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A White Paper

Obesity in Hawaii

Health Policy Options

Executive Summary

Obesity is a growing public health problem affecting Hawaii. Prevalence rates have rapidly increased over the last ten years, with an estimated 17.6 percent of the State population now falling into the category of obese. Moreover, for certain populations in Hawaii (e.g. Native Hawaiians at 35 percent), the prevalence and severity of obesity is much greater. The problem disproportionately affects minority and low-income populations, with broad ramifications and costs for the State. Obesity greatly increases the risk of many chronic health conditions like heart disease, diabetes, and hypertension. Additionally, the costs associated with treating obesity and obesity-attributable health problems is staggering and expected to continue to rise. The effects of obesity and related consequences can be felt throughout society—within the health care, government, and employment sectors.

Obesity is a problem that is here to stay unless a concerted public policy approach is utilized. The health sector is a critical arena for obesity prevention and treatment strategies to be implemented. This paper examines health policy options to address the growing problem of obesity through the health sector. Moving forward and tackling obesity in Hawaii is a necessity, for the State can no longer afford to wait.

Health Policy Options

For this paper, five policy alternatives examining obesity in the health sector were considered. To assess the strengths and weaknesses of the various policy approaches and prioritize action steps, each alternative was measured and weighed based on the criteria of parity, robustness, and political acceptability. While the alternatives pose certain benefits and disadvantages, each could potentially serve an important health policy function for the State. Here is a summary of policy alternatives proposed in this paper.

Alternatives

1. Develop a task force to identify health insurance coverage gaps for obesity treatment services in Hawaii.
2. Mandate that Hawaii QUEST offer weight assessment screening (twice annually) for beneficiaries.
3. Mandate Hawaii QUEST to cover weight loss surgery and applicable supportive services under its health plans.
4. Mandate that Hawaii QUEST offer dietary therapy as a covered benefit under its health plans.
5. Mandate that private insurers and health maintenance organizations in the State cover dietary therapy under their health benefits plans.

Recommendations

This analysis found that expanding benefits offered through Hawaii QUEST ranked highest. A good place for the State to begin with tackling obesity in the health sector is to expand obesity treatment benefits offered under Hawaii QUEST health plans. Additionally, much still remains unknown about health coverage and benefits gaps in the public and private sectors. The creation of a taskforce, as outlined in the first alternative, is a policy avenue by which the state can investigate and assess health coverage gaps in Hawaii and formulate further actionable priorities. The other proposed alternatives could serve as potential health policy options in the future, but at this point may not be feasible for implementation.

Overview

The Obesity Epidemic

Obesity is a growing public health epidemic affecting the State of Hawaii. The problem impacts a broad spectrum of the population, with ripple effects that can be felt throughout society—within the health care, government, and employment sectors. Currently nothing seems to be halting the spread of obesity, and although prevalence rates are steadily increasing in many of Hawaii's communities, the State is without public policies to tackle this growing health problem.

This paper will examine the epidemic of obesity and health policy options, with an emphasis on the health sector in Hawaii. It will outline the problem and explore possible health sector policy alternatives. Additionally, policy options to promote healthy weight in Hawaii will be examined, weighed, and prioritized.

Scope of the Problem

Defining the Problem

While "obesity" and "overweight" are often used interchangeably when discussing obesity as a health policy problem, the concepts represent different meanings. The two primary measurements used to gauge unhealthy weight (as related to total body fat and increased risk of health complication) are waist circumference and the body mass index (BMI). For the most part the BMI, which is a measure of weight by height squared (kg/m² or lbs/inches² x 703) is used to characterize and differentiate overweight and obese in public health and for public policy.[1] The following categories are generally accepted as classifications of the BMI: less than 18.5 is underweight; 18.5 to 24.9 is a healthy weight range; 25 to 29.9 is overweight; and 30 or greater is considered obese.[2] For example a person that is 5'8" and weighs 165 pounds has a BMI of 25 and considered overweight, but a person who is 5'8" and 200 pounds has a BMI of 30, which falls into the obese category. The term severe or morbid obesity has been used to describe individuals with a BMI of 40 and greater.[*]

In adult populations, obesity (BMI $\geq$ 30) is associated with increased morbidity and mortality, which disconnects obesity from the overweight classification.[3] With children, however, obesity and overweight are defined in a slightly different fashion. For children and adolescents, obesity is classified as a risk for adult obesity and is characterized by a statistical approach linking age and sex, as well as height and weight. Using this type of standard for pediatric classification, BMI between the 85th and 95th percentile (for age and height) is considered overweight; BMI above the 95th percentile is considered overweight or obese.[4]

Prevalence

Prevalence rates of overweight and obesity have soared in the last two decades, with an estimated two-thirds (64.5 percent) of the U.S. adult population self-reporting as overweight,

[*] Rates of severe, or morbid obesity have grown at the fastest rate of any of the overweight classifications. An estimated 4 percent of Americans are considered severely obese ($\geq$ 40 BMI). While the prevalence of severely obese residents is unknown in Hawaii, the number is estimated to be rising.

and almost one-third (30.5 percent) of that number considered obese.[5†] Based upon the body mass index, the Centers for Disease Control and Prevention (CDC) estimates that more than 44 million Americans were considered obese in 2001, an increase of 74 percent in ten years.[6] In the last decade, the prevalence of overweight and obese Americans has increased by 12 percent and 70 percent respectively.[7] Moreover, these same trends are occurring worldwide even as some countries struggle with hunger and undernourishment.[8]

The problem of obesity is fast becoming a serious concern in Hawaii. Although the average prevalence for the State is 17.6 percent—a rate lower than many other states—research suggests that for certain populations in Hawaii, obesity rates are some of the highest in the country and reaching epidemic proportions.[9] Furthermore, the prevalence of obesity has increased among all populations in Hawaii. According to the 2002 Behavioral Risk Factor Surveillance Survey (BRFSS), of ethnic groups represented in Hawaii, Native Hawaiians reported the highest proportions of obesity (37.5 percent), followed by "others" (19.6 percent), and then Caucasian (17 percent). Japanese (8.9 percent) and Filipinos (8.8 percent) had the lowest proportions, but were still affected by the problem.

Childhood Obesity

The number of overweight children in the United States has doubled in the past 30 years, with similar patterns occurring in Hawaii. While not enough research has been done on childhood obesity in the State, data from the Youth Risk Behavior Surveillance System reports that approximately one-third of Hawaii's students consider themselves to be overweight, with another 16 percent at risk for becoming overweight.[10] Moreover, for certain communities in Hawaii, studies show that childhood obesity rates may be twice that of the national average.[11]

Obesity in childhood, particularly adolescence, is a predictor for obesity in adulthood. The age-old myth that children will grow out of their "baby fat" has not proven true in this day and age, with prevalence rates of pediatric obesity rapidly increasing in the State. Childhood obesity is not simply a passing phase, but a condition that follows the child into adulthood.[12] Overweight children past the age of six have a 50 percent chance of remaining overweight into adulthood.[13]

Population Disparities

Overweight and obesity are problems that directly impact the entire spectrum of society, but certain groups and populations nationally, and in Hawaii, are more susceptible to increased body weight and resulting health consequences. These disparities relate to race and ethnicity, culture, socioeconomic status, age, and gender and disproportionately affect low-income and minority communities.[14] Moreover, disparities are also evident in overweight and obese children and adolescents.[15]

In Hawaii, data clearly substantiate that Native Hawaiian and other Pacific Islander populations are more at risk for overweight and obesity and obesity-attributable health complications than other ethnic groups.[16] While higher prevalence rates among these populations may be partially attributable to cultural characteristics, these populations are also more likely to experience poverty, hunger, or inadequate nutrition, and other health disparities.[17] These disparate factors put an individual or family at a greater risk for being overweight or obese.

[†] People often under-report their true weight in self-reported studies; therefore, these prevalence rates may be conservative estimates.

Causes of Obesity

Obesity is caused by a multitude of factors working in unison. While genetics plays a role in the development of overweight and obesity, a variety of other characteristics are believed to be a more influential component.[18] Simply put, weight gain is caused when more calories are consumed than are expended. In this modern environment, however, there is much more contributing to the problem of obesity than what an individual eats or drinks. Most experts agree that the problems of overweight and obesity are the result of genetic, physiologic, psychologic, sociologic, and economic aspects.[19] Together these characteristics have created an environment where obesity-related health problems grow and multiply.[20] Research and current trends pertaining to overweight and obesity clearly show that these are not solely the problem of the individual, but rather problems of society with implications for Hawaii, the nation, and throughout the world.

Nutritional Aspects

The American food environment has changed in recent decades, which has helped problems of overweight and obesity develop and grow. On average, many Americans consume more calories than they expend. The U.S. diet contains large proportions of calorie-dense (high in carbohydrates and fat) foods and less nutrient dense (e.g. fruits and vegetables) foods. People tend to consume meals outside of the home on a regular basis, which are likely to be higher in fat and have more calories.[21] Other nutritional characteristics like carbonated beverage consumption, larger portions, and fast food play a significant role in creating this type of a food environment.

Food is abundant throughout the United States (an estimated 5000 calories/adult/day), yet healthier foods like fruits, vegetables, and dairy products are not always affordable or available in certain areas—namely inner-city and rural locations.[22] At the same time (due to the overabundant food supply), food prices have dropped dramatically, especially more calorie-dense processed foods.[23] These foods are also heavily marketed to the public. Paradoxically, the problem of hunger and food insecurity, which are common in many low-income households throughout the United States and Hawaii, greatly contribute to obesity. Low-income families often have higher rates of hunger, food insecurity, and obesity, as they do not always have access to healthy and nutritious food sources.[24‡] Moreover, studies have demonstrated a strong correlation between food insecurity and higher body mass index.[25]

Food is a big part of life in Hawaii—with a variety of social and cultural meanings surrounding what people eat. Although traditional healthy foods in Hawaii (e.g. taro, fish) are still consumed on a regular basis, a range of other less healthy (e.g. fast food, "plate lunch,") foods are also readily available. Hawaii is an ideal location to eat healthy with fresh fruit and vegetables year round, but often cost is a prohibitive factor for healthy eating as fast and processed foods are typically cheaper than fresh fruits and vegetables. Moreover, in certain neighborhoods in Hawaii (i.e. both rural and urban communities), supermarkets are not easily assessable and residents must rely on quick shops and fast food restaurants for their meals.

‡ "Hunger" is defined as the painful or uneasy sensation caused by the recurrent or involuntary lack of food. "Food insecurity" is the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to obtain foods in a socially acceptable way. An estimated 12.5 percent of the U.S. population is food insecure, meaning that they do not, on a regular basis, have access to enough food for an active and healthy lifestyle. In 2002, an estimated 11.9 percent of the Hawaii population was food insecure.

Physical Activity Aspects

Americans are also much less active now than two decades ago. At the same time as people are consuming more calories on average, they are expending fewer calories. The Surgeon General reports that more than half of all Americans are not vigorously active on a regular basis, and studies show that approximately 14 percent of young people report no recent physical activity.[26] Sedentary activities have become a regular part of American life—with every-day tasks and jobs relying on increasingly less activity. Society now utilizes technology on a regular basis—with television viewing, video and computer games, and other sedentary activities a common component of daily life for most American adults and children.

Despite an ideal location for physical activity and fitness, Hawaii is not an exception to this national trend of inactivity. Many of Hawaii's residents do not meet established physical activity and exercise guidelines. According to BRFSS prevalence data for Hawaii, 50 percent of Hawaii residents do not meet moderate physical activity guidelines, and almost 74 percent do not meet vigorous physical activity guidelines. Moreover, 18.3 percent of people in Hawaii reported no exercise in a one-month time period.[27]

Health Sector Aspects

While the health care industry is now beginning to realize the severity and magnitude of obesity as a health problem, a variety of barriers still exist for addressing obesity through the health sector. The health sector does not routinely assess or treat obesity. Although obesity is generally considered a chronic condition and coded for medical visits, it is still, with a few exceptions (e.g. patients undergoing weight loss surgery), not considered a disease category for insurance reimbursement. Furthermore, state Medicaid[§] programs do not reimburse for the routine care of obesity (e.g. Hawaii QUEST does not cover weight loss surgery).[28] The lack of reimbursement makes it difficult for health providers to assess or treat obesity in general—for fear of not being reimbursed for visits.

Additionally, health care providers and health professions students are generally not taught about best practices for the prevention and treatment of obesity.[29] Moreover, research has shown that a variety of stereotypes and negative attitudes about obesity (e.g. obese people lack self-control and are lazy and that obesity is caused by character flaws) are often evident in physicians and other health professionals.[30] Many patients may be reluctant to discuss weight management, overweight, or obesity with health care professionals because of these negative attitudes.

Consequences of Obesity

Health Consequences

Obesity is associated with significant health problems among adults and children, with an increased risk of morbidity and mortality. It is well documented that obesity raises an individual's susceptibility to many chronic illnesses. Overweight and obese individuals are at

[§] The Medical Assistance Program (Medicaid), which was implemented in 1966, provides health coverage nationwide to eligible beneficiaries (primarily low-income, aged, blind, and disabled). In August 1994, Hawaii's Medicaid Program separated into two methods of services. Generally, for individuals who are age 65 and over, or certified blind or disabled, coverage is provided under Hawaii's Fee-For-Service Medicaid Program where providers are paid directly for their services. For all other individuals, coverage is provided under a managed care program called Hawaii QUEST, which provides health (medical and mental health services) for eligible Hawaii residents. QUEST is administered by the Department of Human Services, Med-QUEST Division and financed through the State of Hawaii and the Federal Centers for Medicare and Medicaid Services. Approximately 125,000 are enrolled in the QUEST Program statewide.

risk for a variety of health conditions including type two diabetes, hypertension, cardiovascular disease, dyslipidemia, certain cancers, gallstones, osteoarthritis, rheumatoid arthritis, premature death, sleep apnea, and respiratory problems, as well as poorer physical functioning status.[31] Additionally, obesity often includes psychosocial discrimination and resulting mental health difficulties (e.g. depression). For children and adolescents, one of the most critical side effects of obesity is that of social discrimination and lowered self-esteem.[32]

The rise in the prevalence of obesity also coincides with increased rates of diabetes (5.6 percent growth for obesity and 8.2 percent growth for type two diabetes in one year), that obesity and diabetes have been called "twin epidemics".[33] Moreover, many diseases that correlate with childhood obesity (e.g. type two diabetes, high blood pressure) were, until recently, diseases of adulthood and rarely found in children. In fact, for children born in the United States in 2000, there is an estimated 30 percent chance for boys and 40 percent chance for girls of being diagnosed with type two diabetes over their lifetimes.[34]

Economic Consequences

Health care costs have risen along with increases in obesity-related health problems. Research shows that healthcare utilization and costs increase as body mass increases.[35] According to a national study of health-related costs attributed to overweight and obesity, combined (overweight and obesity-related) medical expenses accounted for 9.1 percent of total U.S. medical expenditures.[36] Estimates are that obesity costs Americans directly and indirectly $99.2 billion annually and growing.[37] Expenditures on obesity-related health care services among children and adolescents have also increased in recent years. Pediatric hospitalizations for diseases associated with obesity multiplied between 1979 and 1999; hospital costs more than tripled.[38]

The most recent obesity-related statistics put annual U.S. obesity-attributable (not including overweight) medical expenditures at $75 billion in 2003, with approximately half of these expenditures financed by Medicare** and Medicaid.[39] In Hawaii, obesity-attributable costs were estimated at 4.9 percent of all medical costs in 2003, representing approximately $290 million. Moreover, in Hawaii Medicare and Medicaid were responsible for $120 million of obesity-related health care costs for the State.[40] See **Table 1** for obesity-attributable medical expenditures, including Medicare and Medicaid costs, for Hawaii and the United States.

Table 1: Estimated Adult Obesity-Attributable Medical Expenditures, 1998-2000 (millions of dollars)

	Hawaii		United States	
	Dollars	%	Dollars	%
Total Population	$290	4.9	$75,051	5.7
Medicare Population	$30	4.8	$17,701	6.8
Medicaid Population	$90	11.2	$21,329	10.6

Source: Finkelstein, Fiebelkorn, and Wang 2004

** Medicare, which was signed into law on July 30, 1965, is the primary health coverage program for the elderly in the United States and Hawaii. The Medicare program is administered at the federal level and provides health coverage to Americans 65 years of age and over, as well as some people under 65 with disabilities, and people with end-stage renal disease. Medicare is administered by the Centers for Medicare and Medicaid Services and covers 40 million people nationwide. In 2003, Medicare covered 174,633 Hawaii residents.

As **Table 1** shows, government health expenditures (through Medicare and Medicaid) make up almost half of obesity-attributable costs in Hawaii, which does not factor in costs associated with overweight individuals. The economic costs of overweight and obesity are clearly a growing problem for the State. Moreover, as data used to generate obesity-attributable medical expenditures is based on self-reported information and most people under-report their true weight, these estimates are likely to be conservative. Percentages, however, clearly substantiate that obesity has surpassed smoking with much higher medical-related costs, and is continuing to rise.[41]

The Impact on Health Insurance

Economic costs associated with overweight and obesity greatly impact health care costs nationally and in Hawaii. As more individuals become overweight and obese and obesity-attributable expenses increase, the health care costs of obesity shift from the obese to the non-obese in health insurance pools, and society in general.[42] These factors characterize rising health insurance premiums as the primary externality of obesity for government, the health insurance industry, employers, and individual Americans.[43]

Medicare and Medicaid

As **Table 1** outlines, rising obesity-related costs currently affect Medicare and Medicaid expenses in Hawaii, and are expected to rise substantially in future years.[44] As the prevalence of overweight and obesity (among adults and children) is higher among low-income populations, many of which are covered by Medicaid, or both Medicaid and Medicare, the public sector can expect to bear a disproportionate cost of obesity. Finally, whereas Medicaid is often the primary payer of nursing home costs, obesity-related health care costs to the program are expected to continue to rise in that area.[45]

The Private Sector

The impact of obesity-attributable medical costs is not isolated to the public sector; the private insurance sector in Hawaii is and will continue to bear a substantial part of the economic burden. For instance, research shows that non-elderly obese adults have 36 percent higher average medical costs and 77 percent greater medication costs than do normal weight individuals.[46] Moreover, Hawaii health insurers (e.g. Hawaii Medical Services Association [HMSA], Kaiser Permanente) must increasingly raise premiums and fees to keep up with rising medical care costs (e.g. a rising percentage is related to obesity).[47]

The Uninsured

An estimated 10 percent of people in Hawaii were uninsured in 2002.[48] While the prevalence of overweight and obesity among this demographic is unknown, it can be assumed that a certain proportion of this group is also affected by the rising prevalence of obesity and obesity-related health complications. Although uninsured populations in Hawaii seek out medical treatment on a less frequent basis than insured individuals, they still utilize health care services (often through community health clinics or emergency rooms). Often, costs that are incurred by an uninsured patient cannot be covered, and uncompensated portions shift to those who can pay—commercial insurers.[49] This uncompensated care affects both public and private insurance costs and rates.

Employment-Related Consequences

Economic costs associated with overweight and obesity also impact employers and the business sector in Hawaii. Obesity can affect business in a variety of ways—namely by lowering profitability, hampering productivity, and diminishing employee pay raises.[50] One national study showed that as body mass index increases, so do medical costs and job absenteeism.[51] In this research, a clear distinction was found between normal weight and overweight individuals in terms of health care costs and job absenteeism. A smaller difference was found between overweight and obese individuals. Thus, the risk to employers begins with overweight employees, and is heightened with obese employees. Furthermore, this study showed that smoking and alcohol consumption did not influence job absenteeism or medical costs to the same extent as overweight and obesity.

Employers in Hawaii are mandated to share a burden of health care costs for employees that work 20 hours or more a week. As overweight and obesity-related medical expenses and health insurance costs continue to rise in the State, employers will increasingly shoulder this burden. As some employers have found, investing in work-related strategies to help keep weight down can be beneficial in a work place. At the moment though, this rising public health problem and resulting costs are directly impacting employers in Hawaii—and are expected to increase.

Health & Economic Benefits of Weight Loss

Even modest weight loss has been shown to convey substantial health benefits on overweight and obese individuals, and ultimately to society. Studies show that it is highly probable that weight loss reduces the risk factors of obesity-attributable medical conditions (e.g. high blood pressure, heart disease).[52] As the Diabetes Prevention Program, conducted by the National Institutes of Health (NIH) showed, weight reduction through lifestyle interventions helped lower an individual's risk for developing type two diabetes in obese subjects with impaired glucose tolerance.[53] Health benefits and lowered health risks equate to cost-savings in medical expenses. These benefits can be felt across the board—from health insurers to employers. Only when the rising prevalence of obesity and obesity-related health problems can be halted, will society begin to feel some relief from this problem. Weight loss is one of the beginning aspects on that path.

Treatment of Obesity

Research substantiates that obesity treatment, generally consisting of dietary therapy, exercise, and behavior therapy, and stomach surgery in severe obesity cases, is a key ingredient in addressing obesity-related health problems.[54] Obesity treatment is a much different entity than a standard medical visit, as it often requires a disease management approach—incorporating multiple visits, specialized services, and personal attention. Additionally, screening and prevention for patients at-risk of obesity is considered the most cost-effective method for dealing with the growing prevalence of obesity and obesity-related illnesses.[55] Most health insurance companies do not, however, consider obesity as an illness or disease, and do not cover the full-range of services for overweight and obese patients, even while they may cover treatments for obesity-related diseases (e.g. type two diabetes, cardiovascular disease).

In July 2004, Medicare changed its policy regarding obesity by recognizing obesity as an illness, and allowing Americans to make medical claims for treatments such as diet programs and surgery.[56] Although this Medicare policy shift will not immediately change Medicare coverage, it opens the door for Medicare beneficiaries and providers to seek coverage for obesity treatments. The Medicare policy change does not directly impact Medicaid coverage, although it potentially opens up the future possibility that state Medicaid programs will begin to consider covering obesity-related treatments.

Private-sector health insurance tends to follow the direction of federal coverage policies and procedures. The first private health insurance company in the country to significantly expand coverage for weight treatment was Blue Cross and Blue Shield of North Carolina, which implemented a policy to cover four visits to the doctor every year to assess a patient's weight and provide necessary treatment, nutritional counseling sessions, and two prescription drugs for patients already overweight.[57] The company will also continue to cover weight loss surgery for obese beneficiaries who meet criteria. The new benefit will go into effect in October 2005. Presently, this trend has not resulted in any changes or expanded coverage for obesity-related treatment in Hawaii.

Health Policy Options

The Policy Problem

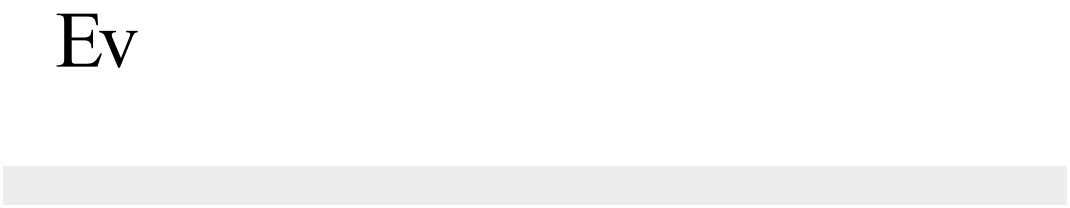
The growing prevalence of obesity is a serious public health issue affecting Hawaii. As overweight and obesity rates continue to rise, the overall health and well being of Hawaii residents will be impacted. Moreover, societal health and economic consequences will persist and broaden, with a variety of ramifications for the State. Obesity is not a purely individual characteristic; rather it is deeply infused into other social welfare and societal implications that carry broad health implications for families, communities, and the State. The problem of obesity is a complex and multifaceted public health issue, and cannot be halted with one policy solution. A variety of policy prescriptions are needed to address and desist the growing spread of this particular public health problem, including environmental, community, economic, school-based, and health sector responses. Together, changes in these areas can impact the growing problem of obesity and build a healthier Hawaii.

Policy Perspective for Obesity

The severity of the obesity epidemic involves a variety of areas, and thus a model for action must include all of the sectors influencing the individual problem. A public health model is critical in addressing the variety of causal factors influencing obesity. The Public Health Model for Obesity Prevention (see **Figure 1**), which was developed at a roundtable sponsored by the Robert Wood Johnson Foundation, Kaiser Permanente, the CDC, and the Washington Business Group on Health, illustrates how treatment and prevention strategies designed to address overweight and obesity should see the individual in community, not solely in the health care system.[58] As this model shows, it is the variety of players working together to impact the individual that makes the difference.

As shown in **Figure 1**, the health sector is a key player in addressing obesity, and ultimately impacting the individual. Health care affects and intersects with a broad range of the population—both obese and non-obese. Moreover, the health sector is a critical arena for prevention and treatment strategies to be implemented. As the problem of obesity is addressed in Hawaii, the role of the health sector cannot be ignored. The policy options and recommendations discussed in this paper center on the role of the health sector in addressing the problem of obesity.

Figure 1: Public Health Model for Obesity Prevention



Policy Alternatives

Health sector approaches can involve a variety of policy alternatives—from mandatory coverage provisions for obesity-related health services (e.g. weight loss surgeries, dietary therapy, counseling, physical activity) and weight assessments and screening programs, to weight management incentives (e.g. health club memberships) and health provider and health professions student education regarding obesity. The multitude of policy alternatives within the health sector center on one primary public health policy purpose—to address the problem of obesity by focusing on health. The following alternatives discussed in this section are potential avenues for Hawaii to consider when tackling obesity through the health sector. Each has distinct advantages and disadvantages, which must be weighed as Hawaii assesses how to respond to the problem. Moreover, these policy options focus on coverage and access to health coverage for obese populations. In this sense, the alternatives are concerned with parity in both the prevention and treatment of obesity.

Alternative #1: Task Force to Identify Coverage Gaps

Develop a task force to identify health coverage gaps for obesity-related treatment services in Hawaii.

Policy

The task force will investigate current coverage provisions with respect to both public and private sector health benefit plans in Hawaii. Health coverage benefits will be assessed and examined for gaps in coverage, according to National Institutes of Health (NIH) treatment guidelines.[††] The task force will recommend policy proposals (e.g. expanded benefits) and a timeline for action.

Rationale

Presently a wide variety of gaps exist between what is recommended for treating obesity and what health plans in Hawaii traditionally provide. Additionally, coverage gaps are evident between the different health organizations and health plans in the State. Before policy can be implemented to support obesity treatment, a baseline of health benefits is warranted.

Alternative # 2: Weight Assessment Screening for Hawaii QUEST Plans

Mandate Hawaii QUEST to cover weight assessment screening (at least twice per year) to specifically assess a patient's weight and provide weight loss information for overweight and obese beneficiaries.

Policy

This alternative would mandate that Hawaii QUEST plans cover weight assessment screenings for beneficiaries to evaluate and inform patients of their weight and information about the healthy weight range. Assessments would include a body fat analysis and BMI configuration. Additionally patients with weight in the unhealthy range would be informed and referred for follow-up services.

Rationale

One of the key ingredients for preventing and treating obesity is to both understand and address the problem. In the health care sector, one method for accomplishing these objectives is preventative screening. The 2004 U.S. Preventative Services Task Force recommends that clinicians screen all adult patients for obesity and offer intensive counseling and behavioral interventions to promote sustained weight loss for obese adults.[59] These types of services,

[††] NIH established guidelines for obesity treatment in 1998 and published a follow-up report in 2002. See www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf.

however, are not a typical component of health care coverage and treatment services under Hawaii QUEST. Moreover, while various preventative screening services and physical exams are allowable under QUEST plans (e.g. mammograms), most of these screening services do not particularly address overweight and obesity, or obesity treatment.

Alternative #3: Weight Loss Surgery Benefit Under Hawaii QUEST

Mandate Hawaii QUEST to provide weight loss surgery and applicable supportive services as a covered health benefit.

Policy

The State will require that QUEST provide weight loss surgery and supportive services as a covered health benefit under all QUEST health plans. Weight loss surgery will be a health care option for beneficiaries who meet the established criteria for the surgery.

Rationale

Weight loss surgeries (e.g. bariatric surgery) are considered an effective treatment option for severely obese individuals (typically BMI of 35 to 40 and a life-threatening comorbid condition; or BMI 40 to 50 without a life-threatening comorbidity).[60] Typically, bariatric surgeries come with supportive services for patients (e.g. dietary therapy, behavioral health counseling and support groups, physical therapy) in order to help them adapt to the change in lifestyle that the surgery demands to be effective. Research suggests that at least 50 percent of those that receive bariatric surgery keep the weight off for five years or longer.[61]

The federal Medicare program covers gastric bypass surgery for beneficiaries who are severely obese. For most beneficiaries, private health insurers (i.e. HMSA and Kaiser Permanente) in Hawaii cover the option of stomach surgery for morbidly obese patients who meet the established criteria. Additionally, some states have gone as far as to require that all public and private insurers and health maintenance organizations cover weight loss surgeries for eligible beneficiaries.[‡‡] Presently, however, the Hawaii QUEST program does not provide weight loss surgery as a covered benefit.

Alternative #4: Dietary Therapy Benefit Under Hawaii QUEST

Mandate that Hawaii QUEST offer nutritional therapy as a covered benefit under its health plans.

Policy

The State will require QUEST to offer dietary therapy as a covered benefit under all of its sponsored health plans. This benefit would include nutritional counseling with licensed dietitians and nutritionists and other health care providers that offer dietary services.

Rationale

Dietary therapy is considered a component of a weight loss treatment strategy.[62] Hawaii QUEST, however, does not offer this option for obese beneficiaries. Additionally, QUEST beneficiaries are generally low-income and do not often have the resources to invest or pay for dietary therapy outside of what is offered through their health plan.

[‡‡] As of the conclusion of the 2004 legislative session, four states—Indiana, Maryland, Georgia, and Virginia—have enacted legislation mandating health insurers, including state Medicaid programs, to offer coverage for gastric bypass surgery for morbid obesity, which is in line with the National Institutes of Health clinical guidelines. This information may change at the conclusion of the 2005 legislative session.

Alternative #5: Dietary Therapy Benefit for Private Sector Health Plans

Mandate that private health coverage organizations in Hawaii provide dietary therapy as a covered benefit under health benefit plans.

Policy

The State will require that all private health insurance companies, health benefit plans, and health maintenance organizations offer dietary therapy as a covered benefit for sponsored health plans in Hawaii. This benefit would include nutritional counseling with licensed dietitians and nutritionists and other health care providers offering dietary services.

Rationale

Dietary therapy is considered a component of a weight loss treatment strategy.[63] In Hawaii, however, health insurance plans do not routinely provide dietary therapy as a covered benefit. Additionally, under certain coverage plans, dietary therapy is provided for diabetic patients who may also be obese.[§§] The benefit is not provided for obese patients without diabetes.

Policy Criteria & Evaluation Process

Public policy involves a process of give and take, and of weighing and measuring. Policy options, and ultimately policy solutions, ought to be the best available options for the particular point in time. The health policy process is very much the same. Whereas a multitude of policies in a variety of sectors of society should ultimately be crafted to deal with the broad array of intersects that obesity impacts, each option must be equally weighed and measured before implementation. Health policy options for obesity are not any different.

A variety of criteria is often used to measure policy alternatives, and assess which options to act upon. For the purposes of this policy paper, the established criteria are parity, robustness, and political acceptability—each with a specific objective in mind to measure and weigh the impact of each health sector policy option with respect to the problem of obesity.

Parity

The concept of parity concerns equality of status or functional equivalence. By definition, parity means equality and can refer to an amount, status, or a value.[64] As a criterion for weighing health policy options, parity is concerned with equality, justice, and access within health care. This criterion is about who gets what, and how the broader public good of health care is distributed throughout society. The objective is to maximize parity with respect to each particular policy alternative.

For the purposes of evaluating potential outcomes of the policy alternatives addressed in this paper, the criterion of parity has been utilized to examine equity and justice in health care services and coverage. As a variety of questions seek to address the concept of parity, the alternatives were judged accordingly. For instance, the following questions were used in approaching the policy alternatives:

- Do these alternatives address health care coverage (or lack there of) for obese beneficiaries?
- Will the projected outcomes lead to greater parity in health prevention and treatment services for obese populations in Hawaii?
- How might the broader parity in health care be affected by these options?

[§§] For example, HMSA and Kaiser Permanente provide dietary therapy for individuals with diabetes, but not routinely for obesity treatment.

This criterion is key to addressing obesity policy alternatives through the health sector, and has been instrumental in establishing the actionable priorities discussed in this policy paper.

Robustness

The criterion of robustness is concerned with the implementation of a particular policy option. Robustness, which means strong and healthy, or hardy and vigorous is used to measure how the practice of a particular policy might diverge and take on a life of its own, away from the initial intent of the idea. The ultimate goal for policy is to maximize the level of robustness, in that the implementation of the established policy mirrors the initial intent as much as possible.

In weighing the robustness of the policy alternatives discussed in this analysis, a variety of areas were examined. These included the vehicle of each policy alternative, as well as potential avenues for involvement along the way—when the set policy is implemented. Moreover, in weighing the policy options by this criterion, the question of whether or not each option is robust enough to make it through the entire policy process, and through the implementation process, and still produce satisfactory and beneficial outcomes was measured and assessed.

Political Acceptability

The creation of health policy also depends on the level of political acceptability. Policies that are not politically acceptable will often not make it through the process, and ultimately will not impact the policy problem. While somewhat concerned with the political process, the concept of political acceptability does not only measure legislative acceptability; rather a variety of players and stakeholders are important in weighing this criterion with respect to each policy concept. For policies in the health sector, the participation of a broad array of actors is necessary. While policies can and are often implemented without agreement or acceptability from all of the players, the broader the support, the stronger the particular health policy. The objective with this criterion is to maximize the political acceptability of as many of the stakeholders as possible.

In measuring these five policy alternatives for addressing obesity through the health sector, political acceptability (or at least not complete unacceptability) is important from the following stakeholders:

- Legislators and other elected officials;
- Hawaii QUEST administrators;
- Private health insurers;
- Health care providers and related staff entities; and
- Health care beneficiaries (particularly those falling in the obese category).

Ultimately, many components are important when gauging political acceptability. Moreover, in some respects without strong support (a key purpose for this criterion), policies are much harder to implement. All of these factors were examined when weighing the policy alternatives addressed in this paper.

Weighing the Options

Projected Outcomes

Policy is about the future—about how a particular option will impact a particular societal problem. In order to discern which policies will best address the policy problem and move through the process, each option must be thoroughly examined. In order to establish policy recommendations and actionable priorities in dealing with the growing prevalence of obesity in Hawaii, each proposed alternative was examined and measured through the established criteria.

The five policy alternatives serve different functions, but within the same framework. Each seeks to expand coverage and/or health care options for obese beneficiaries in Hawaii. The five alternatives were weighed by the criteria—parity, robustness, and political acceptability—and measured on three-point scale. This scale examined how likely each alternative was to achieve the goal of addressing the problem of obesity under each of the established criteria. A *1* was "*not likely,"* a *2* was "*likely,"* and a *3* was "*very likely"* to achieve health policy objectives for addressing obesity in Hawaii. See **Table 2** for an illustration of total point values for each policy alternative.

Table 2: Outcomes Projected for Five Health Policy Alternatives Addressing Obesity in Hawaii Through Established Criteria

	ESTABLISHED CRITERIA		
Policy Alternatives	**Maximize Health Care Parity**	**Maximize Robustness**	**Maximize Political Acceptability**
Alternative #1: *Task Force to Identify Coverage Gaps*	+1	+2	+2
Alternative #2: *Health Assessment Screening for QUEST*	+2	+1	+1
Alternative #3: *Weight Loss Surgery Benefit Under QUEST*	+3	+2	+2
Alternative #4: *Dietary Therapy Under QUEST Health Plans*	+3	+2	+2
Alternative #5: *Dietary Therapy Under Private Health Plans*	+3	+1	+1

Notes: The above values are measured on a 3-point scale, with values of 1 "not likely," 2 "likely," and 3 "most likely" to achieve the established objectives for addressing obesity in the health sector.

- *Alternative #1 received a total of 5 points*
- *Alternative #2 received a total of 4 points*
- *Alternative #3 received a total of 7 points*
- *Alternative #4 received a total of 7 points*
- *Alternative #5 received a total of 5 points*

Alternative #1: Task Force to Identify Coverage Gaps

Outcome Values

This alternative, which addresses health coverage gaps for obesity-related treatment will not change current policies within the health sector. Rather, it will serve as a baseline assessment, with the hope of informing future policy options. The primary purpose of this alternative is to bring health sector and policy stakeholders to the table to investigate the issue of health coverage for obesity treatment in the State. Although this alternative will most definitely show gaps in health coverage, there is the possibility that no alterations in benefits or services will be made. Moreover, this policy alternative does not change coverage, and therefore would not have any direct effect on the problem of obesity in Hawaii.

On the basics of this alternative, the projected outcomes are not likely to immediately address the problem. First, regarding the criteria of parity, this alternative is not likely (1 point) to impact health parity in the State. Rather, this policy option would assess and recommend action steps that could potentially affect parity in the future. For robustness, the

alternative is likely (2 points) to maximize the criterion. As the legislative concept of a task force is fairly well established in policy with certain mandated tasks that must be accomplished, it is more likely to be implement. Furthermore, although taskforce recommendations vary, more often than not the outcomes will result in a better understanding of the problem and provide actionable items. For the last criterion, the alternative is likely (2 points) to maximize political acceptability. Obesity is a public health problem that is receiving more attention each year. A task force is a politically acceptable means by which to assess and investigate potential policy options and strategies.

Alternative #2: Weight Assessment Screening for Hawaii QUEST

Outcome Values

This alternative focuses on the identification and prevention of obesity by mandating that QUEST provide weight assessment screening as a covered health benefit. As low-income populations are generally at a higher risk for obesity, this alternative would potentially help identify the severity of obesity among that demographic. The projected outcome is that if utilized, this service could assist in providing care to at-risk populations. However, although the screening would be a covered benefit, it is not likely that many at-risk populations would utilize the service.

Based on the criterion of parity, this alternative scored as likely (2 points) to achieve parity in the health sector. By providing the option of weight assessment screening for QUEST beneficiaries, parity would be achieved between benefits offered through private health plans in the State and the QUEST program. In some respects, the outcomes of this alternative are not likely to meet objectives, as QUEST beneficiaries may not utilize the benefit. For the second criterion of robustness, however, the alternative scored as not likely (1 point). This alternative could be difficult to implement through QUEST as beneficiaries receive their health care services through HMSA, Kaiser Permanente, or Aloha Care, which may have different approaches to screening for obesity. The potential outcomes associated with the robustness of this alternative could even impact parity down the road.

Lastly, under the criterion of political acceptability, this alternative rated as not likely (1 point). While this policy would most likely be politically popular with certain stakeholders (e.g. beneficiaries, community leaders, health professionals), it would most likely add to QUEST program costs and would require considerable resources to implement and run. In that sense, it might not be as politically acceptable with key stakeholders, (e.g. Med-QUEST administrators, State legislators, etc.) who would ultimately be the players implementing the policy.

Alternative #3: Weight Loss Surgery Benefit Under Hawaii QUEST

Outcome Values

The third alternative mandates that Hawaii QUEST provide weight loss surgery as a covered benefit. The projected outcome of this alternative would be that QUEST beneficiaries who meet the health criteria for weight loss surgery would be eligible for the benefit. As all weight loss surgeons in Hawaii currently have lengthy wait lists for this type of service, this alternative would not necessarily provide the benefit to all eligible QUEST patients. It would, however, give these patients equal access to the process.

Under the criterion of parity, this alternative is very likely (3 points) to achieve health parity. It will give obese QUEST beneficiaries (who meet the criteria) the same access to weight loss surgery as other insured patients in the State. The projected outcome is that although patients may not immediately receive surgery, they would have equal access to such services. Second, this alternative is likely (2 points) to maximize robustness because the benefit could be fairly easily implemented. In some respects, however it also not likely because it will require considerable funding and could have difficulties in implementation.

(e.g. determining the benefits package, reimbursement rates, and patient eligibility levels). Finally, for political acceptability, this alternative is likely (2 points) to maximize acceptability, but not among all stakeholders. Although this option would be acceptable to obese beneficiaries and various medical personnel in the State, it would most likely add considerable costs to the Hawaii QUEST program. In this sense, it is not likely to be supported by some administrators and legislators.

Alternative #4: Dietary Therapy Benefit Under Hawaii QUEST

Outcome Values

This alternative would cover dietary therapy and nutritional counseling under QUEST-sponsored health plans. The projected outcome for this alternative is that it will achieve the objective of addressing obesity through the health sector by providing a service that is not currently offered for QUEST beneficiaries.

For the first criterion, this alternative is very likely (3 points) to maximize parity. Currently, dietary therapy is not a covered benefit, and the projected outcome is that if it is provided, more QUEST beneficiaries will seek dietary services. As QUEST beneficiaries can not generally afford dietary therapy, this health benefit provision would maximize health parity. Robustness as evaluated under this alternative is likely (2 points) to be maximized. While certain coverage details will need to be sorted out, expanding a benefit is not generally as technically involved as creating a new program. Finally, under the criterion of political acceptability, this alternative is likely (2 points). While there is cost associated with expanding QUEST benefits that may draw some resistance from the legislature and administrators, the Med-Quest division is currently discussing adding this option to its benefits package.[65] In this sense, the road toward political acceptability has already begun.

Alternative #5: Dietary Therapy Benefit for Private Sector Health Plans

Outcome Values

This alternative, which would mandate that private sector health benefit plans offer dietary therapy, would greatly expand the benefits packages provided for obesity treatment. In some respects this option would positively impact the objectives of addressing the obesity epidemic through the health sector. In other respects, as this concerns the private sector, many of the objectives could be difficult to enact and expensive.

First, this policy option is very likely (3 points) to maximize the criterion of parity as it will provide the option of dietary therapy to all beneficiaries covered by private sector health plans in Hawaii. For the criterion of robustness, however, it is not likely (1 point) that maximization will take place. Resistance may occur from the private industry, which may not appreciate a State mandate for providing expensive services like dietary therapy. Moreover, technical issues (e.g. how expansive the benefit needs to be, what health plans will cover what, etc.) may be difficult to address. Lastly, under the criterion of political acceptability, this criterion is not likely (1 point) to be maximized. Health care is expensive to provide in Hawaii, and health insurance companies are not likely to want to expand benefits.

Summary

Policy Recommendations

Rationale for Action

A concerted approach and effort through public policy is warranted for addressing rising rates of obesity in Hawaii. This public health problem is not only growing in prevalence, but also in related consequences (e.g. health, economic) for the broader society. At this point, action is a necessity; the State can no longer afford to wait to address this health issue. The health sector is one area to begin public policy strategies.

Actionable Priorities

In investigating and weighing the five health sector policy alternatives addressed in this paper, the following priorities are to be highlighted. First, after weighing each of the values assigned to the various policy alternatives, the options that expand benefits through Hawaii QUEST ranked highest. In this sense, a good place for the State to begin is to look for the means by which to expand obesity treatment benefits through Hawaii QUEST. As the research shows, the government—the State and Federal (e.g. Medicaid, Medicare)—bears a disproportionate economic burden of the problem of obesity, and must continue to look for ways to ease such expenses. The State of Hawaii can begin by treating obese populations that are covered under the Hawaii QUEST program. Additionally, much still remains unknown about health coverage and benefits gaps in the public and private sectors in the State. The creation of a taskforce to investigate and assess such health coverage gaps would be in the best interest of the State and should also be considered.

Each of the alternatives discussed and explained in this paper attempt to address the growing problem of obesity within the health sector by treating, assessing, or preventing the spread of the problem. Although not all of the policy options have received a high score or are considered as high of a priority, each alternative addressed one part of the problem and therefore should be evaluated and considered as this problem is tackled. Here is a summary of prioritized action steps for targeting obesity through the health sector in Hawaii.

Action Steps

1. Mandate that Hawaii QUEST offer dietary therapy as a covered benefit under its health plans.
2. Mandate Hawaii QUEST to cover weight loss surgery and applicable supportive services under its health plans.
3. Develop a task force to identify health insurance coverage gaps for obesity treatment services in Hawaii.
4. Mandate the private insurers and health maintenance organizations in the State cover dietary therapy under their health benefits plans.
5. Mandate that Hawaii QUEST offer weight assessment screening (twice annually) for beneficiaries.

These policy options should be considered and implemented at the same time as other obesity-related policies (other components of the public health model)—see **Figure 1**—are also being explored. The public health problem of obesity cannot be tackled through only one sector. Instead, it will require policy action steps within multiple areas of society.

Conclusion

Obesity is a problem that is here to stay unless concerted public policy approaches are designed. Evidence clearly demonstrates that this public health issue will not dissipate any time soon, and for many communities in Hawaii is on the rise. Action is needed on a variety of levels to counter the growing epidemic. Moving forward with the available knowledge and research is imperative, for with delay come opportunity costs. Hawaii cannot afford to wait on tackling obesity, for with the growing prevalence comes a variety of economic, health, and social ramifications. The health sector is a critical area to approach policy options to tackle obesity, and the policy options addressed in this paper are a beginning step for much needed and critical action.

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