to their score. The overall purpose
of the SHR report is to activate public conversation concerning health, to provide information
to facilitate citizen participation, and to stimulate news stories. While some states have
adapted the rankings for informing or changing health policies, gaps in awareness of this
resource, as well as the knowledge of how to use the SHR to improve health still exist.

The goals of this study were to investigate how the UHF SHR influences state
policymakers. The study's aims included: (1) evaluating the communication campaign for the
UHF SHR; (2) identifying activities and short-term outcomes initiated by policymakers or
decision-makers who have used the UHF SHR to facilitate policy change; (3) examining the
significance of the SHR as a format for presenting health information.

The study used a qualitative evaluation approach. Semi-structured interviews were
conducted with state-level policymakers who have used the SHR to affect policy change in
their state. Purposive sampling was used to recruit subjects in this study. Study subjects were
recruited from among people who contacted UHF about using the SHR for policymaking,

state Chief Information Officers, and members of the Association of Health Care Journalists

and the Association of State and Territorial Health Officers. UHF publicity materials,

dissemination materials, and news reports were reviewed as part of the process evaluation.

Interviews suggested alternative explanatory frameworks that focused on key

components or themes in relating policymakers to the SHR, including: data entrepreneurs,

policy communities, and the symbolic nature of the rankings. The study hypothesizes that the

consistency of SHR information allows data entrepreneurs to translate the overall ranking

into a symbol that can be used to engage others in action. The study intends to demonstrate

that effective data entrepreneurs can transform the overall state ranking to specific

components to facilitate local action.

To Patrick and my community—I dedicate this work to our healing journey together.

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LIST OF ABBREVIATIONS

AHCJ − Association of Health Care Journalists

APHA − American Public Health Association

ASTHO − Association of State and Territorial Health Officials

CIO – Chief Information Officer

GT – Grounded Theory

IOM − Institute of Medicine

NACCHO – National Association of County and City Health Officials

OECD – Organisation for Economic Cooperation and Development

SHR – State Health Rankings

SHR report – State Health Rankings report

SIO – State Information Officer

UHF – United Health Foundation

Chapter 1: Introduction and Background

Public health challenges are increasing in both scope and complexity. The growth of science and technology, increased press attention to scientific discoveries and health issues, the Internet, and the demand for accountability for the use of public resources, have created the need for better dissemination and utilization of research evidence in health care settings (Dobbins, 2001). Essentially, there is an overwhelming amount of information available. There is also a growing perception that research on health issues does not fit well with the needs of policy and decision-makers who are charged with promoting health in communities. Policymakers seemingly make health-related decisions intuitively or on other information, based on crises, public opinion, or political interests (Elliot & Popay, 2000; Innvaer et al., 2002).

The 2003 Institute of Medicine (IOM) Report, *The Future of the Public's Health in the 21st Century*, emphasized that population health is both a social and political undertaking that can only be assured through partnerships. The report issued a call for public health officials to make evidence-based decisions for improving population-level health (IOM, 2003). But, with the enormous amount of competing information, how do population health issues get attention in policy arenas?

The ideas of population health have slowly gained visibility, but less so in policy processes (Evans & Stoddart, 2003). Political scientists, sociologists, communication researchers, and public health practitioners have devoted considerable time to understanding

why some social problems get attention and others do not. Communication research has shown that attention to social problems such as poverty, racism, and lack of access to healthcare and education is less about its objective characteristics and more about the process, power, resources and skills associated with how public sentiment is raised (Salmon, Post & Christensen, 2003; Henry & Rivera, 1998; Coffman, 2002, Bernays, 1965).

The importance of communicating to the public is a critical element to the policymaking process. Public communication campaigns are designed to use media channels, messaging, and an organized set of communication activities to generate specific outcomes in a large number of individuals within a specified period of time (Rogers & Storey, 1987). Recently, the concept of influencing the public will through communications has gained momentum, particularly for nonprofits with social agendas.

The State Health Rankings (SHR) Report, produced by the United Health Foundation, is a primary example of a public will communications campaign designed to influence the public's thinking of health through the ranking of states on health status.

A ranking is a summary measure of health—a combined score of a number of components that is reported as an overall index. The SHR report produces a ranking of each state every year. This hierarchy creates a public position of healthiness for each state. The ranking is created from a score based on 18 components of health. Each state's score is transformed into the ranking by ordering the scores from highest to lowest in a hierarchy of healthiness.

Summary measures are important because their simplicity for communicating ideas allows them to influence policy. The SHR report is an example of a summary measure that can be used to start a conversation, an argument, or dialogue in defining policy problems and

setting priorities. However, summary results need to be activated by someone who is savvy enough to understand their value and how to use them. On its surface, the ranking is very easy to describe. The ranking tells someone where a state is compared to all other 50 states. It communicates the relative position of one state over or under another.

What is still unknown is how rankings influence policymakers to affect policy change. The goals of this dissertation will be to address this question and disseminate findings to the United Health Foundation to ultimately assist states in translating SHR information into actionable steps for affecting policy change that improves population health. A review of the information pertaining to rankings, summary measures of health, performance measurement, knowledge utilization, translation of research, dissemination, evidence-based decision-making, public will communication campaigns, media and press advocacy, agenda-setting and framing functions of the press, and public relations are helpful because they inform the process of how information may be used to affect policy change.

History and Methodology of State Health Ranking (SHR)

The SHR report was created in 1989 to provide a overview of each state's annual health status and to establish a baseline for monitoring changes over time. The description of the ranking's construction and its methodology provides an important foundation for understanding its potential to influence policy change.

The SHR is a composite measure of traditional biomedical, epidemiological, and social or nonmedical determinants of health and well-being. In contrast to biomedical assessments of health (which include the absence or presence of physical disease or pain), sociomedical or nonmedical determinants (i.e., rates of high school graduation) include the upstream influence of social conditions as contributors to the downstream manifestations of the

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physical and mental conditions of the body (Link & Phelan, 1995). This sociomedical approach to assessing population health makes the SHR report and its rank distinctive. This broader understanding of what is measured in the State Health Ranking is important, because many users of the report (especially those who work in a state public health department) often question why components such as high school graduation are included as a measurement of health for which they are held accountable but have no direct control over.

The United Health Foundation has published the SHR report since 2000. Northwestern National Life Insurance (NWNL) Company originated the report, publishing it from 1989 to 1994 (NWNL, 1989-1994), after which ReliaStar Corporation (ReliaStar, 1995–2000) published it from 1995 to 2000. Despite multiple funders, one principal author has coordinated the compiling of the text of the report throughout its history. The report has always presented a single summary indicator of health status—called a rank. This consistency allows for the index or rank to be compared from year to year to note trends and shifts in well-being at the state population level.

The initial report in 1989 put out by NWNL was based on 16 measures of health and received a great deal of favorable attention and suggestions for improving its quality. As a result, NWNL initiated a Delphi study to be undertaken in early 1990 to obtain systematic input from various health and government professionals and to create a solid foundation for future years. A critical component of the Delphi process is to select and recruit expert panel members. This study selected panel members based on the following criteria:

1. Knowledgeable and respected in public health and health care.

2. Committed to and interested in the study.

3. Reflective of a variety of interests, disciplines, and backgrounds.

Panel members represented academic institutions, national and state government health

officials, and collectors and analyzers of health data (see Table 1) (United Health

Foundation, personal communication, January 5, 2001).

Table 1

Expert Panel Members – Delphi Study of State Health Rankings Report, 1990[1]

Name	Title/Organization in 1990	Location
Henry Blackburn, M.D.	University of Minnesota, Division of Epidemiology	Minneapolis, MN
Amos Burke	Director of the Bureau of Health Planning & Resource Management,	Delaware
Robert Hahn, M.D., Ph.D.	Epidemiologist, CDC	Atlanta, GA
Michel Ibrahim, M.D., Ph.D.	Dean and Professor of Epidemiology, School of Public Health	University of North Carolina, Chapel Hill, NC
Harold Kahler, Ph.D.	Executive Director, Wellness Councils of America	Omaha, NE
Joel Kleinman, Ph.D.	National Center for Health Statistics	Hyattsville, MD
Michael Lane, M.D., Ph.D.	Dean, Emory School of Public Health	Atlanta, GA
Frederick Lipfert, Ph.D.	Environmental Consultant, Brookhaven National Laboratory	Upton, NY
Karen Nelson	Staff Director, Committee on Health & Environment, U.S. House of Representatives	Washington, DC
Richard Rotherberg, M.D.	Assistant Director for Science, Center for Chronic Disease & Health Promotion, CDC	Atlanta, GA
Anonymous by request, M.D.	Epidemiologist and Cardiologist	School of Public Health
Anonymous by request	Chief Legislative Aid, Health, U.S. Senator	—

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[1] Source: United Health Foundation, personal communication, January 5, 2001.

The Delphi process involved a series of questionnaires for the panel members interspersed with controlled feedback. Three rounds of questionnaires were used for this study. The initial questionnaire was based on the 1989 Northwestern National Life State Health Rankings Report. Panel members were asked to comment on existing components, suggest revisions, and begin the process of assigning weights to each component. Based on the first round of the Delphi process, the 1989 methodology was altered. The panelists established four criteria for measures to be included in the ranking:

- All measures would be based on existing sources of data.

- Where possible, established and reported measures of health common to the field would be used.

- Measures would be periodic and, ideally, measured and calculated each year.

- The final results of the ranking would be readily communicated to the general public (United Health Foundation, personal communication, January 5, 2001).

A second questionnaire was then prepared, that asked panel members to comment on all components, suggest new ones, and assign weights to each component. Questions were also asked about improving the methodology and the presentation of the findings. The third questionnaire had a tighter focus; panel members assigned weights to all components and commented on the potential for over- and under-weighting. No major components were changed as a result of the third questionnaire. Panel members used the average of the suggested weights in the third round to determine the final weight of each component in the rankings (United Health Foundation, personal communication, January 5, 2001).

As a result of the Delphi study, the SHR report was considerably refined to include new components and a revised method of tabulating and weighting data. In 1991, the

methodology was reviewed again and the expert panel assisted in making minor refinements. Except for the major changes in 1990, the methodology has generally remained the same for the past 15 years, evolving to include the most pertinent aspects of health while striving to maintain comparability from year to year. Currently, the criteria for inclusion in the ranking have evolved: the necessity of overall rankings to represent a broad range of issues that affect a population's health; the need for individual components to share common health measurement criteria; availability of data at a state level; and the need for data to be kept current and updated periodically (UHF, 2004).

Originally, panelists reached consensus on 17 indicators that reflected a variety of health status outcomes and risks, including lifestyle, disease, and mortality. Modifications to the individual indicators have been made throughout the years. For example, the 2004 SHR report ranked states in the United States based on scores for 18 variables grouped in four categories:

- personal behaviors (i.e., prevalence of smoking, motor vehicle deaths, prevalence of obesity, high school graduation)
- community environment (i.e., violent crime, lack of health insurance, infectious disease, children in poverty, occupational fatalities)
- health policies (i.e., percent of health dollars for public health, per capita public health spending, adequacy of prenatal care)
- health outcomes (i.e., limited activity days, cardiovascular deaths, cancer deaths, total mortality, infant mortality, premature death) (UHF, 2004).

Due to the reliance on public data sets, the indicators presented in the SHR report have limitations. However, panelists selected the indicators because they believed them to be the

best available indicators of health status at the time of publication and to be consistent with previous SHR reports (UHF, 2004).

The process of creating the ranking begins with the raw data obtained from state and federal sources, which are then adjusted for age, race and/or population, as appropriate. The weight of each component determines its effect on the overall ranking, and the weights of all the components total 100 percent. The expert panelists determine both the percentage weight of individual components and the effect of the individual components on the overall score (i.e., positive or negative). For example, the high prevalence of obesity carries a 5% weight of the total score and has a negative effect on the score, lowering the ranking of a state (UHF, 2004). The score for each state is based on the following formula:

Score = (Absolute Value / National Mean) – 1.0 X 100

The scores of individual components are weighted and pooled as summary index for each state. A score of zero for a state indicates the national average. Poorer health status is represented by index scores below zero, and better health status is represented by index scores above zero. The score is then converted to a rank through the ordering from highest to lowest scores (UHF, 2004). The overall UHF SHR ranking is purposefully communicated by listing the ranks of all 50 states by number from first to last (1 to 50). The SHR report presents the rankings as a "snapshot" of each state's health status each year and establishes a baseline for monitoring changes over time. This basic knowledge of the methodology of the SHR is important for policymakers to understand in order to use the ranking as a tool to influence policy change.

The Problem

Engaging policymakers to act in improving health can be challenging. Annually, about 2 million articles in more than 20,000 journals are published on health-related topics. Concurrent with this information explosion, the responsibility for health policy is increasingly residing at the state level. Thus, state decision-makers have increased needs for evidence to ensure that their policies and programs provide effective outcomes. Many rely on private sector sources of information to help them make decisions (Coburn, 1998). Although, "population" is a common term understood by state health officials, data that describe populations and their health remains a difficult point to take action on.

Researchers from diverse fields have discussed how the attention to social problems is less about its objective characteristics and more about the process, power, resources, and skills associated with how public sentiment is raised (Salmon, Post & Christensen, 2003; Henry & Rivera, 1998; Coffman, 2002; Paisley, 1981; Bernays, 1965). This body of work points to the importance of communication to the public. Specifically, public will campaigns are well suited for influencing policymakers and connecting them to information and research that address social problems. Public will campaigns seek to mobilize popular support and demand around a given issue, thereby motivating policymakers to react (Coffman, 2003).

Recognizing the role of communications and its role in translating research into practice, many nonprofits and foundations (including United Health Foundation) are realizing the influence that communications has on addressing wide-spread social problems. However, a number of research reports have pointed out the lack of sophistication in producing effective communication strategies that advance the social good (Nall Bales & Gilliam, 2004; Communications Consortium Media Center, 2004). These reviews talk about

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the need for better understanding of the interconnections between communication campaigns and their effect on the public and its policymakers.

These intersections are increasingly evident. Currently in health care, the idea of improving decisions and practice with research findings has spread from medicine to policy decisions. Researchers can bring information about key policy areas and can assist in identifying lessons drawn from experience in other situations and venues. This experience can counter claims and challenge opposing views put forward by stakeholders. Researchers' expertise is with data and how to use data to ask and answer questions. One problem is that policymakers have little time or understanding of what types of questions can be asked and answered with data (Roos, 1999).

Another issue is that the majority of research addresses only parts of policy problems and is often scattered across multiple sources and different media (Waddell, 2001). This fragmentation of information and ideas may be too time consuming and complex to synthesize, leaving policymakers with the work of balancing and addressing competing objectives, while relying on a variety of intuitive, anecdotal, and evidence-based resources. In addition, policymakers often need context-specific evidence, quickly and in a useable communication format (Folz, 2004).

Nonetheless, there is little intersection between the evidence policymakers need and what is produced. This may be largely a function of the research environment, since researchers are rarely rewarded for their accountability to policymakers (Lavis, 2002). Often, research is perceived as being sufficient in itself to motivate people to change behavior. Nevertheless, simply providing good quality information is not enough to change behavior. A solution may include more active dissemination. However, it is still not clear as

to what dissemination approaches work best with which decision-makers in which kinds of settings.

Another problem of influencing policy with evidence lies with the complexity of health policy problems. The true solutions to many health problems may lie within economic or social realms—or the nonmedical determinants of health. However, ideas about nonmedical determinants have not been shown to directly influence the policy process yet. This may be because this concept does not appear to have sufficiently developed outside of the health sector where most of its implications may lie. For example, public health officials often talk about their frustrations with being assessed and held accountable for the SHR components of violent crime or motor vehicle deaths. Their complaints center on their perceptions and feelings that they have no control over these dimensions within their responsibilities as health officials. More information is needed to understand the relationship between the forces affecting health and how they are modified by time and context (Dean & Hunter, 1996).

Since 1989, UHF and its predecessors have published an annual comprehensive, state-by-state analysis of health status in the United States. The overall purpose of the UHF SHR report is to "stimulate public conversation concerning health in our states and provide information to facilitate citizen participation" (UHF, 2004, p. 6). For the past 4 years, UHF has begun to develop a public communications campaign using the SHR as the key element of information. A probable outcome of this campaign is that the SHR has motivated news stories and raised awareness among the general public of health issues.

Some states have begun to develop their own adaptations of the rankings and to use the information to either guide or to stimulate changes in policies and to promote behavioral health change. Nevertheless, while some states have been proactive with using the SHR

information, gaps in awareness of this resource as well as the knowledge and tools to use the

SHR to improve health still exist. United Health Foundation staff members have fielded

numerous calls from state officials asking for guidance on how to use the SHR to take action

in their states that will ultimately lead to improved population health. This dissertation

proposes to clarify the logical connections between the communication of the SHR and the

creation of policy options.

Research Aims

Understanding how information is communicated and influences policymakers to affect

policy change is a critical component of the health policy process. This study proposes to

answer the following main research question: How does the UHF SHR influence state

policymakers?

The aims of the proposed study are to:

Aim 1: To evaluate the communication campaign for the UHF SHR.

Research question 1.1: Which policymakers were involved with the SHR

communication campaign?

Research question 1.2: Who should be the target audiences for the SHR information?

Research question 1.3: Through which channels did policymakers receive

information about the SHR?

Research question 1.4: What interests of policymakers led them to use the SHR?

Research question 1.5: Which aspects of the SHR were most helpful to

policymakers?

Aim 2: To identify activities and short-term outcomes initiated by policymakers or

decision-makers who have used the UHF SHR to facilitate policy change.

Research question 2.1: What did policymakers do with the information from the SHR?

Research question 2.2: What barriers limited use of information from the SHR by policymakers?

Research question 2.3: What facilitators aided use of information from SHR by policymakers?

Research question 2.4: What impact did the publicity campaign for the SHR have on news coverage of the SHR?

Aim 3: To examine the significance of the SHR as a format for presenting health information.

Research question 3.1: Were there differences in policymaker's reactions to the SHR based on a state's rank?

Research question 3.2: How did differences in a state's ranks relate to use of the SHR by policymakers?

Definition of Terms

The following terms are used throughout this document and a definition is provided to clarify their meaning for the reader.

- **Ranking:** A statistic that signifies a position within a hierarchy and implies comparison and competition among the components of a hierarchy.

- **State Health Rankings report (SHR report):** An annual report, currently published by the United Health Foundation, of a composite measure of traditional biomedical, epidemiological, and social or nonmedical determinants of health and well-being.

- **Knowledge Utilization:** The process of transferring knowledge into practice (Dobbins, 2002).

- **Dissemination Research:** The study of processes and variables that determine and/or influence the adoption of knowledge, interventions, or practice by various stakeholders (Dobbins, M., Ciliska, D., Cockerill, R., Barnsley, J. and DiCenso, A., 2002).

- **Public Will Campaigns:** A process that attempts to raise the importance of a social problem in the public eye to motivate policy change (Henry & Rivera, 1998).

- **Mass Media:** The institutions whose primary purpose is to communicate information to the public via a variety of channels (i.e., newspapers, television, radio).

- **The Press:** The group of people primarily responsible for crafting messages and communicating information to the public.

- **Social Marketing:** A social-change management process involving the design, implementation, and control of programs aimed at increasing the acceptability of a social idea or practice in one or more groups of target adopters (Kotler & Zaltman, 1971; Winett & Wallack, 1996).

- **Media/Press Advocacy:** The strategic use of mass media or the press as a resource for advancing a social or public policy initiative. This can also mean studying and influencing how an issue is presented to the mass media or the press, with the understanding that public opinion is shaped by the ways the press represent various issues (Wallack & DeJong, 1994; Wallack et al., 1993; Winett & Wallack, 1996, U.S. DHHS, 1988; Pertschuk & Wilbur, 1991).

- **Public Relations:** A management function of problems or issues that helps establish and maintain mutual lines of communication, understanding, acceptance, and cooperation between an organization and its public audiences (Winett & Wallack, 1996).

- **Agenda-Setting:** The process in which initiators capitalize on both planned and serendipitous issue triggers to influence public, mass media and the press's perceptions of the legitimacy and viability of a social problem (Salmon et al., 2003).

- **Framing:** The manner in which social problems are defined by advocates and opponents in public policy disputes (Salmon et al., 2003).

- **Priming:** The process in which the press attends to some issues and not others and thereby alters the standards by which people evaluate issues, people, or objects (Coffman, 2002).

Chapter 2: Literature Review

A literature review was conducted to provide a context for the use of the SHR information in policy processes. The primary domains for the literature search strategy were rankings, performance measurement, summary measures of health, health policy, dissemination, knowledge utilization, translation of research, public will communication campaigns, media and press advocacy, agenda-setting and framing functions of the press, and public relations. Published articles and other literature were systematically searched through databases (e.g., PUBMED, Google), hand-searching, and citation tracking. Additionally, the literature review was started from collections from the UHF methods panel as well as key articles from experts familiar with the SHR report, summary measures of health, dissemination, and translation of research. These articles were used to track down additional authors and pertinent articles. Literature was included if it addressed the health policy context.

Very little published information specifically addressed the concept of rankings as a communication format (Gerzoff & Williamson, 2001; Dow, 2003). Thus, the majority of information regarding the understanding of rankings was taken from a few seminal articles on performance measurement (Feller, 2002), league tables (Goldstein & Spiegelhalter, 1996) and summary measures of health (Field & Gold, 1998; IOM, 2001; Mootz, 1986; National Committee on Vital and Health Statistics, 2000; Zucconi & Carson, 1994). There was no empirical literature on how rankings influence policy change; thus, only a few leading

authors (Stone, 2002; Kingdon, 2003; Majone, 1989; Berry & Berry, 1999) contributed to the understanding of how rankings may be used in policy. A much larger number of articles, more than 30, pertaining to the 2000 World Health Report were discovered through the literature search, but only 6 review articles were used to summarize this report. The greatest number of articles (more than 50) was obtained through the dissemination, knowledge utilization (Weiss, C.W., 1979), and translation of information literature search. However, in order to reduce redundancy, only 30 articles were included in the literature review on this topic. Approximately 40 articles, white papers, and books pertaining to public will communication campaigns, public relations, press/media advocacy, and agenda-setting and framing functions of the media and press were searched. Only 30 sources were ultimately used for the literature review of these topics.

Communication Campaigns

Political scientists, sociologists, communication researchers, and public health specialists have devoted considerable time to understanding why some social problems get attention and others do not. A number of authors (Salmon, Post & Christensen, 2003; Henry & Rivera, 1998; Coffman, 2002; Paisley, 1981; Bernays, 1965) have talked about how the attention to social problems is less about its objective characteristics and more about the process, power, resources, and skills associated with how public sentiment is raised. These fields and works point to the importance of communication and specifically, communication to the public.

The role of communications in translating research into practice is rising in importance for many nonprofits and foundations. These institutions are realizing the influence that communications have on addressing wide-spread social problems. Recently, nonprofits have

been refining communication campaigns that define social problems and their solutions to reach the awareness of those who hold the power to allocate resources and choose appropriate policy alternatives. However, a number of researchers have recently written on the lack of sophistication within this community in producing effective communication strategies that advance the social good (Nall Bales & Gilliam, 2004; Communications Consortium Media Center, 2004). These reviews talk about the need for better understanding of the interconnections between nonprofit and foundation communication campaigns and their effect on the public and its policymakers.

Part of the lack of understanding of communication campaigns is due to the complexity and difficulty in studying the causal relationships that may or may not be attributed to the campaigns. Public communication campaigns must address social issues that cut across a number of sectors of horizontal complexity (e.g., economic, political, social) and various levels of vertical complexity (e.g., cognitive, individual behavior, community or systems levels) (Coffman, 2002). In addition, the level of influence that a communication campaign has on the public is difficult to predict. Ultimately, outcome assessment is problematic because there may be many confounding variables that are difficult to separate from the effects of the campaign itself (Coffman, 2002).

Reviews of foundations and nonprofits communications find them neither based on conceptual grounds (i.e., communication theory) nor on solid research principles and practices. As a result, conversations and literature regarding communications campaigns do not have a common language and body of data that readily allows for comparison, evaluation, and identification of best practices (Nall Bales & Gilliam, 2004). The review of

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the literature on the influence of communication in mass media and the press shows this lack of common language.

Therefore, for the purposes of this review, mass media or the media is defined as institutions whose primary purpose is to communicate information to the public via a variety of channels (i.e., newspapers, television, and radio). The press is defined as the group of people primarily responsible for crafting messages and communicating information to the public. Media or press advocacy is defined as the strategic use of mass media or the press as a resource for advancing a social or public policy initiative. Press or media advocacy can also mean the study of how an issue is presented to the mass media or the press, with the understanding that public opinion is shaped by the ways the press represents various issues (Wallack & DeJong, 1994; Wallack et al., 1993; Winett & Wallack, 1996; U.S. DHHS, 1988; Pertschuk & Wilbur, 1991).

The goals of communication campaigns are to shape behavior toward desirable social outcomes with the understanding of the influence of social and political environments that support behavior change (Weiss & Tschirhart, 1994). To accomplish this, communication campaigns use the media, messaging, and an organized set of communication activities to generate specific outcomes in a large number of individuals and in a specified period of time (Rogers & Storey, 1987). The management of media efforts from various communication channels is done to increase the reach and frequency of the campaign's messages and the probability that messages will result in a change (Dungan-Seaver, 1999).

Public opinion research within the last 10 years has shown that the news (i.e., information generation by the press or mass media) constitutes the main source of information about public affairs in America. Because of this position, the news holds a large

potential for attracting the attention of the public and policymakers. Therefore, the potential

to influence the press's agenda (i.e., the topics that are made into news) and the presentation

or framing of the news is critical to an effective communication campaign.

Agenda-setting theory posits that policy agendas are influenced by what the public

thinks, cares about, and acts on (Kingdon, 2003). Agenda-setting literature within the fields

of journalism and communication describe that the press instructs what people should think

about, not how they think (Salmon et al., 2003; Coffman, 2002). This literature positions the

press as gatekeepers of information and places them in the role of determining the

importance and messaging (framing) of issues. The information that the press reports on

frequently becomes more salient to the public. This saliency translates to political and social

priorities.

How the press frames or presents issues is also critical to resolution of social problems.

The press's use of a specific frame is an important influence on the way the public judges the

relevance and legitimacy of a communication's overt or covert call to action (Nall Bales &

Gilliam, 2004). Framing is intended to communicate both the solutions to a social problem

and who is responsible for addressing the problem (i.e., defining target audience).

Ultimately, framing can affect whether a solution to a social problem is held by individuals

or by a collective.

Literature on communication campaigns makes a distinction between two types of

initiatives with two different goals: individual behavior change and public will (Dungan-

Seaver, 1999; Henry & Rivera, 1998; NCI, 2000). Table 2 lists the distinctions between the

two types of campaigns.

Table 2

Distinctions Between Public Communications Campaigns[2]

	Campaign Type	
Component	Individual Behavior Change	Public Will
Objectives	▪ Influence beliefs and knowledge about a behavior and its consequences ▪ Affect attitudes in support of behavior and persuade ▪ Affect perceived social norms about the acceptability of a behavior among one's peers ▪ Affect intentions to perform the behavior ▪ Produce behavior change	▪ Increase visibility of an issue and its importance ▪ Affect perceptions of social issues and who is seen as responsible ▪ Increase knowledge about solutions based on who is seen as responsible ▪ Affect criteria used to judge policies and policymakers ▪ Help determine what is possible for service introduction and public funding ▪ Engage and mobilize constituencies to action
Target Audience	▪ Segments of population whose behavior needs to change	▪ Segments of general public to be mobilized ▪ Policymakers
Strategies	▪ Social marketing	▪ Media advocacy ▪ Community organizing and mobilization
Media Vehicles	▪ Public service/affairs programming ▪ Print, TV, radio, electronic advertising	▪ News media ▪ Print television, radio, electronic advertising

The methods of targeting individuals or the public vary. Within public health, practitioners recognized the need for supporting individual behavior change using processes such as: social marketing, public relations, and media advocacy. Winett and Wallack (1996) suggest that social marketing and public relations are focused on communication campaigns for changing individual behavior, whereas media advocacy focuses on changing policies that shape the environment in which health behavior decisions are made. However, public will campaigns are a type of activity that can be used in all three of these mass media methods.

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[2] Source: Coffman J., 2002, May. Public communication campaign evaluation: An environmental scan of challenges, criticisms, practice, and opportunities. p 6.

Public will campaigns seek to mobilize popular support and demand around a given issue, thereby motivating policymakers to react. As illustrated in Figure 1, public will campaigns with policy change as their outcome are based on the process of media, and public and policy agenda-setting (Bohan-Baker, 2001).

Figure 1
General Theory of Change for Public Will Communication Campaigns[3]
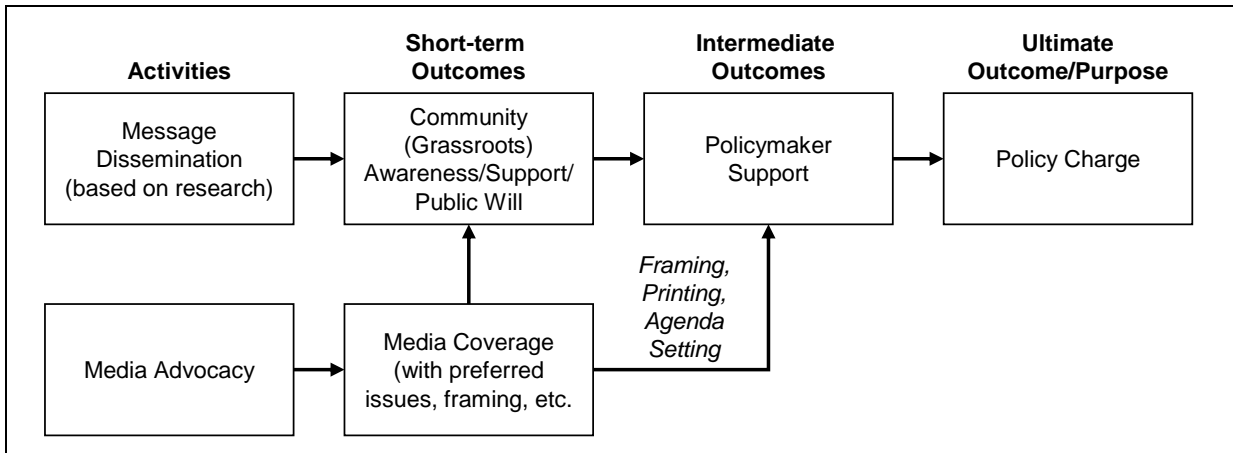
Public will campaigns are considered effective when they are explicit about the actions that they want the public to take (Gould, 1996). Raising public awareness about social issues is an important part of the communication process; however, awareness and knowledge without action does not create individual behavioral or policy change. Therefore, communication campaigns may also include organizing and mobilizing people for change in support of the campaign's main messages.

The outcomes relevant to public will campaigns include media frames and policy change. Specifically, awareness, saliency (importance of an issue), attitudes (an individual's affect for or against an object), social norms or context (perceived standards of acceptable attitudes and behaviors among a person's peer group or among those people important to that

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[3] Source: Theory of Change for Public Will Campaigns (Coffman, June 2002).

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person), and action are some important measures of effective campaigns (Coffman, 2002).

Table 3 lists the characteristics of effective public will campaigns.

Table 3

Characteristics of Effective Public Will Campaigns[4]

Tasks	Issues to Consider
1. To capture the attention of the right audience	Defining the target audience, selecting channels to reach the audience, attracting sufficient attention
2. To deliver an understandable and credible message	Source credibility, message clarity, fit with prior knowledge, duration of exposure
3. To deliver a message that influences the beliefs or understanding of the audience	Provide information, direct attention, trigger norms, change underlying values and preferences
4. To create social contexts that lead toward desired outcomes	Understand the pressures that govern the behavior of interest

Theories particularly applicable to public will campaigns include agenda-setting, framing, and priming (Coffman, 2002). Agenda-setting is the "process in which initiators capitalize on both planned and serendipitous issue triggers to influence public and media perceptions of the legitimacy and viability of a social problem" (Salmon et al., 2003). Framing is the manner in which social problems are defined by advocates and opponents in public policy disputes (Salmon et al., 2003). It is the construct (language, visuals and messengers) that signals to listeners or observers how to interpret and classify new information that ultimately triggers meaning (Coffman, 2002). Priming is "the process in which the media attend to some issues and not others and thereby alter the standards by which people evaluate issues, people, or objects" (Coffman, 2002).

Public will campaigns integrate framing and priming theory into the agenda-setting process through the mass media and press. Because the media has the capacity to shape public policy priorities by leading the public to view certain issues as more important than

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[4] Source: Coffman J., 2002, May. Public communication campaign evaluation: An environmental scan of challenges, criticisms, practice, and opportunities. p 20.

others, media advocacy is essential to a public will campaign (Cook et al., 1983; Coffman, 2002; Salmon et al., 2003). A number of studies show that media attention to social problems significantly influences political leaders to act (McCombs & Shaw, 1972; Baumgartner & Jones, 1993; Salmon et al., 2003). This is precisely why public will campaigns leverage the media to play an important role as gatekeepers in determining the editorial processes of defining and selecting issues for inclusion in news content (Kosicki, 1993; Salmon et al., 2003).

Because of the mass media's role of influence, the content of the media is very important to understand. Content is "the complete quantitative and qualitative range of verbal and visual information distributed by the mass media" (Shoemaker & Reese, 1996). Quantitatively, the range of content information can include: the length in minutes of a television story or the amount of news stories on a particular subject. Qualitative information on media content describes the nature of the coverage. The subjective nature of news content can point to an event's newsworthiness which influences the prominence of its coverage.

Studies of media content demonstrate that journalists act as gatekeepers of media messages (Shoemaker, 1991; Shoemaker & Reese, 1996). Table 4 characterizes the theories governing media content literature into five main categories.

All five theories point to many influences on news messages. For the purposes of this study, the influence of content by other social institutions and forces will be the main focus. Specifically, suppliers of information through public relations play a major role in routinizing and making more systematic the link between the press and other institutions (Shoemaker & Reese, 1996). In their study, Martin and Singletary (1981) noted that nearly 20% of press releases were used verbatim by news organizations with an even greater percentage of

resource-poor nondailies using press releases verbatim. This rise in public relations also

makes journalists more susceptible to the dependence on news flow from public relations-

generated press releases.

Table 4

Categories of Media Content Theories[5]

Media Content Theory	Premise
Content reflects social reality with little or no distortion	Assumes the mass media distribute accurate reflections of social reality based on compromises between those who sell information to the media and those who buy it
Content is influenced by media workers' socialization and attitudes	Assumes a communicator-centered approach that leads communications personnel to produce a social reality in which they agree with social norms and anything outside of this is considered an oddity
Content is influenced by media routines	Assumes that media content is influenced by the ways in which communications workers and their companies organize work
Content is influence by other social institutions and forces	**Assumes that factors external to the communications worker and their organization (i.e., economic and cultural forces) determine content**
Content is a function of ideological positions and maintains the status quo	Assumes that mass media is part of an economic system that are controlled by those with economic power and therefore, the mass media helps ensure the status quo of society

These routines (i.e., channels of information from public relations) have an important

influence on the production of news content and thus defining what the public thinks about

(Shoemaker & Reese, 1996).

The recent communications focus of nonprofits and foundations has shown them the

importance of influencing the message content of news. Practically, this has meant that this

community is becoming more media savvy and relying on public relations firms to assist

them in their communications efforts. The UHF has done this as part of their

communications campaign for disseminating the SHR.

The purpose of the SHR is "to stimulate public conversation concerning health in our

states, as well as provide information to facilitate citizen participation" (UHF, 2004). Based

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[5] Source: Shoemaker & Reese, 1996. Mediating the message: theories of influence on mass media content.

on these goals, this report can be considered a public will communication campaign, because its aim is to create public will that motivates policymakers to take political action. Since the UHF SHR campaign is a mature campaign—in terms of having over 15 years of publication to the public—it is very reasonable to expect the campaigns purpose to be focused on policy change.

Currently, the UHF contracts with a public relations firm to create a public will campaign that is focused on stimulating public conversation and awareness concerning health. With the support of the public relations agency, UHF has created a dissemination campaign including press releases and other publicity materials focused around the SHR report. The public relations agency is the conduit for the SHR information disseminating to the press. They are responsible for connecting the SHR information to media channels.

There are many aspects of the UHF SHR communications campaign. Each year, UHF holds a teleconference with state Chief Information Officers (CIOs) a week prior to the public release of the SHR information. This information session is designed to prepare the CIOs to actively disseminate the information within their states as well as prepare them to field questions and concerns that the national UHF campaign generates. Through the public relations agency, the UHF has collected the volume of coverage in newspapers, TV, and radio that include information on the SHR each year. Outside of this information, no formal evaluation of the communications campaign has been undertaken.

What is a Ranking?

To recognize how the SHR may influence policy processes necessitates an understanding of the definition and function of a ranking. This understanding is brought about through a review of the historical and cultural contexts both within and outside of

public health. At its most basic level, a rank is a statistic that signifies a position within a hierarchy. It implies comparison and competition among the components of the hierarchy. The ordering within the SHR report is based on the statistical characteristic of health status.

Broadly categorized, a ranking is a form of performance measurement. For more than 40 years, the quality improvement and performance management movements have been a significant influence in the private sector (Feller, 2002). Nonprofit and public sectors have also responded to increased demands for accountability and have embraced performance measurement over the last decade as well (Feller, 2002; Goldstein & Spiegelhalter, 1996). A performance indicator is a summary statistic, which is intended to be related to the quality of its functioning (Goldstein & Spiegelhalter, 1996). The notion underlying performance management is that by monitoring metrics deemed significant by decision-makers, an individual or entity can use the information to improve practices and create better outcomes. Benchmarking, the process of classifying best practices and comparing others' actions to this standard, is also commonplace in the private sector.

Performance measurement is a means to demonstrate accountability and, at the least, interest in performance improvement. Ultimately, performance indicators and rankings are political instruments used within organizational and policy settings. A ranking's value is its capacity to foster accountability, communicate a community's goals and results, and motivate action towards performance improvement. Ranks can function as a form of symbolic politics to provide political coverage for decision-making. It is also a vehicle and symbol for decision-makers to create the opportunity to capture or limit resources and control (Feller, 2002; Stone, 2002).

In this sense, the ranking is a form of information capital—a stock of knowledge devoted to the production of other goods or actions. Ultimately, a ranking is an effective, if oversimplified, means to communicate a community's health status, through a single number representing the health status of a state (Gerzoff, 1997). Because of the accessibility of the format of the ranking, the media tend to create stories around the best and the worst. As a result, considerable public debate is generated (Goldstein & Spiegelhalter, 1996). For example, the United Health Foundation estimates that one in four American's saw or heard something about their State Health Rankings report in 2004.

Summary Measures of Health

The trend for social and political measurement can be traced back to the Age of Enlightenment and its emphasis on social and political mathematics. This emphasis, along with the political philosophy of mercantilism, advocated that the strength of the state was determined by its levels of health (Porter, 1999). As early as the 1680s, Gottfried Wilhelm Leibniz created a summary measure consisting of 56 categories pertaining to the population, including sex, social status, and the number of able-bodied men for bearing arms and marriageable women for bearing children (Porter, 1999). The term "Statistik" was invented to describe the conditions and prospects of society. Even at its earliest stages, statistics were embedded in politics laden with value judgments (Porter, 1999).

As life spans have lengthened, researchers, individuals, and communities have become increasingly interested in broader health goals such as the influence of social determinants of health (e.g., socioeconomic status) and quality of life assessments (e.g., SF36). Summary measures of health provide a forum for assessing an overall picture of health or well-being and understanding broad trends in public health (Field & Gold, 1998). The use of these

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assessments based on population health models encourages a more balanced portfolio of data that reflects the wide range of influences on population health (Friedman & Starfield, 2003).

Summary measures of population health combine information on mortality and non-fatal health outcomes to represent the health of a population as a single indicator (Field & Gold 1998; Murray, Lauer, et al., 2000). The format of summary measures facilitates the comparison of the health of one population to that of another by providing a means to analyze the key contributors to differences in health between populations and of the same population at different points in time (Murray, Lauer, et al., 2000). Information from summary measures can inform debates on health service delivery and planning priorities, inform debates on the identification of health concerns and research and development, and garner the attention of senior managers in public health agencies and government leaders. Summary measures have the potential for improving professional training curricula in public health and informing analyses of health interventions and cost-effectiveness studies (Murray, Salomon, and Mathers, 1999).

Recognizing the influence that summary measures may hold for the policy process, the Institute of Medicine (IOM) convened a committee to strengthen the credibility and utility of the measures of population health. In 1998, this committee described summary measures of health as capturing a continuum of components of health, created to understand the well-being of populations. The measures inform a wide range of decision-making in public health and medical systems. Broad groups of public health partners (e.g., consumers, patients, health care providers, and public health officials) are able to use summary measures of health because of their accessibility (National Committee on Vital and Health Statistics, 2000). However, although the measures are intended to be broad, they still may not capture what is

salient to all decision-makers. Therefore, a challenge of summary measures is to represent

the complexity of health in a manageable way (Field & Gold, 1998).

The IOM committee described the components of health status as "an important first

step in identifying health problems as part of a process for improving community health,

deploying resources, and overseeing the performance of those responsible in some way for

individual or population health" (Field & Gold, 1998, p. 26). They noted that when summary

measures are understandable and helpful in describing limitations, the possibility of

controversial value judgments due to obscure methodologies is lessened. Additionally, the

committee called for increased understanding of the influence of social norms and public

accountability in how summary measures are used in decision-making (Field & Gold, 1998).

The IOM committee recognized that summary measures have an established place

within the health policy process due to their characteristics of comprehensibility, simplicity,

and conciseness of communication (Murray, Lauer, et al, 2000). In its report, the committee

acknowledged that summary measures of population health can be used to shape, improve, or

distort decisions by providing information to decision-makers that may compete with an

array of other sources of information in the policymaking process (Field & Gold, 1998). In

their assessment they observed that all measures of population health involve choices and

value judgments in both construction and application. These measures ultimately influence

the ethical and policy implications of their use (Field & Gold, 1998).

Lastly, another IOM committee on selecting measures for the National Health Care

Quality Data Set emphasized the importance of selection of the components of a summary

measure of health status. Experts in this effort agreed that to motivate action, measures

should be relevant, meaningful or interpretable, informative of important issues, scientific or

evidence-based, reliable or reproducible, valid, and feasible. This committee also suggested

that summary measures should strive to meet three criteria:

    (1)   balance (measure represents the entire range of experiences)

    (2)   comprehensiveness (measure should present a thorough picture)

    (3)   robustness (measure should be stable over time and reflect only true changes in

        health) (IOM, 2001).

This information was taken into account by the expert methods panel, which guides the

construction of the SHR report.

The Trend of Summary Measures and Rankings

There is an increasing trend toward the use of summary measures of health status and

for presenting information in the form of a ranking. Americans are increasingly familiar with

information presented as rankings, from music (e.g., *Rolling Stone*) and food (e.g., Top 5—

Food Network) to the best graduate schools (Hartigan, 2004). The media—both print and

television—exceedingly exploit this increasingly prevalent norm of presenting "winners" and

"losers' to its consumers in order to boost sales or market share. This trend extends to the

health care sector too, as we see more rankings on "the healthiest places" and the 100 best

hospitals., for example (*Money*, www.bestplaces.net; Duffy, 2004).

League Tables

The popularity of rankings is not unique to the United States, however. The first use of

ranking was William Farr's use of the "life-table" as a barometer of health in England. Farr

showed that the life table could demonstrate how life expectation at different ages varied

according to occupation, wealth, and hygienic conditions. Today, this tool is still widely

used by English public health officers to analyze a district (Porter, 1999). Presently called

league tables, educational and health data in the United Kingdom are shown as graphic

representations of information (i.e., surgeons, hospitals, places, states, districts, etc.) ranked

from best to worst or in a way that a hierarchy of quality is established (Goldstein &

Spiegelhalter, 1996).

The use of statistics to assess institutional performance dates back to well before 1840

when the Statistical Society of London set up a Committee on Hospital Statistics (Porter,

1999). Today, most hospital outcome data in the United Kingdom are aggregated to the

district level before becoming part of a long list of indicators, each of whose rank across

districts could be graphically displayed and used by the government and media. Currently

there is public dissemination of such process measures as waiting times and adherence to

appointment times (Goldstein & Spiegelhalter, 1996). There has been considerable public

debate surrounding each—institutions tend to be immediately ranked by the media, bringing

the "best" and "worst" under close scrutiny. This attention is accompanied by criticism from

clinicians and statisticians of the naïve interpretation of the results as reflecting the "quality"

of care.

Over the last decade there has been a growing interest in the development of

performance indicators as part of an attempt to introduce accountability into public sector

activities such as education, health and social services, where the focus has been on the

development of quantitative comparisons between institutions. Performance indicators have

the longest period of development and use in education in the United Kingdom (Feller,

2002).

Most recently, rankings of various hospital indicators in the United Kingdom have

also received attention. Avoidable mortality and other indicators established in the *Health of*

the Nation program have been developed into a set of population outcome indicators for the

National Health Service. These are distributed as the public health common data set in which

regions in England are ranked for each indicator. This initiative was started due to the

growing emphasis on assessing whether local areas are progressing towards or achieving

national or local health targets (Goldstein & Spiegelhalter, 1996). In Scotland, the medical

record system has permitted greater progress than other countries, including league tables on

a variety of outcome measures for use by both health authorities and trusts (Goldstein &

Spiegelhalter, 1996).

International Trends in Summary Measures and Rankings

Many international organizations are also concerned with ways in which institutions

and systems can be judged. This concern has pervaded almost all existing discussions of

rankings. For example, a Canadian Task Force recently created the health equivalent of the

Gross Domestic Product, acting as an overall indicator of trend in the nation's health

(Murray, Salomon & Mathers, 1999). In the international arena, comparisons of health status

across countries usefully focus attention on countries with critical needs for international

assistance; to set priorities for investments in combating particular conditions and diseases;

and to gain an understanding of differences regarding different nation's burden of disease

(Murray, Salomon & Mathers, 1999).

In 1971, the Organisation for Economic Cooperation and Development (OECD) started

a project for the development of social indicators, with the goal of describing the social state

of society and to determine policy goals and policy priorities (Mootz, 1996). This movement

has been slow to fully develop due to the ambiguous nature of deciding what to measure

(Mootz, 1996). The OECD also has been active in developing sets of educational

performance indicators of student achievement that complement similar indicators at the

institutional level within national education systems. The OECD report assumes that comparisons of students' achievements across countries, unadjusted for context, allow inferences about the relative performances of educational systems. The OECD also identified their interest in using summary measures of health to monitor trends in population health to evaluate the effectiveness of health interventions and to guide resource allocation decisions between competing health needs within member countries (Field & Gold, 1998).

The World Health Organization and the World Bank sponsored comparisons of health systems and published a ranking in the 2000 World Health Report. For the World Health Report 2000, however, the rankings were based on five components: (1) level of health, (2) health inequality, (3) responsiveness, (4) responsiveness inequality, and (5) fairness of financial contribution (WHO, 2000). Using these five performance indicators, the WHO calculated the rank of the health systems of 191 member states on the basis of mean achievement and included uncertainty intervals around each rank (Murray, Lauer, et al., 2000). One outcome of this ranking was increased discussion among a broad group of policy analysts from different sectors. These analysts and researchers took positions on what the ranking meant to them and their countries, either discrediting the analysis or using it to make suggestions for improvements to their health systems (Coyne, 2002; Nord, 2001; Mathers, 2001; Anderson & Hussey, 2001; Wagstaff, 2002; Richardson, Wildman and Robertson, 2003).

Summary Measures and Rankings in the United States

In the United States, the National Aeronautics and Space Administration (NASA) first employed social indicators in 1962 to trace the unintended negative social effects of their programs. Current measures such as the consumer price index and gross national product monitor economic vitality (Mootz, 1996). In addition to the UHF, the most notable

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purveyors of health rankings are Morgan Quitno (Morgan Quitno, 2005) and the AARP (AARP, 2003) which publishes reports on an annual or biannual basis and ranks each state on various health status indicators. While these lists are probably the most widely known, countless other organizations generate rankings to compare health agencies, counties, cities, and other entities within a state (Gerzoff, 1997).

Although not categorized directly as a ranking, the CDC introduced a set of Health Status Indicators (HSI) in 1990 in response to a need for health status measures that present a broad overview of health and that can be used by various levels of government. The indicators include 18 measures of health status that put individuals at increased risk of disease or premature death. The indicators were chosen to facilitate national, state, and local efforts to track the Healthy People 2000 objectives and to help communities assess the general health status of their populations (CDC, 1996).

At the national level, the HSI is published annually in the Healthy People 2000 Review. In this report, HSI data are presented for the total population of the three most recent years and by race for the most recent year. Another type of state-level report, which uses most of the HSI data, is the CDC's "State Health Profiles" report (CDC, 1996). The contents of these reports vary from year to year. Since the Health Status Indicators are intended for use at the local level, some states have published data for local areas (county, region, or health department district). The HSI have also been used to examine differences among local health districts or counties with the intention to use local variations in health status to provide a basis for community assessment and priority setting (CDC, 1996). The results of a survey of state health officials showed that state health departments commonly use the CDC's consensus set of health status indicators. This study showed that the CDC's consensus

indicators are widely recognized by states that appear to use the HSI for monitoring performance (Zucconi, 1994).

A recent notable example of the use of rankings occurred recently when former President Clinton had coronary artery bypass graft surgery. Both national and local media referenced the New York state department's cardiac profile system, which assesses the performance of hospitals and surgeons over time, independent of the severity of individual patients' preoperative conditions. The system's aim is to provide information to help patients make better decisions about referrals and treatment decisions (New York State Department of Health, 2004)

How are Ranks Useful for Policy Change?

Over the past 30 years, population metrics have attracted the attention of policymakers, who sometimes have accepted them as reliable sources of critical information for decision-making. While rankings have not been studied specifically as to how their format shapes policy, this review will focus on what is known regarding the use of summary measures of health and statistics in the policy process. Clearly, rankings provide a picture of well-being backed by information on specific dimensions of health. However, little is known of the choices that policymakers use to shape the picture and use of the ranking. Ultimately, it is important to understand policymakers' expectations surrounding what rankings can and cannot do to inform the policy process.

The components underlying the construction of the ranking and thus the ranking itself are measures of health norms (Field & Gold, 1998; Murray, Salomon & Mathers, 1999). Therefore, who uses a ranking is not limited by sector or by levels of government. Summary measures may provide a first step toward identifying health problems and may clarify policy

choices. If value judgments underlying the index conflict with those of policymakers and others within the population, policymakers will likely not use the ranking. Many policymakers are aware of the opportunities that rankings create in informing policy, but they are reluctant to use them because they lack an understanding of the methods behind the ranking or of the technical and ethical issues salient to the methodology itself (Feller, 2002). Policymakers also recognize that the ranking provides a snapshot of health that may not have credibility with all of their constituents.

Still, rankings appeal to a broad audience. Thus, the ranking may facilitate debates among competing interests who have little agreement on policy priorities. Some performance evaluators advise that rankings be used as part of a comprehensive evaluation process that informs major decisions. By supplementing and improving the usefulness of the ranking as a form of symbolic politics, policymakers are assured better political coverage for their positions (Feller, 2002; Stone, 2002). For example, state health officials may gather data from the CDC and other national agencies to provide additional support for the health problems that the SHR points out. In this case, the ranking can be used as a symbol to call attention to health issues with the state.

It cannot be overemphasized—the main value of a ranking is its ability to clearly communicate the comparability or relative position of one population's health over another. Rankings do not facilitate neutral fact gathering, they are clearly linked to specific political, social, and moral reform philosophies (Porter, 1999). The value of the rankings' ability to convey comparisons of state information and its broad appeal may make its output more influenced by factors extrinsic to the state public health department and other health policy decision-makers. Additionally, due to the fact that the SHR report has used a consistent

methodology for the past 15 years, the ranking allows for comparing the same summary measures of state populations over time.

There is a common-sense notion of health that individuals would agree that one population is healthier than another. And conversely, individuals would also agree that one population is worse off than others. Even with this perception and understanding, however, rarely do individuals within and outside of policymaking roles consider how individual health information links to population health data. It is difficult to motivate the public to understand health patterns outside of their own households. Given community-or state-level data, individuals may not grasp how it affects them personally or their households (Murray, Salomon & Mathers, 1999). Therefore, policymakers who understand the meaning of the information conveyed in rankings are needed to transform and translate the information to larger audiences.

In policy analysis, data are often found rather than created or planned for. The craft of formulating data into information and then into evidence sets the stage for discussions and arguments to take place within the policymaking arena. Majone defines evidence as a specific point in an argument to persuade the mind that a given factual proposition is true or false (Majone, 1989). Being able to focus the attention of discussions around a limited range of issues occurs through public discussion and persuasion that mobilizes the knowledge, experience, and interest of many people. Science and technological expertise cannot be solely relied upon to discover the right way to improve health. Majone argues that the process or craft of argument allows for the discovery of an innovations' capacity and limitations (Majone, 1989). In addition, he believes that the craft of persuasion (or rhetoric or the study of all the ways of doing things with words) is needed in order to increase both

the acceptability of advice and the willingness to act on less than conclusive evidence (Majone, 1989).

Majone states that experts advocate standards of evidence and engage in setting norms (Majone, 1989). In using the SHR, a norm has already been shaped by the expert methods panel and the longevity and investment of the report by its originators and publishers. One way that policymakers can begin the craft of argument is by using the ranking as a symbol for defining problems (Stone, 2002). Using the ranking to create stories of decline or control is a powerful way in which policymakers can activate the information behind the ranking. Stone also discusses the use of synecdoche (i.e., a small part of the policy problem represents the whole), metaphors (implying likeness between things), and ambiguity (the ability of statements, experiences, and other competing information to have more than one meaning or to cast doubt) in defining policy problems (Stone, 2002).

The format of the ranking naturally evokes people's reaction to being counted and measured and brings out their aspirations to look good. On the other hand, depending on the ranking, policymakers may try to manipulate their ranking by discrediting the SHR report methodology. The sheer act of measuring or counting the various components included in the SHR report and publicly reporting them has the potential to stimulate public demand for change and can create the illusion that health is under an individual or state's control (Stone, 2002). Finally, the rankings and their components must be leveraged by others and this process creates relationships and alliances between various positions of interpretations of the ranking (Stone, 2002). In the case of the SHR, the illusion of control rests at the state level.

In fact, state government has become increasingly important in affecting health policy. As a result state-level health statistics are more readily available. This trend has contributed

to the SHR being used for health advocacy and policy purposes (Dow, 2003). A main goal of using the ranking may range from efforts to keep public health on the policy agenda or monitoring changes in health over time to directly informing debates of policies for prioritizing health improvements.

States learn from one another by sharing and borrowing innovations perceived to be successful in other states. States also compete with each other. Walker argued that despite the apparent independence of states within the federal system, pressure still exists to conform to nationally or regionally accepted standards (Berry and Berry, 1999). There is clearly pressure to conform but also pressure to emulate and compete with other states to provide the best conditions for its citizens. On top of this pressure, public officials can also experience pressure from its own citizens to adopt policies initiated by other states (Berry and Berry, 1999). The news media also plays a large role in communicating the needs and thus the expectations of policymaker's constituents.

There are two models for explaining why states emulate other states – the national interaction model and the regional diffusion model. The national interaction model assumes that state officials communicate through a national peer network. This network becomes the conduit of norms and expectations for states. The regional diffusion model assumes that states are influenced by geographic proximity. A neighbor model assumes that the influence is greatest between states sharing a border, while fixed-region models assume influence occurs among states within regions (Berry and Berry, 1999). Using any of these models though, demonstrates the political leverage that a ranking can gain when used to compare states.

Research utilization is defined as the process of transferring research-based knowledge into clinical practice (Dobbins, Ciliska, et al., 2002). So that information generated through research is not only received but translated into a useable form. Its ultimate aim is to use knowledge to solve human problems. This field is characterized by a number of subtopics: technology transfer (the study of how discoveries are transmuted into products); information dissemination and utilization (all methods for getting information out to larger audiences); research utilization; innovation diffusion (the spread of information about innovations); sociology of knowledge (the study of social groups and their interactions around the exchange of knowledge); organizational change (the study of organization's adoption of innovation); policy research (the study of how policy decisions and processes facilitate how innovations get adopted in organizations and social systems); interpersonal and mass communication (the study of the communication processes of how an innovation is known). The fields of dissemination research and policy research will be the focus of this review of research utilization. More specifically, dissemination research is defined as the study of processes and variables that determine and/or influence the adoption of knowledge, interventions or practice by various stakeholders (Dobbins, Ciliska, et al., 2002).

Models of Translating Information

There are a number of models for how information is used and translated into policy: rational, incrementalist, mixed scanning, interactive, two communities, Kingdon's policy soup, and diffusion of innovations (Willison, 1999; Kingdon, 2003). The unique principle of each model is the degree of influence that information has on policymaking. The rational model assumes that the policy process is linear starting from problem identification, policy formulation, to policy implementation and evaluation. Under this model, it is assumed that

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policymakers choose from a broad selection of carefully researched policy options and choose the option that best meets the prioritized goals. Research plays a very direct, problem-solving role in suggesting policy action (Willison, 1999). The incrementalist model, however, focuses on the process and context in which a policy is made. In this model, policy options are usually limited and differ marginally from existing policies. Policymaking is most heavily influenced by negotiation and adjustment between interest groups. Research in this setting may play an indirect role informing agendas through interest groups (Willison, 1999).

Etzioni's mixed scanning model takes elements of both the rational and incrementalist models into account. This model posits that policymakers begin the policymaking process by taking a broad, superficial scan of problems and policy options. Policymakers then decide on a few options that are perceived to be viable. Viability is based on technical feasibility, and congruence with existing values and future constraints. In this model, research may be used directly or indirectly to define problems and policy options (Dobbins, Cockerill, et al., 2001). All of these models assume a producer-push or a user-pull notion of transferring knowledge into the policy process.

Kingdon posits that the policy process has clear phases including prioritization (agenda-setting), development, and implementation. He believes that research could be used in any of these stages of the policy process (Kingdon, 2003). Contrary to rational models, Kingdon recognizes that social change happens in cycles according to when economic and political environments are open to it (i.e., a policy window is created). His research shows policymakers must have a variety of alternatives ready for when these policy windows occur.

By continually studying the issues and policy options, policymakers create a "policy soup" that they can rely on when they need it (Kingdon, 2003).

Lavis also has posited a knowledge transfer strategy applicable to not only policy but decision-making in general. He includes four questions as part of his strategy:

(1)   What should be transferred to decison-makers (the message)?

(2)   To whom should research knowledge be transferred (the target audience)?

(3)   How should research knowledge be transferred (the knowledge-transfer process and communications structure)?

(4)   With what effect should research knowledge be transferred (evaluation) (Lavis, Robertson, et al., 2003).

Lavis argues that by having answers to these four questions, information can be facilitated into the policymaking process more effectively.

The two communities' model posits that two groups of people (i.e., policymakers and researchers) exist and lack the ability to take into account the realities or perspectives of one another. In this model, researchers see themselves as rational, objective, and open to new ideas, but they see decision-makers as action- and interest-oriented and indifferent to evidence and new ideas (Dobbins, Ciliska, et al., 2002). On the other hand, decision-makers in this model see themselves as responsible, action-oriented, and practical, but they see researchers as naïve, impractical, and jargon-ridden. It is the polarized perspectives of each of these communities that keep information flow from readily occurring in the policy process (Dobbins, Ciliska, et al., 2002). Yet in this model, expanded perspectives and two-way communication help ensure that research appropriately informs decision-making (Weiss, 1979; Dobbins, Ciliska, et al., 2002; Lavis, Robertson, et al., 2003).

The interactive model is often thought of most closely followed practice. This model posits that information is used iteratively in the decision-making process. In fact, many sources of information are used including the policymakers own experience and information from media releases. Thus, research is likely to have a conceptual or symbolic affect on the policy process. The foundation of this model is that information is transformed into knowledge through interaction with others (Elliot & Popay, 2000).

Lastly, the diffusion of innovations (the spread or adoption of new ideas throughout a population) framework can also be used to explain how information is used in policy. This model posits that an individual's decision about an innovation (e.g., information or research) is not an instantaneous act, but one that occurs over time by a series of actions (Rogers, 1995). For example, the dissemination of information or research usually occurs during the knowledge stage when decision-makers become aware of new information. Next, in the persuasion stage, various factors contribute to the development of perceptions toward the innovation. Finally, the adoption process begins when the individual becomes aware of the innovation and is interested in understanding its functions. Diffusion research suggests that innovations must be perceived as relevant and consistent with the values and attitudes of the individual in order for adoption to occur (Rogers, 1995; Dobbins, Ciliska, et al., 2002).

How is Information Used?

There are generally three types of research use: direct (instrumental or engineering), selective (symbolic or legitimating), and enlightening (conceptual). Direct use of research is something that directly affects the policy solution without much adjustment. An example of direct use of research is when the Institute of Medicine released the *Too Err is Human* report resulting in the Clinton Administration almost immediately instituting a panel to address these issues in health care (IOM, 1999; Folz, 2004). Selective use of research is strategic and

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legitimates and sustains predetermined political positions instead of directly creating action. When research is used to justify a position that has already been taken, it is referred to as political use of research. When research is used to justify inaction, it is referred to as tactical use of research (Weiss, 1979; Willison, 1999). For example, a senior public health official in a state ranked last in the SHR's report could use this information symbolically to engage funders and others to appropriate more money to public health issues. Enlightening uses of research help to establish new goals or benchmarks and help to enrich or deepen the understanding of the complexity of policy issues (Willison, 1999). For example, research on the effects of the built environment in public health help expand the conversations around policy issues relating to obesity.

The degree to which information is used (i.e., direct, selective, or enlightening) depends on the decision-maker, the types of policy questions, and the policy issue. In addition, values strongly influence decision-making. Particular values are embedded in the formal and informal institutional structures for decision-making (Lomas, 2000). The use of information may depend on the values of those responsible and accountable for the distribution of information, and the roles of interest groups and policy networks. Lomas describes values as ideologies (the views about what ought to be done), beliefs (assumptions about what is), and interests (responses to incentives and rewards). He also states that clear linkages are needed between the information and how it is framed and the predominant focus and value orientation of the policy community using the information (Lomas, 2000). Other researchers have pointed out that information has a political dimension and users need to be sensitive to questions regarding its wider social and political values and effects (Davis & Howden-Chapman, 1996).

Policy issues also influence the ways information are used in policy. Lavis argues that large-scale decisions may require information that is broader in scope than is typically produced by discipline-specific research (Lavis, Ross & Hurley, 2002). McKinlay argues that information based on less scientific convention is more likely to accommodate bigger issues and more likely to influence policy that support major socio-political change (Dobbins, Ciliska, et al., 2002). In addition, parts of a policy issue may not be readily influenced by information while other parts may be more open (Majone, 1989; Dobbins, Ciliska, et al, 2002). The type of policy process is also significant in how research is used. An open, fluid model of policy process may use research as ideas, whereas a more partisan, incrementalist process of policymaking may use research as argument (Dobbins, Ciliska, et al., 2002).

Receptors/Policy Entrepreneurs

Individuals or organizations can operate as receptors for information in the policymaking process. A receptor is a type of policymaker who is accountable for developing and maintaining linkages with researchers. Establishing a receptor function with accountabilities for developing and maintaining linkages with researchers could be a systematic way of creating more opportunities for interactions with potential users of research. Sustained interactions between researchers and policymakers appear to make a difference in the creation of evidence-based policies (Lomas, 2000). Kingdon also created the term "policy entrepreneur" as an individual who champions or leads a policy process, including facilitating information from various sources into policy (Kingdon, 2003).

Summary

This literature review begins to characterize the elements that are useful in using the SHR to affect policy change. This review shows a large gap in the understanding of how rankings are used as a communication format in health policymaking. Significant gaps also remain in understanding the mechanisms through which communication campaigns gain the publics interest and engage policymakers. The intersections between how policymakers perceive and use population-level evidence to affect policy also contain significant gaps. The literature supports more active dissemination of information, engagement of public and policymakers through media advocacy, and stresses the importance of crafting audience appropriate messages. However, it is still not clear as to what dissemination approaches work best with which decision-makers in which kinds of settings.

Chapter 3: Methodology

Background and Results for Planning Study of SHR Campaign

A preliminary Institutional Review Board (IRB)-approved study was conducted to help

inform this study. The aims of the preliminary research were to identify processes by which

policymakers have used the UHF SHR to affect policy change. The primary approach of the

preliminary study was to interview a group of key informants who had experience using the

SHR information. Purposive sampling was used because the population who actually use the

SHR information is very limited and little information is known about how individuals

actually use a ranking in policy settings. The analysis of interviews was conducted using a

grounded theory (GT) approach (Glaser & Strauss, 1967; Chenitz & Swanson, 1986).

The results from seven preliminary interviews suggested several explanatory

frameworks for how policymakers used the SHR to affect policy change. They include: the

characteristics of the originator of the SHR report, the rankings as symbol, data entrepreneurs

who operate within the public health context but perceive other private and public sector

users of the SHR, and policy communities. The study hypothesizes that the consistency of

the format of SHR information allows data entrepreneurs to translate the overall ranking into

a symbol that can be used to tell stories and make comparisons to engage others in action.

Additionally, the study hypothesized that effective data entrepreneurs can transform the

overall state ranking to specific components to facilitate local action.

Conceptual Model

The literature on public will campaigns points to a general theory of change that includes message dissemination, media advocacy, and public awareness to create policy change. As illustrated in Figure 2, public will campaigns with policy change as their outcome are based on the process of media, and public and policy agenda-setting (Bohan-Baker, 2001). This conceptual model illustrates the theory of change for the qualitative evaluation study.

Figure 2

Theory of Change for UHF SHR Public Will Communication Campaign[6]
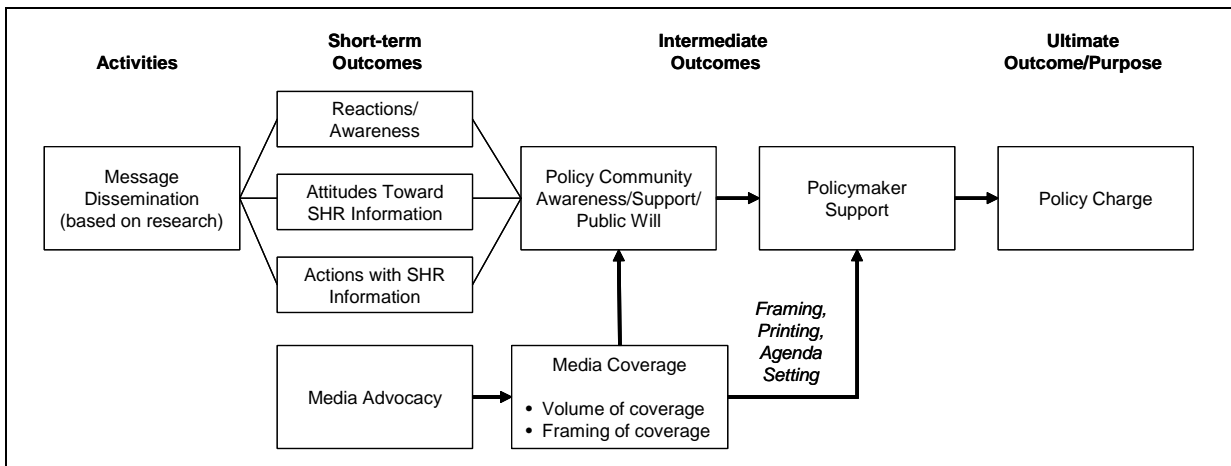
Research Methods

The primary research approach for this study comprised three types of evaluation: formative, process, and outcome. Formative evaluations of communication campaigns assess the strengths and weaknesses of campaign materials and strategies during a campaign's implementation (Coffman, 2003). Strengths and weaknesses can be defined by the subjective experiences of the receivers of the communication messages. Essentially, the formative evaluation measured the strengths and weaknesses of the SHR campaign through qualitative interviews with stakeholders to determine their levels of awareness, interest, and action with

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[6] Source: Theory of Change for Public Will Campaigns (Coffman, June 2003).

the messages and information disseminated as the SHR campaign. Specifically, strengths and weaknesses of the SHR campaign were assessed by addressing the following research aims and questions:

Aim 1: To evaluate the communication campaign for the UHF SHR.

- Which policymakers were involved? Who are the target audiences for the SHR information?

- What were the responses of policymakers to information contained in the SHR?

- Through which channels did policymakers receive information about the SHR?

- What interests of policymakers led them to use the SHR?

- Which aspects of the SHR were most helpful to policymakers?

- Were there differences in reactions to the SHR based on a state's rank?

Aim 2: To examine the significance of the SHR as a format for presenting health information.

- Were there differences in policymakers' reactions to the SHR based on a state's rank?

A formative evaluation was conducted to help shape future SHR campaigns. This type of evaluation is similar to marketing research approaches and methods (Balch & Sutton, 1997) and was used to identify possible campaign strategies and provide information about potential target audiences and messages (Valente, 2001). This type of evaluation primarily involved testing the awareness and saliency of the information presented in the SHR report as well as the ranking. Semi-structured qualitative interview data were used to answer the formative evaluation questions.

A process evaluation was conducted to assess the SHR campaign's delivery and implementation. Process evaluation measures effort and the direct outputs of campaigns (Coffman, 2002). This type of evaluation was used to assess the following research question:

- What impact did the publicity campaign for the SHR have on news coverage of the SHR?

Content analysis (Neuendorf, 2002) of the UHF publicity and dissemination campaign and news reports on the SHR were used to answer the process evaluation question.

Outcome evaluation measures effects and changes that result from the campaign (Coffman, 2002). The outcome evaluation of the SHR was focused on proximal outcomes, because assessment of long-term outcomes (e.g., policy change) is difficult to evaluate. This type of evaluation was used to assess the following research aim and questions:

Aim 3: To identify activities and short-term outcomes initiated by policymakers or decision-makers who have used the United Health Foundation (UHF) State Health Rankings (SHR) to facilitate policy change.

- What did policymakers do with the information from the SHR?

- What barriers limited use of information from the SHR by policymakers?

- What facilitators aided use of information from the SHR by policymakers?

- How did differences in states' ranks relate to use of the SHR by policymakers?

Semi-structured qualitative interview data were used to answer the outcome evaluation questions.

Participants

To obtain information-rich interviews, purposive sampling was used to recruit study subjects (Patton, 1990). Therefore, study participants were selected based on use of the SHR report to affect policy change. The proposed study included two sample groups: policymakers who have used the SHR to affect policy change and staff members of United Health Foundation who are familiar with the SHR. All participants were recruited and interviewed by phone and contacted at a phone number and setting of their choosing. The seven participants from the planning study were also included in this sample through review of their previous interview transcripts.

Participant selection continued until the research questions defined above had been sufficiently characterized, and saturation was reached. Recruitment and interviews were conducted during the months of August, September, and October 2005.

Selection Criteria

For this study, only those policymakers who had used the SHR to affect policy change in their state were recruited. The definition of "having used the SHR information to affect policy change" includes those decision-makers who used this information both proactively and reactively (positive and negative actions) to affect policy change in their state. An example of proactive use (positive action) of the SHR information could include a state-level policymaker using the information to influence a governor's decision about appropriations for health. An example of reactive use (negative action) of the SHR would be a budget officer who used a low ranking to cut public health funding in a state.

Study participants were recruited from lists of people who previously contacted UHF regarding the use of the SHR information, as well as from a list of current state Chief

Information Officers (CIOs) who received the SHR information from UHF each year. In addition, study participants were solicited from the Association of Health Care Journalists (AHCJ) and the Association of State and Territorial Health Officers (ASTHO). A list of potential contacts was obtained through discussions with UHF and contacts within ASTHO. These potential subjects were then sent an e-mail message asking those who had used the SHR if they would like to participate in this study.

AHCJ members were contacted through an e-mail message sent to their membership listserv soliciting members to participate in this study. Once members responded, they were screened for eligibility and sent the informed consent to participate. Also, UHF staff members and outside contractors who had fielded calls or had experience with the media analysis were contacted and asked about UHF methods of dissemination and public relations messaging.

Data Collection Methods

Data for the formative and outcome evaluation were collected through interactive phone interviews. Two semi-structured interview guides were used and questions were modified or deleted depending on participants' answers. Interviews were approximately 30 to 60 minutes long. The tone was conversational, and interview guides were used to facilitate the interview (see *Appendix A* and *Appendix B*).

Data for the process evaluation included a collection of SHR publicity, dissemination strategy materials, and news articles collected from the 2004 release of the SHR. The UHF collected 513 news articles (N = 513) over the months of November and December 2004. A 25% sample of this collection was used for analysis (n = 134). These articles served as the population of news articles from which the content analysis was conducted. A codebook,

based on the messages disseminated by UHF for the 2004 release of the SHR, was created to assess a sample of the news articles.

Data Collection Procedures

To fully describe and examine the process from the point of awareness of SHR to taking action to change policy, data were collected retrospectively from the participants and UHF. To protect against bias, interview questions were open-ended. This approach also encouraged participants to give rich data. In addition, after each interview, a field notes form (see *Appendix C*) was used to record data from the interview session, as well as any insights, thoughts, and emotions that were realized during the interview. Field notes were documented within 48 hours of each interview.

Moreover, each interview was digitally audio taped. To ensure reliability and validity of the study, interviews were transcribed verbatim. After completing all interviews, transcripts were coded and categories were constantly compared with previous work to formulate the themes and patterns of the analysis. Constant comparison and reflexivity was practiced to ensure that the interview data directly supported the analysis of the research questions and to determine how closely they followed the proposed conceptual theory.

Human Subjects Protections

Informed Consent

An informed consent form (see *Appendix D*) was sent to each participant at the time the interview was scheduled. A signed consent form was collected by fax or e-mail prior to the first interview.

Confidentiality of Subjects

To protect the privacy of participants, their information was not identified by their name. Although names were used during interviews, names were not used in transcribing the data or in writing or communication of any kind thereafter. All participant information provided has been stored without name identifiers. Original audiotapes are stored on a CD-R file in a locked file drawer and will be destroyed upon completion of this research paper. Every effort was taken to protect the identity of others mentioned by study participants. Names or organizations mentioned in the interview were not transcribed.

Sources of Data

Members of UHF, ASTHO and AHCJ facilitated data collection through referrals (i.e., snowball sampling). Data collection continued until saturation of the research questions was adequately obtained. Data for the process evaluation came from internal documents at UHF and their collection of news coverage (November to December 2004) from the 2004 SHR release.

Data Analysis

The process for coding the interview transcripts for this study was based on approaches credited to Miles and Huberman (Miles and Huberman, 2001) and Taylor-Powell and Renner (Taylor-Powell & Renner, 2003). The steps of analysis included: (1) reading the interview transcripts, (2) focusing the analysis on the research questions, (3) categorizing information by themes or patterns associated with research questions, (4) grouping and describing the larger patterns and connections within and between categories, and (5) interpreting the patterns, trends, and connections (Miles & Huberman, 2001; Taylor-Powell & Renner, 2003). ATLAS ti was used to support this analytic process.

The data analysis for the process evaluation included descriptions of the distribution of the SHR publicity and actual news print coverage from November 8, 2004 to December 6, 2004 that occurred after dissemination of the publicity materials. These two sources of information were compared and the similarities and differences were described. Key messages in the publicity materials and news reports were compared. Based on this review, a codebook, as shown in *Appendix E*, was created to determine the frequency of the messages disseminated as part of the SHR publicity campaign. News analysis results were categorized by publication date.

Instrumentation

Examples of instruments can be found in *Appendices A*, *B*, *C*, and *E*.

Chapter 4: The Findings

This chapter reports the results and analysis of the evaluation of the communication campaign for the UHF SHR. The following findings are presented to answer the overall research question about how the UHF SHR influenced state policymakers. Transcripts from the qualitative interviews were analyzed using Atlas ti® which facilitated use of the codes presented in *Appendix F*. Transcripts were read and then quotations or text was highlighted and categorized into the root codes listed in *Appendix F*. Finally, the quotations or highlighted text was further categorized into themes and patterns presented in the tables that follow as part of the findings chapter. The results and analysis of this qualitative evaluation are presented for each research question. *Appendix G* presents the timeline for all evaluations.

Question 1: Which policymakers were involved with the SHR communication campaign?

In searching for policymakers who used the UHF SHR report, we found many were aware of the report but few claimed to have used the information. Table 5 lists the sample of policymakers interviewed for this study based on the criteria that they took action with the UHF SHR report in some way.

Table 5

Sample of Policymakers Who Took Action with UHF SHR

Policymaker	State	Occupational Function
1	Minnesota	Staff Member, United Health Foundation
2	Wisconsin	Academic
3	Louisiana	Senior Staff Member, Public Health Department
4	New Mexico	Senior Staff Member, Institute for Public Health
5	Oklahoma	Communications Director, Department of Health
6	Oklahoma	Professor, Member of Board of Health
7	Washington	CEO Health Foundation
8	Washington	Freelance Health Journalist
9	Oklahoma	Health Policy Director, State Medical Association
10	Iowa	Former Director, Public Health Department
11	North Dakota	Public Information Officer, North Dakota Department of Health
12	Texas	Evaluation Consultant, Arkansas Department of Health
13	Minnesota	Communication Director, Minnesota Department of Health
14	Colorado	Researcher for Colorado College, State of Rockies Project
15	Mississippi	Dean of School of Nursing
16	Rhode Island	Former State Health Director
17	Florida	Academic, Former Deputy Secretary of Health, Florida; Former Commissioner of Health for Oklahoma

In recruiting for the qualitative study, people were asked to participate if they used or took action with the SHR report. During the recruitment process, many policymakers reported being aware of the report but few stated that they used the SHR information. Additionally, directors of ASTHO were asked for recommendations of state policymakers who took action with the SHR information. These directors also mentioned that state and territorial health officials were aware of the UHF SHR report; however, they believed these officials would not use the information for fear of jeopardizing their positions. Essentially, those that responded and participated in the qualitative study came from five professional sectors: academics, public health departments, health foundations, journalism (e.g., journalists and editors), health care consulting, and health policy (e.g., state medical associations).

Table 5 lists the sample of policymakers interviewed for this study based on the criteria that they took action with the UHF SHR report in some way. The results of the qualitative interview evaluation show that there are two types of involvements with the SHR information: active and passive. Table 6 categorizes policymaker involvement as either active or passive. Active involvement is defined as those policymakers who sought out the SHR information to fill their needs and used the information as part of their work or organization's initiatives with parties outside of their professional sphere. An example of active involvement is the following excerpt from the interview with a health policy director who participated in the qualitative study (the following response is from the question: have you used the SHR information?):

> I've used it. I've passed it on to other people. I passed it on to our Alliance on Health and Tobacco, which I actually have chaired for the last 2 years, so I'm in a position to use it. And I think the other thing too is that [Participant 6] uses it all the time, and he's always talking to people. You know, he may talk with the Rotary downtown or he may talk with a group of physicians or docs at the College of Medicine at the University of Oklahoma. He uses it all the time. No matter who he talks to he always brings up the United Health Foundation rankings.

Passive involvement is defined as those policymakers who were aware of the SHR information but did not proactively seek the information for themselves and either did not use the information as part of their work at all or only used the SHR information in limited ways (e.g., using the SHR information only with people in their professional sphere). An example of passive involvement is the following excerpt from the interview with a former state health director who participated in the qualitative study (the following response is from the question: have you used the SHR information?):

Table 6

Policymaker Involvement with UHF SHR Report by Active or Passive Type

Policymaker Involvement with UHF SHR Report	
Active Type	Passive Type
Academics	Communication directors of public health departments
Senior Public Health officials	Public health officials
State officials (e.g. Governors)	State officials
Journalists	Journalists
Editors	Editors
Health policy directors (e.g. State medical association)	
Health care / public health consultants	
CEO of health foundation	

> Any time you talk about spending the publics' money, you're talking a highly political issue. And the State Health Department, in my view, there are things that you can really take a stand on but you have to have a good partnership, and that's where the Kids Count model [refers to Rhode Island Foundation using Annie E. Foundation's Casey Kids Count report to build public will campaign around children's health issues] was so successful and things like national report cards don't come with a ready-made partnership. I really tried to think about why I've made so little use of the report card and that's what I came to is that because there isn't a local political connection it's very hard to use it to build that kind of coalition. If you can get the coalition going, then you might be able to make use of that data more easily.

As Table 6 illustrates, the distinction between active and passive involvement with the SHR information is not stagnant. In certain political and organizational contexts, policymaker's roles may force only passive involvement with the SHR information. An example of movement from passive to active involvement by the same policymaker is illustrated with the following excerpt from a senior public health official [response to the question: who was involved with the SHR information?]:

> The communication's director—he was the one who heard about it—and then he brought it to the attention of the Assistant Secretary of the Office of Public Health. So, I'm over [at] the health department and then she brought it to the attention of the Secretary of Public Health. And I have been with this for two administrations. The first time it [the SHR report] came out I was talking to one set of people and then when it came out I was talking to another set of

people. Alright, so when the first time it came out, I was in a kind of oppressive administration and they were just afraid that here was something else we were going to get beat up about. They didn't take it as an opportunity to make something happen. It was almost damage control the first time. This time [under second administration] it was "let's take this and let's make this work for us." Which is what I always like to do.

The trends in the qualitative interviews distinguished the characteristics of active policymakers as acting in entrepreneurial ways with data sources, specifically the UHF SHR. Therefore, these policymakers will be termed as "Data Entrepreneurs." Analysis of the qualitative interview transcripts shows that data entrepreneurs can be characterized in the following ways illustrated in Table 7.

Table 7

Characteristics of Data Entrepreneurs

Characteristic	
▪ Champions or change agents	▪ Facilitators of knowledge to others
▪ Proactive	▪ Highly credible
▪ Risk takers	▪ Empowered (either through position, organization structure, and/or intellectual power)
▪ Realistic	▪ Knowledgeable and analytic
▪ Skilled (both technically and interpersonally with data, politics, people, and systems)	

Journalists and editors of newsprint organizations can also be associated with active and passive involvement with the SHR information. In attempting to recruit journalists and editors into the qualitative study through the AHCJ, it appears that the majority of journalists and editors were not readily aware of the UHF SHR report. From the qualitative interview with a journalist, it appears that journalists' involvement with the SHR information is dependent on press releases, their own networks of information, and the desires of their editors. An editor who was interviewed via e-mail for this study suggested that editors would

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be interested in information contained in the UHF SHR if it fits with the regional issues of

the day, or if their journalist made a case for using this information.

Question 2: Who should be the target audiences for the SHR information?

To answer this question, participants in the qualitative study were asked to identify

target audiences. Table 8 lists suggested target audiences for the UHF SHR report by

participant. A general theme arising from the interviews was that, since the SHR report is a

summary measure of health, it attracts a broader constituency and audiences that can focus

on health as a larger issue (e.g., foundations focused on improving population health in a

multidimensional way vs. American Lung Association whose focus is more limited).

Table 8

Potential Target Audiences for the UHF SHR Report

Policymaker	State	Suggestions for Target Audiences
2	Wisconsin	People with a statewide perspective; State health departments (but often they work from a defensive position with information); some legislatures such as senators and the governor and the governor's office; state health officer; Press officers
3	Louisiana	SHR report is written at too high a level for general public to activate; Whoever can use it, should influence people with more power than themselves; nurses, doctors, regional administrators; using the SHR directly with communities is difficult because it is difficult to bring social determinants to a community and expect them to activate or define a problem
4	New Mexico	Academic/independent voices; Academics from health sciences centers who would form a writing/editorial committee, State department of health (from other states as well), State-run regional health programs (New Mexico has no local health departments, public health in the state is fragmented, and the state has no state center for health statistics)
5	Oklahoma	President of the state board of health; Communications directors may not be best audience because they are "in the hot seat" for responding to the SHR report
6	Oklahoma	Champion of the data who is articulate, recognizes trends and points out relationships with the data, and is able to persuade others to engage in fundamental causes of poor health status
7	Washington	A person or organization with a vision for improving health; a person or organization who builds partnerships around this vision; a person or organization who can use the SHR as an educational tool; a person or organization who can create a health leadership summit and engage key leaders

Table 8 (continued)

Potential Target Audiences for the UHF SHR Report

Policymaker	State	Suggestions for Target Audiences
8	Washington	A person or organization who can educate reporters and editors (on summary measures of health, SHR (not all editors understand health care or the relevance of health information); governor's office; Journalists via the AHCJ; Robert Pear from *The New York Times*; Reporters and editors at major publications like *The Los Angeles Times*, *The Washington Post*, and *The Boston Globe* (these leading publications attract attention of other editors and reporters across the nation); Stateline.org in Washington, DC (online news service operated through Pew Charitable Trust); Capitol Beat (an association of Capitol reporters and editors); National Conference of State Legislators; Alliance for Health Reform (holds regular meetings on newsworthy health topics)
9	Oklahoma	Rotary clubs; Groups of physicians at University health centers; State health department; Hospital associations and state medical associations (staff of these associations really make "stuff" happen); Business communities; Committees and councils both within and outside of state medical associations; health professionals
10	Iowa	Persons, organizations, or the private sector who can build support through *Healthy Iowans 2010* process; Public, private and nonprofit organizations who have an interest in something they can promote from SHR (e.g., health department and the American Lung Association); ASTHO, National Association of County and City Health Officials (NACCHO); Students and academics of public health programs; Association of Schools of Public Health (ASPH)
11	North Dakota	People who deal with data in public health departments or associations (Information officer was not able to use the SHR)
12	Texas	Arkansas General Assembly; Arkansas Public Health Foundation; Consulting firms that have health care practices; Health management associations; Public health consulting firms; Academics at public health schools
13	Minnesota	Elected officials; Anyone you wanted to celebrate for contributing to having a high ranking
14	Colorado	Collectives of state officials from the Rocky Mountains
15	Mississippi	Staff of policy centers of governmental, nonprofit, and advocacy organizations; Anyone attempting to use data to influence policymakers; Staff policy analysts; Students (medical, nursing and public health); Universities and associations with a preventive health curriculum
16	Rhode Island	Broader health and social service organizations and nonprofits (e.g., Rhode Island Foundation); Not state agencies for state agency to take positions on information contained in SHR because its solutions are usually tied to public tax dollars and health officials are usually elected or appointed); Anyone who is savvy at building partnerships to address the complex health issues (social determinants); Poverty Institute at Rhode Island College; Institute in Community Health at Brown University as part of medical school; Foundations that can start state-based discussions; Policy people in state legislature and governor's office

Table 8 (continued)

Potential Target Audiences for the UHF SHR Report

Policymaker	State	Suggestions for Target Audiences
17	Florida	State boards of health (only four states have this though); Legislative committees; Advocates; Public health staff who use SHR as an educational tool (SHR was not used to same extent as in Oklahoma; Oklahoma used SHR as an educational tool); People who care about health outcomes; State quality improvement organizations; Public health agencies at state and federal levels

A review of policymakers who were actively and passively involved with the SHR information and the information provided in Table 8 listing the suggestions for target audiences for the UHF SHR report by participant reveals some audiences that may be beneficial to target. While Table 7 lists the current audiences that receive a copy of the SHR report or any other type of material pertaining to the SHR report on an annual basis, Table 9 and Table 10 list current and suggested target audiences that could be beneficial in furthering the purpose of the SHR report—to stimulate public conversation concerning health in our states, as well as provide information to facilitate citizen participation.

Table 9

Current Audiences Annually Receiving SHR Communication Campaign Materials

Current Target Audiences
Major print, TV, radio, and news channels—accessed through a public relations firm
Governors and the health staff of each state
State health officers
People on state health care committees
Anyone requesting a hardcopy of the SHR report via the website
Other state offices when appropriate
State CIOs
UHF Partners: APHA and Partnership for Prevention
Human resource contacts at various businesses

Table 10

Audiences to Target for SHR Communication Campaign

Suggested Target Audiences
State foundations or nonprofits whose interests are aligned with broad population health ideals (e.g., Rhode Island Foundation)
Academics and students in public health schools, medical schools, nursing schools, preventative medicine programs, and other schools or programs whose goals are aligned with population health ideals.
State and local legislators
Federal government and policy staff aligned with population health ideals such as the Department of Housing and Urban Development (HUD), Health Resources and Services Administration (HRSA), Department of Health and Human Services (DHHS)
Association of Health Care Journalists (AHCJ)
State medical and hospital associations
Association of Schools of Public Health (ASPH)
Health care and public health consulting firms
Insurance companies
National community organizations (e.g., Rotary Club, Lions Club, Knights of Columbus)
State boards of health
State quality improvement organizations

Question 3: Through which channels did policymakers receive information about the SHR?

To assess the dissemination of the UHF SHR report, all participants in the qualitative study were asked to tell their story of how they became aware of the report and how they communicated it to other policymakers. Table 11 describes the information channels through which participants received the UHF SHR report. Participants in the qualitative study became aware of the SHR report either by receiving a copy of the report directly from UHF, through the SHR website, being invited to serve on the UHF SHR methods panel, from colleagues (e.g., editors or state information officers), or through press coverage in their state.

Table 11

Information Channels for the UHF SHR Report

Policymakers	Information Channels for Disseminating the SHR
UHF	UHF works with Arundel Street Consulting to create and write the report and create its key messages. UHF disseminates the SHR through a Public Relations (PR) firm who connects the information to major print, TV, and radio channels. This PR firm creates press releases for these channels. UHF also manages a dissemination list for mailings of the hardcopy SHR report to health staffers, all governors, all state health officers, people on state health care committees, anyone who requests a copy via the website, and other state government offices when appropriate. UHF also creates, updates, and manages a website for the SHR report and its information. UHF created the partnerships with APHA and Partnership for Prevention and makes connections to the letter writers for each years report. UHF also holds a conference call with state chief information officers (CIOs) to introduce the SHR to them earlier than its release and to field any questions and concerns CIOs may have.
Academics/ Researchers	Academics communicate the SHR information to many different audiences, including the local (e.g., county level) media and local health officials. Publications, position papers, issues briefs, policy briefs, and websites have been the vehicles through which academics have communicated the SHR ranking and information.
State Information Officers	State Information Officers respond to various media channels questions. State Information Officers communicated internally to other state health officials and state administrations.
State Health Officials	State health officials participating in this study communicated the SHR information internally in the state health department or reactively responded to local media channels. Louisiana is a case where state health officials communicated the SHR information to the local legislative, parish, and community levels using the SHR as a health platform for numerous discussions. Oklahoma is a case where the President of the board of health communicated the SHR information to many audiences—academic, state government, legislative, nonprofit, advocacy, and business communities.
Consultants	Consultants communicated the SHR information in writing as evidence to support their findings as part of consulting assignments.
Foundations	Foundations communicated the SHR information to numerous audiences (e.g., University of Washington, communities in each county, governor, the Washington Health Foundation through their Healthiest State in the Nation Campaign).

Analysis of the qualitative study showed that the majority of both data entrepreneurs and passively involved policymakers received the information about the SHR either by hardcopy directly from UHF, through the SHR website, through serving on the UHF SHR methods panel, from colleagues (e.g., editors or state information officers), or through press coverage in their state. However, there were considerable differences in how data entrepreneurs and passively involved policymakers disseminated the SHR information to

others. Passively involved policymakers tended to just pass the SHR information along to

other audiences as it was presented in the report. In contrast, data entrepreneurs tended to

communicate the ranking of the state through story-telling, or translated the ranking into its

components that predominantly affected a state's ranking. An example of a type of

translation is illustrated with the following excerpt from an academic [response to the

question: how did you use the SHR information?]:

> We decided we are interested in overall summary measures of population
> health and the state health rankings and the SHR was one we thought did a
> good job considering the broad determinants. So, as we were looking at it, one
> of the things we decided to examine was why a rank would change. What is it
> that would have our state's health ranking dropping over the years? So, we did
> a pretty simple component analysis where we modeled some scenarios and
> said well, if this trend hadn't happened—if tobacco specific [*sic*] ranking
> hadn't dropped from 8th to 22nd—what would our rank have been? And we
> just rank through and modeled several scenarios and the other thing we
> discovered was that two components that have driven our change in rank—
> one is our relative decline in rank in infant mortality and our relative decline
> in tobacco issues. Those two factors if we maintained our rank it wouldn't
> have dropped in overall measure of health. That has had a fair amount of
> discussion.

Data entrepreneurs also tended to transform the SHR information or format into

information useable by local policymakers. For example, data entrepreneurs created a

localized version of the SHR report (e.g., the State of the State report published in

Oklahoma). These localized reports were disseminated to local media and state and local

policymakers.

Question 4: What interests of policymakers led them to use the SHR?

To assess the dissemination of the UHF SHR report, all participants in the qualitative

study were asked why they were interested in the UHF SHR information. Table 12 lists the

interests of the policymakers who used the UHF SHR report, grouped into five major

categories. Many participants used the SHR report because their work or goals were aligned with broader population health objectives.

Table 12

Policymakers' Interests in the UHF SHR Report

Policymaker Category	Interests in UHF SHR report
Academics/Researchers	Regional comparisons; Serving on UHF SHR methods panel; Academic interests in summary measures of health;
State Information Officers	Media contacted them for response; Job responsibility
State Health Officials	Media contacted them for response; SHR report is targeted to health departments; SHR ranking and information provides metrics to target for quality improvement efforts
Consultants	Regional comparisons; Credible data from independent source
Foundations	SHR ranking and information provides metrics to target for quality improvement efforts; Regional comparisons

Analysis of policymakers' interests in the SHR report can be consolidated to two predominant reasons: opportunities for regional comparisons and opportunities to use information that supported personal or organizational visions and goals. The majority of participants were interested in the SHR report because their work or goals were aligned with broader population health objectives. The SHR report was interesting to many policymakers because of the ranking of states and the ease of making regional comparisons.

Question 5: Which aspects of the SHR were most helpful to policymakers?

The literature review points to usefulness as a key factor in effective dissemination of research and information to policymakers. In order to assess this factor in relation to the UHF SHR report, participants in the qualitative study were asked which aspects of the UHF SHR information were most helpful to them. Table 13 lists these factors of the SHR report.

Table 13

Helpful Aspects of UHF SHR Report

Helpful Aspects of the SHR Report
▪ The ranking gets the media's attention and is an easy-to-use tool to engage the media.
▪ SHR rank and information is very relevant to a national audience because its units of observation are states.
▪ The consistent publication and methodology of the SHR report has facilitated its use and credibility.
▪ The website is very user friendly and the UHF staff is very receptive and helpful in answering questions regarding this data.
▪ Having a dedicated page in the SHR report for each state is very helpful.
▪ The support for public health and per capital spending on public health components were helpful in making arguments for appropriations for public health in some states.
▪ The ranking and its components were helpful in creating public shame or positive acknowledgement that could be leveraged with public officials to get them to act to improve health.
▪ The fact that the SHR report is published and disseminated by UHF and its partners is very helpful. Policymakers and the general public tend to be wary of data that comes from a state agency.
▪ SHR ranking and its information is a good vehicle to start conversations about improving the population health of a state.
▪ SHR ranking and its information are useful as educational tools and tools for accountability and quality improvement at the state level.

The analysis of the aspects that policymakers found most helpful pointed to a main theme of the SHR information being an important, reliable, and credible source of information capital. Policymakers repeatedly stated that the SHR report carried considerable credibility because it was published by a non-governmental source (i.e., UHF) and was endorsed by well respected partners and methods panelists. Additionally, policymakers saw the SHR report as a readily accessible source of information with a consistent ranking format since 1990. This format allowed policymakers to create dialogue and point out policy problems and solutions regarding the health of their state with a variety of audiences, including sources in the media.

Question 6: What did policymakers do with the information from the SHR?

One reason this evaluation was undertaken was to document best practices in activating

the SHR information. Table 14 lists the uses of the UHF SHR report by policymaker

category from among policymakers who were interested in the qualitative study.

Table 14

Policymakers' Use of the UHF SHR Report

Policymaker Category	Use of UHF SHR Report
Academics/Researchers	Transformed the information to the components that have the most effect on their state's ranking and communicated the information to many different audiences, including the local (e.g., county level) media and local health officials. Wisconsin and Oklahoma provide examples of transforming and translating SHR information to a local level. Position papers, policy briefs, and websites were created to further disseminate the transformed and translated information. Academics used the SHR ranking and information in courses with public health and health professionals to provoke thinking on issues including preventive health and health status.
State Information Officers	All of the state information officers interviewed did not proactively use the SHR information further after receiving the report from UHF. However, they did discuss and sometimes disseminate the report with their state health officers. Mostly, state information officers were reactive to the SHR report.
State Health Officials	Many state health officials were reluctant to take action with the SHR report because they held political positions and could not take the risk to call out problems or solutions to various health issues in their states that the SHR report points out. For those state health officials who have used the SHR report, they activated this information internally to others within their state's health department for discussion and for educational and quality improvement efforts. Louisiana state health department and the governor's office activated and sustained the use of the SHR ranking and information through its health reform agenda. In this case, the SHR report is used as markers for health outcomes, accountability, and quality improvement. Oklahoma is another example of state board of health referencing SHR information in its State of the State report.
Consultants	SHR information is used to point out issues within state health departments and to affirm recommendations for changes as part of consulting assignments.
Foundations	SHR ranking and information are used as markers for health outcomes, accountability, and quality improvement to support the Healthiest State in the Nation campaign. Rhode Island cites importance of Rhode Island Foundations use of Annie E. Casey Foundation's Kids Count ranking by state foundations. Rhode Island supports state foundations taking political risks with SHR ranking and information to formulate policy problems and solutions at a state level.

The analysis of how policymakers used the SHR information showed four main themes

of use. The SHR information was predominantly used as a communication and public

relations tool to create discussions regarding a state's health or make regional comparisons to

a state's health. Some policymakers also used the SHR ranking and its information as a

template or model for creating a localized summary measure of health for their state. For example, academics in Wisconsin created a report that ranked counties within Wisconsin using county-level health information presented in a similar format as the UHF SHR report.

Other policymakers used the SHR ranking and its information as an educational tool to raise awareness of the health status of their state. Lastly, some policymakers used the SHR ranking and its components as a tool for accountability and quality improvement. For example, a nonprofit foundation in Washington was beginning to use the SHR report as one of its sources for measuring improvement in overall health for the state.

Question 7: What barriers limited use of information from SHR by policymakers?

In order to evaluate the overall influence of the UHF SHR report on policymakers, all participants in the qualitative study were asked to identify barriers to using the UHF SHR information. Table 15 lists the barriers that participants who used the UHF SHR report experienced.

The overarching theme in the barriers to using the SHR information is that only a small, limited audience readily relate to population health ideals and its language. Policymakers frequently noted their frustration that this lack of understanding imposed. The barriers to using the SHR information appear to be dependent on the level of compartmentalization of the policymakers' job role (e.g., state health official limited by governmental role compared to CEO of nonprofit health foundation who can address all components of health defined in the SHR).

The broader the influence or responsibilities that the policymaker had on influencing all factors related to health status, the lower the level of barrier to using the SHR information. As is, the SHR information is difficult to engage the general public and would require

Table 15

Barriers that Limited Use of the UHF SHR Report

Barriers	Background
Rankings can provoke negative attention, from media and others.	Public health departments and communication officers may become resentful of SHR information because of added work and training needed to respond to these questions. The SHR report forces health departments to be proactive with information. However, some departments complain that UHF does not give them enough time to prepare for the release of their ranking. ASTHO will not publicly promote this report because they do not want to support rankings of states and risk alienating any of their constituents.
SHR information contains components of health that cannot be directly addressed by one governmental department, specifically the health department.	State health departments are often the department that are held accountable for the ranking, its information, and the overall health status of the state. However, the SHR information is not compartmentalized to be addressed only by health departments at the state level.
The information contained in SHR is best activated at the county level but the SHR information is only available at the state level.	The SHR information is from state-level sources of publicly available resources.
The purpose of the SHR report is to stimulate public conversation concerning health in our states, as well as provide information to facilitate citizen participation.	The SHR report is disseminated through the UHF website, through a public relations firm to various media channels and directly to state health departments and selective legislative and business audiences. These dissemination channels may limit its access to some audiences.
The broad measures used in the SHR may limit its messages that can be disseminated to the general public, its spin in the media, and its utility in the policy arena.	Organizations and policymakers who are focused on a single issue, which is common, may have a difficult time in using the overall ranking and its components. Policy decisions are usually made on specific issues.
The report cannot include all facets of health.	Advocacy groups, and some specialized organizations (e.g., American Lung Association) may be limited as to whether or how they could use the overall ranking and its components because it may not address their organization's objectives.
The ranking is not precise.	Because the overall ranking is a composite score of components that are weighted, each ranking may have a significant standard deviation or margin of error. Therefore, rankings are subject to speculation and are best used as political symbols to discuss a state's healthiness in relation to other states.
The methodology may be difficult for some audiences to understand. Data-savvy users are critical to the use of the ranking and the information provided in the SHR report.	The ranking is a composite measure and its calculation may not be readily understood by audiences without some exposure to these types of measures.
The ranking and some components may be difficult to explain in simple terms.	Components like per capita spending on public health are difficult to boil down into a one sentence explanation. Also, some users do not understand the ranking and how to use the information provided in the SHR to compare their state's information to national data.

Table 15 (continued)

Barriers that Limited Use of the UHF SHR Report

Barriers	Background
The ranking is limited unless its users can answer what are the underlying problems and solutions.	Users will need to do more work when using the ranking to transform the ranking into its components and translate the information into useful messages to local audiences.
Culturally, some legislatures, states, or organizations are not receptive to ranks or comparisons to other states.	For example, the information officer in North Dakota states that her office cannot use rankings to influence policymakers.
Rankings can be double-edge swords in that they can be used to create attention, but that attention may not be positive or helpful.	For example, the state budget director in Oklahoma decreased the public health budget after learning that the state's rank decreased from the previous year. In Rhode Island, the health director was leery of using the ranking for fear of jeopardizing key partnerships that took considerable time to create.

considerable investment in educating the public on broad summary measures of health and

population health ideals. Therefore, development of a specialized audience or cadre of

population health audiences may be the catalyst to creating policy communities who can

sustain a substantive conversation regarding population health ideals.

Question 8: What factors facilitated the use of information in the SHR by

policymakers?

In addition to recognizing barriers, all participants in the qualitative study were asked to

identify factors that facilitated using the UHF SHR information. Table 16 lists the

facilitators that participants who used the UHF SHR report experienced.

The analysis of factors that facilitated use of the SHR information showed two main

themes: characteristics of policymakers who used the SHR and the characteristics of the SHR

report itself. The main facilitative characteristics of the SHR report were that policymakers

were able to use the SHR report as a form of credible information capital. Policymakers

could use this information capital to start conversations, talk about health issues within a

state, and create partnerships or coalitions to address these issues with diverse groups of

Table 16

Factors that Facilitated Policymaker Use of the UHF SHR Report

Facilitators	Background
The fact that the SHR report is disseminated in association with the APHA and Partnership for Prevention.	Participants have noted that the connections with the APHA and Partnership for Prevention have supported the credibility of the report.
UHF works with a public relations firm and offers this as a resource to any state that needs support in responding to their ranking.	This resource is available to states if they reach out for support and ask UHF. UHF's work through the public relations firm allows greater connection to media.
The methods panel is very well respected and lends credibility to the report.	Many participants have noted their respect for the methods panel and their contribution to the credibility of the SHR.
Cultural or organizational norm of ranking or regional comparison.	For example, a cultural norm for Wisconsin is to compare and rank themselves to Minnesota—in everything from college entrance exams to football. This norm creates attention and interest. Many participants stated that governmental, political, and social arenas really respond to rankings.
Translating and transforming the SHR rank and information to a local level helps to sustain its message and further activate the purpose of the SHR report.	Participants in Wisconsin, Louisiana, Washington, and Oklahoma have all translated the SHR information to a local level either through formal county- or local-level reports (e.g., State of the State Health report in Oklahoma) or through formal and informal discussions with local communities, parishes, or counties.
The ranking (e.g., A, B, C) is easier to activate than a report card.	For example, Wisconsin originally formatted their county report as a report card and the feedback on this report was that local policymakers could not take action with this information because it could not be as easily translated to a meaningful message.
Translating the rank to the components that are contributing to it and its changes facilitates its use.	Participants who have activated the SHR rank and information have done so by translating their states ranking into the components that have the largest influence on its movement.
The SHR report provides an opportunity for story-telling by celebrating the positives and pointing out challenges.	Many participants told stories of how the ranking and its components facilitated them to tell stories about the state of health in their state.
The SHR report is unique in its broad focus on health.	Many participants use this report to facilitate a larger focus on the determinants of health.
"Data Entrepreneurship" are leaders, organizations, or champions of the data who understand the SHR ranking and its information and can translate and transform the information into stories and information that engages others in discussions of improving health.	Those states who have a "Data Entrepreneur" in their state have been most successful at sustaining the use of the SHR ranking and its information.
The SHR information is broad and thus may facilitate discussions and formation of coalitions to address broad health issues.	Leaders activate the SHR information with a variety of audiences to get various perspectives on addressing the health status of their states.

people from a variety of sectors (e.g., academia to business communities). Several policymaker characteristics were seen as important to facilitate the use of the SHR information, including abilities to act as a change agent; entrepreneurial spirit (i.e., to recognize and relentlessly pursue new opportunities to serve a population health mission; to engage in a process of continuous innovation, adaptation, and learning; to act boldly without being limited by resources currently in hand; and to exhibit a heightened sense of accountability to the constituencies served and for the outcomes created); and sophistication with data, communication, and politics.

Question 9: What impact did the publicity campaign for the SHR have on news coverage of the SHR?

The results of the content analysis of the articles collected from the November 2004 release of the 2004 SHR report are presented in Tables 17 through 22. The amount of agreement among two coders, or inter-coder reliability, was calculated as raw percent agreements and Scott's pi for each variable of the codebook (refer to *Appendix E*) (Neuendorf, 2002; Scott, 1955). All variables, except ST18 and ST88, achieved a percent agreement of 80% or higher and a Scott's pi of .75 or higher. Only two variables differed from this agreement—the variable ST18 had a percent agreement of 75% and ST88 had a percent agreement of 65%. The corresponding Scott's pi values for ST18 and ST88 were .65 and .56, respectively. Table 17 is the rank of states presented in the 2004 UHF SHR report.

Table 17

2004 UHF SHR Rank Order by Quintile

Quintile	Rank	State	Quintile	Rank	State
Top 10	1	Minnesota	30 - 40	30	Michigan
	2	New Hampshire		31	New York
	3	Vermont		32	Delaware
	4	Hawaii		33	Indiana
	5	Utah		34	Maryland
	6	Massachusetts		35	Texas
	7	North Dakota		36	Missouri
	8	Connecticut		37	Nevada
	9	Wisconsin		38	New Mexico
	10	Maine		39	Kentucky
10 - 20	11	Iowa	Bottom 10	40	Oklahoma
	12	Nebraska		41	North Carolina
	13	Colorado		42	Florida
	14	Rhode Island		43	Alabama
	15	Washington		44	West Virginia
	16	Kansas		45	Georgia
	17	New Jersey		46	Arkansas
	18	Idaho		47	South Carolina
	19	South Dakota		48	Tennessee
	20	Virginia		49	Mississippi
20 - 30	21	Oregon		50	Louisiana
	22	California			
	23	Arizona			
	24	Alaska			
	25	Pennsylvania			
	26	Montana			
	27	Ohio			
	28	Wyoming			
	29	Illinois			

Table 18 illustrates the overall placement of the UHF SHR article in news print. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 18

Placement of UHF SHR in Newspaper

Ranking	Percent	
	Front Page	Other Page
Overall (n= 158)	17	83
Top 10 (n = 29)	24	76
10 – 20 (n=18)	6	94
20 – 30 (n= 23)	9	91
30 – 40 (n= 27)	15	85
Bottom 10 (n= 48)	54	46

Table 19 lists the type of news stories that reported the UHF SHR information. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 19

Types of News Stories Reporting UHF SHR

Ranking	Type of News, %			
	News Analysis	Feature	Editorial / Commentary	Other
Overall	8	80	11	1
Top 10	3	87	10	—
10 – 20	22	61	17	—
20 – 30	4	88	4	4
30 – 40	11	82	7	—
Bottom 10	—	85	15	—

Table 20 shows the prominence of a state's rank or the United Health Foundation State Health Rankings report. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 20

Prominence of UHF and State's Ranking in Article

Ranking	Head Line, %				Lead Paragraph, %			
	UHF SHR	Rank	Both	Other	UHF SHR	Rank	Both	Other
Overall	—	62	—	38	6	3	82	9
Top 10	—	48	3	48	3	76	21	—
10 – 20	—	61	—	39	11	—	18	61
20 – 30	—	61	—	39	9	—	87	4
30 – 40	—	63	—	37	7	—	78	15
Bottom 10	—	63	—	37	4	4	92	—

Table 21 illustrates the frequency of citing the personal behavior components that make up the overall rank. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 21

Citations of Personal Behavior Components in Article

Ranking	Personal Behaviors, %				
	General Mention	Prevalence of Smoking	Motor Vehicle Deaths	Prevalence of Obesity	High School Graduation
Overall	27	70	57	77	50
Top 10	33	55	66	83	76
10 – 20	—	83	44	89	61
20 – 30	9	61	61	83	30
30 – 40	15	74	52	67	59
Bottom 10	44	83	63	81	40

Table 22 illustrates the frequency of citing the community environment components that make up the overall rank. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 22

Citations of Community Environment Components in Article

| Ranking | Community Environment, % | | | | | |
	General Mention	Violent Crime	Lack of Health Insurance	Infectious Disease	Children in Poverty	Occupational Fatalities
Overall	24	50	64	43	70	30
Top 10	34	66	90	34	83	24
10 – 20	22	44	83	28	94	50
20 – 30	9	48	74	52	70	48
30 – 40	22	52	70	33	96	26
Bottom 10	27	52	35	56	54	27

Table 23 illustrates the frequency of citing the health policy components that make up the overall rank. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 23

Citations of Health Policy Components in Article

| Ranking | Health Policies, % | | | |
	General Mention	Percent of Health Dollars for Public Health	Per Capita Public Health Spending	Adequacy of Prenatal Care
Overall	24	43	46	44
Top 10	34	48	41	31
10 – 20	22	56	39	39
20 – 30	9	48	48	48
30 – 40	26	37	59	22
Bottom 10	29	42	48	58

Table 24 illustrates the frequency of citing the outcomes components that make up the overall rank. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 24

Citations of Outcomes Components in Articles

	Outcomes, %						
Ranking	General Mention	Limited Activity Days	Cardio-vascular Deaths	Cancer Deaths	Total Mortality	Infant Mortality	Premature Death
Overall	10	8	53	36	34	67	18
Top 10	10	17	59	24	41	72	17
10 – 20	22	33	61	44	22	50	28
20 – 30	9	4	74	26	26	70	22
30 – 40	11	0	44	37	41	81	26
Bottom 10	2	2	40	44	27	56	10

Table 25 illustrates the frequency of citing the producers, partners, or collaborators of the SHR report. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 25

Citations of Expert Producers and Collaborators of UHF SHR

	Experts and Collaborators, %					
Ranking	UHF	Previous Years Reports	APHA	Partnership for Prevention	CDC (letter writer)	March of Dimes
Overall	100	80	33	32	8	2
Top 10	100	79	59	55	17	3
10 – 20	100	83	33	28	11	—
20 – 30	100	87	39	39	22	4
30 – 40	100	89	44	44	4	4
Bottom 10	100	67	15	15	—	—

Table 26 illustrates the frequency of citing various sources in relation to the SHR report. These results are illustrated for the entire sample and by ranking broken down by quintiles as illustrated in Table 17.

Table 26

Sources Cited in Connection with the UHF SHR

| Ranking | Other Sources Cited in UHF SHR Articles, % | | | | | |
	State Politicians	Health – state agency	Local Politicians	CDC	Other	None
Overall	14	25	2	5	66	28
Top 10	3	17	—	7	59	38
10 – 20	—	50	—	22	56	22
20 – 30	—	30	—	4	70	26
30 – 40	4	11	4	4	74	26
Bottom 10	25	15	4	—	63	33

As part of the evaluation of the impact of the publicity campaign for the SHR report on news coverage, an assessment was made of the type and prominence of the SHR coverage in news print. The analysis shows that on average, more than 80% of newspapers reported the SHR information as a non-front page story, as part of the features section of the newspaper. Thus, on average, approximately 80% of the SHR news stories were not communicated in a time-sensitive manner within 24 hours of releasing the 2004 SHR report.

Another assessment of news print stories was made to establish the prominence of citing a state's rank, the UHF SHR report, or both of these messages. The analysis shows that, on average, a state's rank was frequently used in news print stories in both the headline and lead paragraph. While mention of the UHF SHR report by itself was not commonly cited in the headline, it was frequently cited in the lead paragraph. More than 60% of all news articles, on average, mentioned the rank of a state in its headline and over 80% mentioned both a states rank and the UHF SHR report in its lead paragraph. Almost 40% of the news articles, on average, alluded to a states rank, a regional comparison, the overall health of the United States, or to a national health survey in its headlines. On average, almost 9% of news articles mentioned the general health status of the United States or referenced the 2004

election debate of the healthiness of blue (i.e., Democratic) vs. red (i.e., Republican) states in its lead paragraph.

Another part of the evaluation of the impact of the publicity campaign for the SHR report included an assessment of the prominence of the components of the SHR report as messages in the news print SHR coverage. Out of the eighteen components presented in the 2004 SHR report, the most commonly cited components (cited on average over 60% of the time) included: prevalence of smoking, prevalence of obesity, lack of health insurance, children in poverty, and infant mortality. On average, approximately 25% of the news articles generally mentioned the overarching categories of health including: personal behaviors, community environment, and health policy. The general category of health outcomes was only mentioned, on average, approximately 10% of the time in news articles. The least commonly cited components (cited lower than 30%, on average) included: occupational fatalities, limited activity days, and premature death. As a group, the analysis shows that the personal behavior components were the most prevalently cited.

This evaluation also assessed the frequency of citing the producers and collaborators of the 2004 UHF SHR report. The majority of news reports cited the UHF (100%) and previous years SHR reports (80%), on average. Additionally, almost a third of the articles also cited the partners of this report, APHA, and Partnership for Prevention. The letter writers for the 2004 report were cited less than 10% of the time, on average. Finally, the evaluation assessed the sources that were cited in connection with the UHF SHR report. On average, almost a third of the articles did not cite anyone, while a quarter of the articles cited personnel in state health agencies. The majority of articles, 66% on average, cited officials from UHF or its partners.

Question 10: Were there differences in policymakers' or the media's reactions to the SHR based on a state's rank?

The results of media reactions to the SHR based on a state's rank are illustrated in Tables 17 to 20. The reactions to the SHR based on a state's rank from the qualitative interviews with policymakers listed in Table 17 appear to be unrelated to state rank On the whole, there were minimal differences in the media's and policymakers reactions to the SHR report based on a state's rank. A main difference in the media's reactions to the SHR, based on a state's rank, was seen in the placement of the UHF SHR information in news articles.

The trend shows the bottom 10 states placing the story about the SHR report on the front page more frequently than other pages. No difference was seen in the type of news story reporting the UHF SHR report. The analysis of the qualitative interviews shows that the reactions to the SHR appear to be unrelated to a state's rank. The most significant and sustained reactions to the SHR information came from policymakers in the states of Wisconsin (2004 rank of 9), Washington (2004 rank of 15), Oklahoma (2004 rank of 40), and Louisiana (2004 rank of 50). These reactions were considered significant and sustained because policymakers were interested in the SHR over multiple years, and there was more than one policymaker involved with the SHR from these states.

Question 11: How did differences in states' ranks relate to use of the SHR by policymakers and the media?

The results of the media's use of the SHR information based on a state's rank are illustrated in Tables 17 to 26. The use of the SHR based on a state's rank from the qualitative interviews with policymakers listed in Table 17, again appear to be unrelated to a state's rank. Overall, there were minimal differences in the media's and policymakers use of

the SHR report based on a state's rank. A minor difference was seen in the news articles from the top 10 ranked states where only the rank, and not both the SHR report and rank, was reported at a greater frequency. No distinctive differences were seen for the personal behavior components, except in the news articles for those states ranked from 10 to 20, which did not generally mention personal behaviors as a component of a state's health.

Differences were seen in the news articles for both the top 10 and bottom 10 ranked states. For the lack of health insurance component, the top-ranked states cited this considerably more frequently (990%) than average, while the bottom 10 cited this component considerably less frequently (35%) than average. No differences were seen for health policy and health outcomes components.

News articles for the top 10 states tended to cite the APHA and Partnership for Prevention more frequently than average. Notably, the 2004 letter writers (CDC and March of Dimes) were not cited at all in news articles from the bottom 10 ranked states. The most remarkable difference in reporting on the SHR based on a state's rank was seen in the sources that news articles cited in connection with the report. State politicians were much more likely to be cited in news articles from the bottom 10 ranked states than any other states. Another distinction, states ranked from 10 to 20 tended to cite the CDC more frequently than any other states.

The most significant and sustained use of the SHR information came from policymakers in the states of Wisconsin (2004 rank of 9), Washington (2004 rank of 15), Oklahoma (2004 rank of 40), and Louisiana (2004 rank of 50). These actions were considered significant and sustained because policymakers used the SHR for multiple years, with more than one policymaker being involved with the SHR from these states. Therefore,

this analysis shows no difference in the use of the SHR by policymakers based on a state's

rank.

Chapter 5: Discussion

The discussion chapter summarizes the entire process of this dissertation including the findings of the evaluation of the SHR and its communication campaign. This chapter addresses the research aims and goals of the dissertation and points out the key lessons learned, best practices, and relevance of the SHR to policymakers. Limitations of this research will also be discussed as related to the use of rankings to affect policy change. The chapter concludes with summary recommendations on how the SHR can be used to affect policy change.

The impetus for this dissertation began when members of the UHF SHR methods panel asked how policymakers take action with the SHR. In the spring of 2004, a focus group was convened with members of the National Institute for Public Health Leadership, representing approximately five different states. Group members were asked how they took action with the SHR. Surprisingly, there were few answers to our research question, and numerous questions for us to answer, including the actions policymakers could take to increase the rank of their state within the SHR.

A systematic literature search was conducted. A review of popular media sources showed that rankings proliferated as a format for communicating a variety of information (e.g., *America's Best Graduate Schools*, *America's Best Hospitals*). However, very little had been written on the concept of rankings with no studies of how rankings were used to affect policy change. Supporting information was found from literature of summary measures of

health, evidence-based policymaking, translation, diffusion, and dissemination of information into policy. The literature speculated on the importance of summary measures, like the UHF SHR, for affecting policy change; however, no published studies investigated this assumption.

In the fall of 2004, a preliminary study was conducted to determine the feasibility of studying the research question of how state policymakers take action with the UHF SHR to affect policy change. Qualitative interviews with 7 participants were conducted in September and October 2004. Transcripts were analyzed and themes were reported at the 2004 APHA meeting. The concepts of data entrepreneurs and rankings as a form of information capital arose from these preliminary interviews. These interviews confirmed that this topic was researchable and a proposal was defended in April 2005.

From the proposal defense, many improvements were made to the research protocol. The most significant improvement was redefining the overall research question to how the UHF SHR influences state policymakers. The proposal defense also clarified gaps in awareness from UHF's dissemination of the SHR and the generation of media attention and its affect on the public. As a result of these discussions, the literature review was bolstered with a review of the public will communication campaign information. This literature base brought forth the theoretical model that this final dissertation is founded on, the Theory of Change for Public Will Campaigns (Coffman et al., 2003), as expressed in Figure 3.

Figure 3

Model for Change for UHF SHR[7]
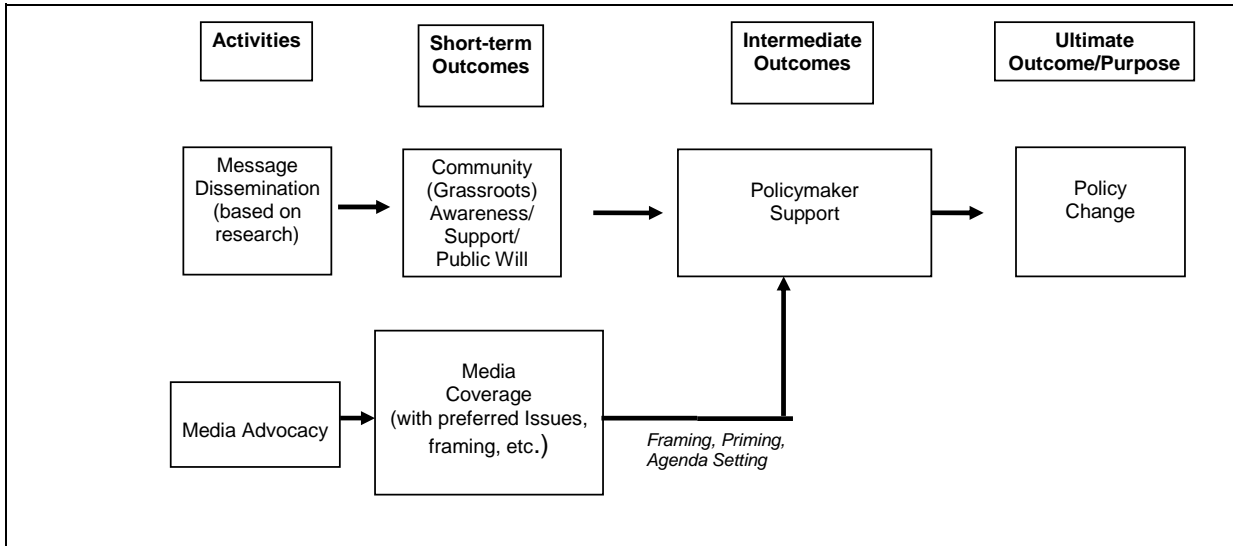
To answer the research question for this dissertation, an evaluation was conducted

utilizing two primary methods: 1) qualitative interviews with policymakers who used the

SHR and 2) content analysis of news articles from the 2004 release of the UHF SHR. In

August and September of 2005, a total of 17 interviews were conducted with policymakers

from 13 different states. Content analysis was done by reviewing the dissemination materials

from the 2004 UHF SHR campaign and creating a codebook from which a sample (n = 134)

of news print articles (N = 513) collected by UHF were analyzed.

The research aims of this dissertation were to evaluate the communication campaign for

the SHR, to identify the activities and short-term outcomes initiated by policymakers who

have used the SHR to facilitate policy change, and to examine the significance of the SHR as

a format for presenting health information. The goals of this dissertation were to investigate

how the UHF SHR influenced policymakers to affect policy change. Ultimately, the results

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[7] Source: Theory of Change for Public Will Campaigns (Coffman, June 2003).

of this evaluation should assist others in translating the SHR information into actionable

steps for affecting policy change that improves population health.

This evaluation is important because it sheds light on three streams of information—

rankings as a format for communication, rankings and their use by policymakers, and

rankings and their use in creating public will campaigns for improving population health.

This discussion also clarifies the best practices in using the SHR. This evaluation points out

the value of the SHR and highlights the reasons that the SHR gets and deserves attention.

This discussion highlights the key uses of the ranking as an effective, symbolic

communication tool for improving the overall health of citizens of the United States. Finally,

the discussion describes the overall significance of the UHF SHR in light of the findings

from this evaluation.

Why is the SHR important?

The results of the dissertation clarify the importance of the SHR as a format for

communication, and clarify the mechanisms, processes and best practices for using the SHR

to affect policy change for improving population health. Both the literature review and

evaluation components of the dissertation have pointed to gaps in policymakers' needs for

information and gaps in evidence to make valuable decisions that can affect policy change

for societal improvement. This evaluation of the SHR has shown that the SHR is an

important tool that policymakers can use to start conversations, call attention to health

problems, educate constituents on health issues, and hold organizations and people

accountable for improving the health of a state. Even more so over the past 4 years that the

United Health Foundation has placed resources into cultivating media advocacy for this

campaign, the SHR continues to be an important indicator of health status in America. The

SHR gets the attention of policymakers particularly because it is published by a non-governmental institution, the United Health Foundation. In addition, policymakers can readily check on the reliability and credibility of the SHR report because it is constructed from publicly available data sources such as information from CDC and the U.S. Census Bureau. This transparency improves the credibility of the SHR report.

As a communication format, this evaluation shows that the ranking is an important tool for soliciting and focusing attention of health issues pertinent to a state. The ranking allows policymakers to create stories about their state's health, to celebrate those responsible for improving their state's health, and to shame others to act to improve health. Overwhelmingly, the ranking provokes policymakers at varying levels of involvement in state health to ask the questions: *how are we doing* and *how can we do better?* In a sense, the ranking is a powerful tool that symbolizes an annual health exam for a state. Unlike a grading system though, the ranking implies clear distinctions or hierarchies among states. As revealed in the qualitative interviews, policymakers often compared the rank of their state to the rank and status of regional states.

A reason for the success of the ranking as a communication format could be because it suits the norms of American society. The format of the ranking lends itself to competition, comparison, and commoditization—widely held values of a capitalistic American society. Policymakers can use the rank to compare themselves to others and make arguments for or against allocation of resources to support health in their state. Although the ranking itself does not contain economic analyses of state's health status, policymakers can make economic cases for investing in health based on the ranking and its underlying components.

The ranking is not only a symbol for economic investment though. This evaluation also demonstrates that the ranking and its components are used as tools to generate policy communities (or public will) whose focus is improving population health of their state. The ranking and its components are a very important tool for educating others on the issues that impact the health of members of a state. It is an organizing tool that points out dissatisfaction in the status quo and rallies the interests of those who seek improvement. This evaluation has shown that the ranking is useful as a quality improvement indicator—a barometer of health improvement.

Best Practices—Use of the SHR

The qualitative interviews pointed to a number of processes that policymakers used that constitute best practices for activating the ranking and the components in the SHR report. Policymakers that consistently used the SHR (i.e., data entrepreneurs) did so by translating their state's ranking into the components that were most responsible for the rankings movement. Data entrepreneurs then used the ranking as a symbol to create attention to the factors that affect population health in their state. The ranking and its components were then transformed to indicators that were meaningful to local levels within their state (e.g., indicators pertaining to counties or parishes). In essence, this transformation was conducted to form policy communities at local levels that could follow similar processes as state-level policymakers. This process pushes the ranking down to an actionable level while creating policy communities who can activate the information contained in the SHR.

Another best practice with the ranking and its components is to use the SHR as an accountability tool. Once the ranking and its components have been translated and transformed to local or actionable levels, the overall ranking can be used as a measure of

quality improvement. The ranking can then be used to hold policymakers accountable for changes to the population health of their states. Data entrepreneurs are responsible for transforming the ranking into evidence that policymakers can use to create and defend arguments for improving population health.

Study Limitations

Since this evaluation relied on snowball sampling of only those policymakers who used the UHF SHR report, its findings may not be generalizable to other ranking systems. The UHF SHR also has unique characteristics that are important to ranking systems, including, consistency and length of time in reporting the ranking and credibility of the author (i.e., UHF and its partners—the American Public Health Association, APHA, and Partnership for Prevention). In addition, the ranking compliments the American cultural norm of comparison and competition.

Recommendations

Based on the analysis of the evaluation of the UHF SHR communication campaign, the following recommendations could be implemented to further stimulate public conversation and facilitate policymaker support and thus ultimately to increase the likelihood of policy change that supports the population health ideals contained in the SHR report.

- Generate public will by creating and supporting "data entrepreneurs." Data entrepreneurs are the catalysts that are needed to activate the ranking as a symbol of population health in a state. They are needed to translate and transform the ranking into actionable components that create policy communities that affect policy change. This cascade of information diffusion is an important process in the activation of the SHR information to affect policy change to improve population

health. Regional health conferences could be initiated and data entrepreneurs could

be created through these health conferences.

- Strengthen media advocacy components of current communication campaign.

    Direct connection and education of journalists and editors could be an important

    step to creating greater media advocacy. Healthcare journalists and editors could be

    reached through educational forums on population health as part of the AHCJ.

APPENDICES

Appendix A: Semi-Structured Interview Guide—UHF Participants

The following is the semi-structured interview guide for Interview 1 with UHF staff members.

1. At UHF, what is your role or relationship to the State Health Rankings initiative?
2. Do you have contact with or manage others who have contact with decision-makers who use the State Health Rankings?
   a. If so, could you give me some examples of the types of issues that you field in regards to the State Health Rankings report?
3. What are United Health Foundation's expectations for this research that I will be conducting?
   a. What would be useful information to you and UHF?
4. Being in your role at UHF, how would you describe the process of decision-makers taking action with the SHR report to produce policy change in their states?
   a. Are there other processes?
5. What are the barriers for using the SHR information to affect policy change?
6. What do you think the decision-makers who are able to use the SHR are doing differently than others who have not used the SHR?
7. How do you think decision-makers create meaning with the SHR report?

The following is the semi-structured interview guide for Interview 2 with UHF staff members.

1. Would you please describe how you or UHF promotes the State Health Rankings?
   a. In a typical year, do you actively talk with state health officials or anyone else to see what they have done with the SHR report, or do you just respond to whomever takes the initiative to call or reach you?
2. Would you please describe how UHF disseminates the SHR report each year?
   a. Would you describe the format of the teleconference with the state CIOs?
   b, Are there follow-up conversations with the state CIOs, or is this the only time UHF actively engages CIOs?
3. Who are UHF's partners in promoting the State Health Rankings?
   a. What do these partners do to support the State Health Rankings?
   b. How does ASTHO support the SHR?
4. Who do you think the audience is for this report?

      a. How well do you think the SHR report meets this audience's needs?

5. Have you ever done a formal assessment of the utility of the SHR report with any audience?

      a. Have you ever received any informal feedback on how useful the SHR is to a state or individual?

6. What are the barriers for using the SHR report to affect policy change?

7. What do you think the decision-makers who are able to use the SHR are doing differently than others who have not used the SHR?

Appendix B: Semi-Structured Interview Guide—Non-UHF Participants

The following is the semi-structured interview guide for Interview 1 with anyone who

has used the UHF SHR to affect policy change.

I would like to ask you to reflect and tell your story of using the United Health

Foundation's State Health Rankings (SHR) for policy change in your state.

1. How did you first become aware of the State Health Rankings?
   a. Were there other people involved?
2. What were your initial impressions of the SHR report?
3. How did you decide to use the SHR report?
   a. What was the process that you went through to decide whether or not to use the SHR information?
   b. What were the factors that may have influenced the way you perceived the SHR report?
   c. hat did you actually do with the report?
4. Why was the SHR information interesting to you?
5. Was the information contained in the SHR meaningful to you? If so, why was this?
6. How did you react to the ranking of your state?
   a. Was the ranking meaningful to you? If so, why was this?
7. What was the political context at the time when you first perceived the SHR report? Your organizational context? Other things that may have influenced your perception?
8. Has this political context changed and, if so, did this impact the way you use the SHR report now?
9. What were the benefits that you thought your organization or you could receive by using the SHR information?
   a. Does your organization still anticipate those same benefits, or have those expectations shifted some since you started using the SHR report?
10. Was the SHR information helpful to you? If so, how?
11. Was the ranking helpful to you? If so, how?
12. Were there any barriers that limited your use of the SHR or the report?
13. Were there things that facilitated or helped you used the SHR or the report?
14. Who do you think are the target audiences for the SHR? For the entire report?

15. In what ways are you not fully satisfied with using the SHR report?

   a. Please explain and tell me why, and what have been the main problems with using the SHR report in the past?

   b. Do you have any suggestions for ways to resolve these barriers or problems?

16. What suggestions can you offer for improving the SHR that would help you be more successful in changing policy in the future?

17. Finally, if you had to describe to another state health official the process by which you first became aware of the SHR report including all the steps you would recommend taking to affect policy change—what would you tell them?

   a. How would you guide them to do this?

18. Do you know of anyone else who has used the State Health Rankings report and would you be willing to connect me to these people to interview them for this study?

That is all the questions I have for you today. Thank you for your time.

As stated in the informed consent, I will be transcribing this interview into a Word document. I may have further questions for you after completing a number of interviews with other successful state policymakers like yourself. If needed, I will contact you again to see if there is a mutually agreeable time to talk.

Appendix C: Field Notes Form For Qualitative Interviews

ID# _____ Interviewer _____ Interview # _____ Interview Date _____

Context of Situation:

Physical Environment:

Theoretical or Explanatory Insights:

Personal Reflections/Emotions:

Additional Notes:

**From Perception to Action: Developing A Model for Using the United Health
Foundation's State Health Rankings Report to Affect Policy Change**

Consent Form

Version September 30, 2004

WHAT IS THIS STUDY ABOUT?/WHAT IS THE PURPOSE OF THIS STUDY?
You are invited to participate in a research study entitled "From Perception to Action:
Developing a Model for Using the United Health Foundation (UHF)'s State Health Rankings
(SHR) Report to Affect Policy Change." The purpose of the study is to interview state
policymakers who are known to have used the SHR to affect policy change in their state. The
results of all interviews will be used to produce a model for taking action with the SHR
report to affect policy change. You are being asked to participate because you have used the
SHR information to affect policy within your state, or you know of others who have done
this.

WHO IS THE PRIMARY INVESTIGATOR?
This study is a student project that will ultimately fulfill requirements for a doctoral
dissertation. The study is being conducted by Ms. Susan Zelt, Cecil G. Sheps Center for
Health Services Research, CB#7590, Chapel Hill, NC 27599-7590; Phone: 919-619-4224;
Fax: 919-966-5764. Ms. Susan Zelt's faculty advisor is Thomas Ricketts, Ph.D., M.P.H. If
you have any questions about the study, you can call Ms. Zelt, collect, at the above number.

WHAT WILL I BE ASKED TO DO? You will be asked to answer questions and tell your
story of how you first became aware of the State Health Rankings, how you perceived them,
the sociopolitical context of this awareness of perception and the process of how you used
the SHR to affect policy in your state or as a journalist. We plan to audiotape the interview
but will ask your permission before doing so.

We estimate that it will take about approximately 1 hour of your time to complete a one-on-
one open-ended questionnaire to gain information on how you used the United Health
Foundation's State Health Rankings to change policy. Since you are one of the participants
in this qualitative study, there is a possibility that we will need to re-contact you after the
initial interview in order to clarify or gain additional information from you regarding your
experiences with the State Health Rankings.

WHAT ARE THE RISKS AND BENEFITS OF MY PARTICIPATION?
There are minimal risks for participating in this study. There are no direct benefits of participating in this study.

ARE THERE ANY COSTS? The only cost for your participation in this study is the time it takes to complete the interview.
WILL I BE PAID? You will receive no reimbursement for your participation.

SUBJECT'S RIGHTS AND CONFIDENTIALITY: If you agree to participate in this study, please understand that your participation is voluntary (you do not have to do it). You have the right to withdraw your consent or stop your participation at any time without penalty. You have the right to refuse to answer particular questions. You may ask that the recording be stopped at any time.

To protect your privacy, you will be identified by numbers only. Although your name will be used during the interview, your name will not be used upon transcribing the data or in publication or communication of any kind thereafter.   All of the information you provide will be stored without specific identifiers. The original audiotape will be destroyed upon completion of the doctoral dissertation associated with this research.

Every effort will be taken to protect the identity of the participants in the study. However, there is no guarantee that the information cannot be obtained by legal process or court order. You will not be personally identified in any report or publication of this study or its results.

If you wish to withdraw from the study or have any questions, contact Susan Zelt at (919) 619-4224. You may call collect if you wish.

This study has been reviewed and approved by the Public Health Institutional Review Board on Research Involving Human Subjects. If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact—anonymously, if you wish—the Public Health Institutional Review Board, Office of Human Research Ethics, University of North Carolina at Chapel Hill, CB # 7400, Chapel Hill, NC 27599-7400, or by phone 919-966-3012. You may call collect.

The extra copy of this consent form is for you to keep.

AGREEMENT STATEMENTS:

I have read and understand the information presented here, and I freely give my consent to participate in this research.

Signature: Date

IRB Approval Date: _10/8/04_____   Expiration Date: __10/8/05_____

Appendix E: UHF SHR Codebook

For all binomial variables, 1 = YES and 0 = NO.

General Identifying Information

V777 – Coders, SZ = Susan Zelt; Reliability Coder - ET = Erin Taylor
V990 – Project ID = **UHF SHR**
V991 – ID = Individual identifying number **(unique identifier for each article –**
 e.g., "SHR 001")
V992 – Type = Newspaper Title
> **1** – newspaper 1
> **2** – newspaper 2
> **3** – newspaper 3
> ↓
> **50** – newspaper 50
> **88** – other
> **99** – don't know
> **994** – duplicate article

V993 – City and State of newspaper

V994 – Date published/disseminated (mm/dd/yyyy format)

V995 Position
> **1** = *Front page (only combinations of A and 1, e.g., A1 or A01)*
>
> **8** = All other locations
> **9** = Don't know/can't tell

V996 News Type
> **1** = **Hard news**
> (reports of events, etc. within past 24 hours, has to be indicated that events happened in 24 hours)
> **2** = **News bulletin**
> (a list of very brief hard news stories)
> **3** = **News analysis or background**
> (seemingly objective discussion of an event, etc. that has happened in the past 24 hours)

4   =   **Feature**
             (A factual story that is not time-sensitive. Example: May feature a story about a Mom who was discharged a year ago.

5   =   **Commentary/editorial/opinions**
             (Must be labeled as such; letters to the editor should not be in this database and should be coded as "." for all of the variables.)

8   =   **Other**

9   =   **Don't know/can't tell**

Article Focus

Was the United Health Foundation's State Health Rankings report (UHF SHR) or a ranking from the SHR report the focus of the article as evidenced by mentions of either of them in the following?

V997   The lead paragraph is comprised of the first 16 lines of text in a story.

VH1   Head Line UHF SHR
VH2   Head Line Rank – is the rank of a state or states mentioned in the headline?
VH3   Head Line Both (UHF SHR and Rank)
VH88 Head Other
VH99 Head Don't know/can't tell
VL1   Lead UHF SHR
VL2   Lead Rank – is the rank of a state or states mentioned in the lead paragraph?
VL3   Lead Both (UHF SHR and Rank)
VL88 Lead Other
VL99 Lead Don't know/can't tell

General Questions Surrounding UHF SHR

General Question: How were key findings from United Health Foundation's "America's Health: State Health Rankings" framed?

V998 What components of the SHR were mentioned?

     ST01 = Personal Behaviors (general mention of broad topic)
          ST02 = Prevalence of Smoking
          ST03 = Motor Vehicle Deaths
          ST04 = Prevalence of Obesity
          ST05 = High School Graduation
     ST06 = Community Environment (general mention of broad topic)
          ST07 = Violent Crime
          ST08 = Lack of Health Insurance
          ST09 = Infectious Disease
          ST10 = Children in Poverty
          ST11 = Occupational Fatalities

ST12 = Health policies (general mention of broad topic)
    ST13 = Percent of health dollars for public health
    ST14 = Per capita public health spending
    ST15 = Adequacy of prenatal care
ST16 = Outcomes (general mention of broad topic)
    ST17 = Limited Activity Days
    ST18 = Cardiovascular Deaths
    ST19 = Cancer Deaths
    ST20 = Total Mortality
    ST21 = Infant Mortality
    ST22 = Premature Death
ST23 = Regional comparison – top ranked states
ST24 = Regional comparison – bottom ranked states
ST25 = Disparities
ST26 = Regional comparison – surrounding states
ST88 = Other (list them)
ST99 = Don't know/can't tell

V999 What expert producers and collaborators provide information or are mentioned in connection with the UHF SHR or a state's rank? (NOTE: Information can be attributed to them or quoted)

    ES01 = United Health Foundation
    ES02 = Previous years reports
    ES03 = American Public Health Association (APHA)
    ES04 = Partnership for Prevention
    ES05 = CDC (2004 letter writer)
    ES06 = March of Dimes (2004 letter writer)
    ES88 = None
    ES99 = Don't know/can't tell

V1000 What other sources are quoted (or attributed) in connection with the UHF SHR or a state's rank? (NOTE: They can just be mentioned; they do not have to be quoted).

    OS01 = Politicians – state
    OS02 = state agency representatives – health
    OS03 = state agency representatives – other than health
    OS04 = Politicians – local
    OS05 = CDC
    OS06 = Other (list them)
    OS88 = None
    OS99 = Don't know/can't tell

Appendix F: Code Hierarchy for Qualitative Evaluation

Root Categories (codes)	Subcategories (codes)	Themes / Patterns
Policymakers involved	• Policymakers reactions to SHR	Tables 5, 6 and 7
Target Audiences		Tables 8, 9, and 10
Communication Channels	• Key messages • Political processes • SHR as format for health information	Table 11
Policymakers interests	• Credibility / validity • Feelings towards UHF	Table 12
Helpful aspects of SHR		Table 13
Actions of policymakers with SHR information	• Use of Rank • Improving the UHF SHR report • Influence of SHR on media • Leadership • Partnerships • Regional Comparisons	Table 14
Barriers	• Political processes	Table 15
Facilitators	• Political processes	Table 16

Appendix G: Timelines for Studies

Timeline for Qualitative Evaluation – Formative and Outcomes Evaluations

Activity	Jul '05	Aug '05	Sep '05	Oct '05	Nov '05	Dec '05	Jan '06	Feb '06
Qualitative Interviews			▬					
Transcription				▬				
Coding of Interviews					▬			
Data analysis							▬	
Report write-up/completion								▬

Timeline for Process Evaluation

Activity	Jul '05	Aug '05	Sep '05	Oct '05	Nov '05	Dec '05	Jan '06	Feb '06
Development and pre-testing of coding instrument		▬						
Completed coding Instrument				▬				
Coding					▬			
Data analysis							▬	
Report write-up/completion								▬

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