Designing a Program to Reduce Overweight and Obesity Among Low-income Californians:

Results of Key Informant Interviews

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UC DAVIS INSTITUTE FOR POPULATION HEALTH IMPROVEMENT

DHCS California Department of Health Care Services

NORC at the UNIVERSITY of CHICAGO

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Executive Summary

Study Background and Purpose

The California Department of Health Care Services (DHCS) and University of California, Davis Institute for Population Health Improvement (IPHI) received a grant from the United States Department of Agriculture (USDA) Supplemental Nutrition Assistance Program-Education (SNAP-Ed) to build and connect community assets and to reduce obesity among low-income Californians. The project includes formative research, program planning and development, and a formal impact evaluation.

As part of the formative research, the National Opinion Research Center (NORC) at the University of Chicago, in partnership with LTG Associates, conducted a series of key informant interviews for DHCS and IPHI. The key informant interviews were the first in a series of formative studies to identify the best approaches for reducing the risk and prevalence of overweight and obesity among those who are eligible for California's Medicaid program (Medi-Cal) and SNAP-Ed. The key informant interviews gathered in-depth perspectives from experts regarding the barriers that low-income Medi-Cal and SNAP-Ed-eligible families face. The interviews also explored how to improve community-level problems associated with overweight and obesity. Study results will be used to inform future planning of programs targeting obesity and related chronic diseases, which have a high prevalence in California's low-income communities.

Methods

Twenty-five key informant interviews were conducted with experts in the health care, population health, academic, research, and policy sectors. Interviews were conducted over the telephone, recorded, and transcribed. Respondents represented multiple sectors but all had considerable experience (typically, 10 years or more) in areas such as health promotion, obesity prevention, nutrition education, and physical activity promotion. A discussion guide was developed by DHCS and IPHI, with input from NORC. The purpose of the guide was to ask respondents about their thoughts on personal and community health and well-being, and their suggestions for ways to measurably improve the health of a low-income, racially diverse community in California. They were asked for suggestions to reduce the prevalence of obesity in that same community, given a three-year timeframe and $7 million investment. Three example obesity prevention scenarios were also described in a one-page outline format for respondents to react to and provide their impressions of applicability to California's low-income communities. Interviews were conducted in English during February, March, and April, 2016.

Key findings from the research are summarized below.

Findings: Contributors to a Good Life, Healthy Life, and Healthy Community

Strong personal relationships, social connections, and the feeling of belonging were the factors most frequently mentioned by respondents as contributors to a good life. Respondents also described safe physical environments and access to basic needs such as housing, jobs, education, health care, and food as important contributors to a good life. Factors that respondents thought contribute to a healthy life were focused more on making good choices through

personal health habits, such as obtaining enough regular sleep, eating healthy foods, and being physically active. Having access to affordable food and physical activity opportunities to support choices that contribute to a healthy life were also considered important factors. Access to healthy foods, health care, housing, and other basic resources were cited as important contributors to a healthy community overall. Respondents were also asked to comment on potential reasons for high rates of chronic diseases and obesity in low-income California communities, and they pointed mainly to lack of education about healthy living and the disconnect between knowledge of healthy behaviors and carrying them out in daily life.

Findings: Measurably Improving Health and Reducing Prevalence of Overweight and Obesity

Key informants proposed similar approaches for both improving health generally and lowering the prevalence of overweight and obesity in low-income, racially diverse communities in California. An important theme in many of the interviews was addressing the social determinants of health such as economic stability, safe and healthy neighborhood conditions, quality housing, and access to education and health care. The elements that make up the social determinants of health[1,2] were pervasive throughout the interviews and therefore the theme was captured through coding methods using the references footnoted below, unless otherwise stated. Experts also suggested convening community members and developing coalitions to maximize solution-oriented, collaborative decision-making. Building capacity for community change among local leaders was also an important approach suggested by the key informants.

Increasing access to healthy foods through urban agriculture and other locally sourced methods was recognized as critical to solving obesity and chronic disease problems in low-income communities in California. In addition, respondents felt that nutrition education and changes in the built environment to encourage physical activity would be needed as part of any approach. There was also strong support for the use of realistic and meaningful measurement strategies in order to determine the effectiveness of program efforts.

Findings: Effective Scenarios

Respondents reacted positively overall to three scenarios presented during the interview. The scenarios were described in standardized formats to present examples of tested interventions previously implemented in the field. They included: (1) *Wholesome Wave Fruit and Vegetable Prescription Program*—an incentive-based program where fruits and vegetables were prescribed by physicians for use with participating retailers; (2) *Shape up Somerville*—a community-based intervention with programs and policies targeted toward sectors such as schools, worksites, restaurants, and the built environment; and (3) *Greenprint: Planting Trees for Public Health*—a tree-planting program aimed at schools and parks to improve the physical environment and increase physical activity. Findings showed that each approach has many merits. Comparison of the three scenarios to each other directly may not be applicable as they were individually unique, some with greater complexity in their intervention methods.

The *Shape up Somerville* scenario, however, was viewed as the most viable option for application in low-income communities in California. It resonated as a program that is comprehensive and engages community members as part of the solution to reduce the prevalence of overweight and obesity where they live. Respondents thought that a program similar to *Shape up Somerville* has the potential to increase access to healthy foods, provide nutrition education, and foster increased opportunities for physical activity. Concerns included how to apply it across the tremendous cultural diversity of the state as well as the capacity to achieve challenging outcomes, such as reductions

1. Centers for Disease Control and Prevention, [http://www.cdc.gov/socialdeterminants/], May 2016.
2. United States Office of Disease Prevention and Health Promotion, Healthy People 2020, [https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health], May 2016.

in Body Mass Index (BMI) among residents in a relatively short intervention period. Respondents also thought that *Shape up Somerville* would need strong local leadership to guide the community activation process.

The other two scenarios were also well received, but neither received the strength of support as *Shape up Somerville*. *Greenprint: Planting Trees for Public Health* was not seen as a stand-alone program. It was suggested that it could be combined with other intervention approaches. Respondents recognized more potential problems in implementation of the *Wholesome Wave Fruit and Vegetable Prescription Program* in California compared to the other scenarios, with the main issues being that it requires a lot of investment, was not a population-level approach, and it might not be scalable across all low-income communities in California. Key informants thought that the strongest aspect of *Wholesome Wave* was the involvement of physicians as credible, trusted sources for information about health.

Conclusions

Community engagement is a critical element for any effort to reduce overweight and obesity in low-income communities in California. Respondents emphasized the need to increase the ability of local leadership to convene community members and develop creative and collaborative solutions. Key informants thought that addressing the social determinants of health was critical to support the health of communities and that reduction of overweight and obesity would not be realized without addressing those basic needs. Increasing access to healthy foods and physical activity opportunities were also mentioned as important to any local action to support improved health. Respondents stated that health care should play a role, but not a traditional one where patients are served by a central clinical facility that targets individual illnesses. It was suggested that health care should treat not only physical conditions, but consider the mental, social, and behavioral aspects of community members in their local areas. Key informants thought that a community-level model that engaged the health care system and local stakeholders was a direction to take to reduce overweight and obesity among Medi-Cal and SNAP-Ed-eligible recipients.

Introduction

Study Background and Purpose

The National Opinion Research Center (NORC) at the University of Chicago, in partnership with LTG Associates, conducted key informant interviews on behalf of the California Department of Health Care Services (DHCS) and University of California, Davis Institute for Population Health Improvement (IPHI) in February, March, and April of

2016. Twenty-five individual one-hour interviews were conducted to capture insights from professionals who have decades of collective experience in the fields of health care, population health, academia, research, and policy. The interviews, conducted by telephone, were recorded and transcribed for analysis, with the purpose of gathering insights from experts on ways to reduce the prevalence of overweight and obesity in low-income communities in California. Study results will be used to inform planning of programs to reduce overweight and obesity among those eligible for California's Medicaid program (Medi-Cal) and the United States Department of Agriculture (USDA) Supplemental Nutrition Assistance Program-Education (SNAP-Ed).

Methods

Key informant respondents were selected by DHCS and IPHI based on participants' experience as thought leaders in the fields of health care, population health, academia, research, and policy. DHCS and IPHI, with input from NORC, drafted a discussion guide. The purpose of the guide was to gather insightful and creative big picture thinking from key informants who have made significant contributions in their respective fields. In-depth probes were applied by seasoned interviewers to gather real-world, applied thinking and perspectives about the vexing issues related to reducing the prevalence of overweight and obesity in low-income communities in California. The guide contained questions that asked respondents about their professional experiences, their thoughts on personal and community health and well-being, and their suggestions for ways to measurably improve the health of a low-income, racially diverse community in California. Respondents were then asked for their suggestions to reduce the prevalence of obesity in that same community, given a three-year timeframe and $7 million investment.

Along with the discussion guide, DHCS and IPHI, with input from NORC, developed three example obesity prevention scenarios with evidence of effectiveness, which they asked respondents to review prior to the interviews and evaluate during the interviews. Each approach was described in a one-page outline format, including a title, purpose, approach, and evaluation. Bullet points were provided under each section with information assembled by DHCS and IPHI. The same four questions were asked after each of the scenarios. The discussion guide is provided in *Appendix A* and the three scenario concepts are provided in *Appendix B*. The guide was approved by the state's Committee for the Protection of Human Subjects (CPHS) as well as NORC's Institutional Review Board (IRB).

The interviews were administered by telephone, in English, from February 24 through April 8, 2016. Interviews, which lasted approximately one hour, were recorded and transcribed. Prior to the interview, NORC sent each respondent a copy of the interview guide (*Appendix A*) and information about three scenarios (*Appendix B*). This allowed respondents to have a short period of time to reflect on the questions and consider the merits of the approaches before the interview.

Analysis Approach

NORC took a two-tiered manual coding approach to the verbatim transcripts. Microsoft Excel was used to organize the data. Due to the small sample size, only counts of the thematic and sentiment codes from respondent mentions were conducted. Thematic codes were derived directly from the content to contain the main ideas of the response. Sentiment coding provided a designation of positive versus negative portrayal of the content. The descriptive analysis was conducted using thematic codes from the responses, not by respondent, and in some cases, multiple codes were assigned to reflect more than one theme contained in a response. In the first phase of the coding effort, NORC

reviewed the transcribed text and captured specific mentions of key ideas as paraphrased "bullets" within responses from the key informants. The term "mentions" was used to define the unit of analysis for the coding to be able to capture more than one theme or concept within a given response or comment. For some responses, multiple bullets were created from the text to paraphrase the ideas mentioned and represent the rich conceptual content relayed by the respondents. This was an important intermediate step that isolated the components of the interviewees' responses to summarize the complex interactions and a variety of different ideas. Once these paraphrased bullets were created, NORC developed code frames based on the key conceptual divisions suggested by these isolated ideas.

Due to the broad, open-ended nature of the initial questions in the discussion guide related to a good life, a healthy life, a healthy community, and why there are high rates of chronic diseases in low-income communities (*Appendix A, questions 7-10*), the code frames developed organically and iteratively. Each question had its own unique code frame conformed to the character of the key informants' responses to that specific question. Two coders reviewed the initial coding to remedy any ambiguities or misapplied codes, while the project lead and content expert, Alyssa Ghirardelli, performed a final review to ensure codes were representative of the topic content and were optimally aligned to the conceptual frameworks throughout the process. As a final step, NORC applied letter coding indicating meta-categorical connections between the code frames (*Appendix C*) to enhance their comparability.

For the later questions regarding measurably improving health, reducing obesity (*Appendix A, questions 11-13*), and the three scenarios (*Appendix A, questions 15-18*), NORC developed uniform code frames based on the project lead's expertise in the field of obesity prevention. The uniformity of these code frames, leveraging common concepts in the field, allowed for more direct comparison of the key informants' thought processes, especially their reactions to the different program elements presented across the three different scenarios. Additional items with less detailed responses, such as follow-up questions to the main items, were coded by question based on the goals of the question, using a less formal process.

Study Team

Alyssa Ghirardelli, MPH, RD, NORC Research Scientist, led project management including data collection activities, conducted interviews, led data analysis, and served as principal writer of the report. Larry L. Bye, MA, NORC Senior Fellow, conducted interviews, provided project oversight, and assisted with the presentation of data. Mike Benz, BA, NORC Research Analyst, provided qualitative coding, descriptive analysis, additional data management, and contributed to the report. Sari Schy, MPH, CHES, NORC Survey Director, assisted with qualitative coding and quality control checking. Interviews were also conducted by Niel Tashima, PhD, LTG Associates Partner.

Respondent Characteristics

Tables 1 and 2 provide an overview of study participant characteristics including demographic and professional backgrounds.

Table 1: Respondent Characteristics

Demographic Background	N
Age	
18-24 years	0
25-34 years	2
35-44 years	3
45-54 years	9
55-64 years	6
65 or older	5
Race-ethnicity	
White	20
Hispanic & White	3
Black or African American	1
Hispanic and No Other Race	1
Gender	
Male	10
Female	15

- Most respondents in the key informant interviews fell within the age range of 45-64 years, and the majority identified their race as white. Fifteen of the respondents were female and 10 were male.

Professional Experience

Respondents provided information about their professional background and populations they serve.

Table 2: Professional Background

Background Characteristics	N
Sector	
Health Care Delivery: Federal Level	1
Health Care Delivery: State Level	3
Health Care Delivery: Local Level	6
Population Health:* Federal Level	3
Population Health:* State Level	5
Population Health:* Local Level	3
Research or Academic	4
Professional Years of Experience	
5-7 Years	2
8-10 Years	1
More than 10 Years	22

**Population health refers not only to governmental roles in public health but also to roles in advocacy organizations and the food industry.*

- Among the 25 total respondents, there was a fairly even representation of sectors across health care and population health. The local level health care delivery group was the largest sector represented and the number of respondents in the research/academic field was less than half those in the population health or health care delivery sectors. Respondents brought a great depth of collective experience to their interviews: 22 out of 25 had more than 10 years of experience in their respective fields. The other three respondents each had at least five years of experience.

Populations Served

Twelve of the respondents reported working with low-income, local, or county-level populations, and four were engaged with serving SNAP-Ed eligible populations. Some described their experience with methods to assist Medi-Cal and SNAP-Ed-eligible populations, which included approaches such as the Complete Health Improvement Program (CHIP) or statewide campaigns. Three respondents described their work with populations as policy-related, serving state or federal agencies and advocates. There were three that named other researchers as a population they serve. Two respondents also mentioned their role in serving academic populations through a university teaching position. Respondents that described their engagement with populations that were academic, research, or policy-related, in some cases, had overlapping groups they serve. Several work with very specialized populations, such as youth, people with disabilities, and/or ethnic/racial or sexual minorities.

Results

Findings from the key informant interviews are arranged by topics covered in the sections below. Specific, illustrative quotes selected as examples from the interviews are organized by code in *Appendix C*.

Important Contributors to Health and Well-being

Respondents were asked their thoughts about the most important contributors to a good life, a healthy life, and a healthy community. These questions allowed respondents to explore their thoughts on key contributors to community health in preparation for making recommendations for community interventions to improve health and reduce overweight and obesity. Apart from this function, however, the key informants' responses also grappled directly with the complex interactions of different factors and are worth considering as individual concepts within a given question. These unique concepts as independent responses have been analyzed in an aggregated way and are described in the following section. Because of the complexity of the responses, multiple themes were coded for each response; therefore, the total number of instances of different themes (the "n" sample value of independently coded responses in the following tables) exceeds the total number of respondents (n= 25 respondents).

Contributors to a Good Life

Coded responses were counted within similar themes and are displayed in Table 3. Insights from the responses are also provided following the table. All themes identified in the analysis are accounted for in each table; however, the points that follow cover more prominent themes.

Table 3: Important Contributors to a Good Life

Question 7: From your perspective, what are the most important contributors to living a good life?

Contributor	N
Relationships/Love/Belonging/Social Connections	22
Environment/Safety/Access to Food, Jobs, Health Care, Housing, Education	19
Personal Health (Physical, Mental, Emotional)	10
Sense of Purpose/Fulfilling, Meaningful Work	10
Financial Stability/Well-paying Job	9
Personal Health Habits (Healthy Diet, Physical Activity)	8
Other (Equitable Society, Balance in Life, Maslow's Hierarchy of Needs Met)	5
Good Morals and Values/Personal Responsibility	2
Hope/Happiness	2

- Many respondents thought that the most important contributors to a good life were related to relationships and social connections. A loving family, a healthy social network, family and community support, experiencing quality time with family and friends, and strong relationships were commonly mentioned.

- A large proportion of respondents included the theme of supportive conditions in one's environment, akin to the social determinants of health. Within this theme, some respondents commented that education enables access to a good job and a safe living environment.
- There were frequent comments that personal health, in its physical, mental, and emotional dimensions, is critical for living a good life, and includes achieving a balance of mind, body, and spirit.
- Having a sense of purpose, a meaningful or fulfilling job, continual learning, and/or managing responsibilities were also themes that were present in several responses.
- Financial stability brought by a well-paying job was mentioned by a number of respondents.

The following selected comments provide succinct, representative examples of common responses among the key informants:

"A solid job and a just society. A loving family."

"Developing healthy, supportive relationships and having a purpose that brings you satisfaction"

"You think of fulfillment from your vocation and fulfillment from your family and friends and your social group. Living in a comfortable place with adequate medical care, adequate housing, and adequate food. Opportunities for cultural improvement as well as physical activity. I think that's the good life."

A more extensive selection of comments can be found in *Appendix C*.

Contributors to a Healthy Life

A similar coding structure was applied to responses to the follow-up question about important contributors to a healthy life, with somewhat different results. Findings are presented in Table 4, followed by a summary of comments provided by respondents.

Table 4: Important Contributors to a Healthy Life

Question 8: From your perspective, what are the most important contributors to living a healthy life?

Contributor	N
Personal Health Habits (Healthy Diet, Physical Activity, Sleep)	35
Access and Affordability (Health Care, Healthy Foods, Physical Activity)	18
Community Environment/Safety/Access to Resources	16
Knowledge/Education	13
Relationships/Love/Belonging/Social Connectedness	11
Financial Resources/Job to Support Healthy Life	9
Personal Health (Physical, Mental, Emotional, Balance)	6
Other (Social Ecological Model, Equitable Society, Leadership, Cleanliness)	4

- The most frequent comments from respondents covered themes of personal health habits, such as good nutrition and regular physical activity. Other frequent themes included getting enough sleep, seeking a work-life balance, practicing self-discipline and routine, being involved in a variety of life activities, and maintaining an attitude that supports personal health.
- The theme of access and affordability applied not only to healthy foods, such as fruits and vegetables, and opportunities for physical activity, but also to physical and mental health services, quality health care and health insurance, and safe drinking water.
- The theme of a healthy community environment was composed of comments related to safe, vibrant neighborhoods; communities designed for health in their structural features, such as through local-level planning departments and design guidelines; those that encourage trust by building community involvement; a community culture promoting healthy choices and supporting a healthy learning environment for children; and having faith-based organizations in the neighborhood. The concept of resilient communities and programs that use positive reinforcement as well as approaches to incentivize local programs were also mentioned.
- Other prominent themes included knowledge and educational attainment, including awareness of factors leading to health; skills in making healthy choices; and access to information, such as use of the internet. The themes of relationships and social connections were still present, but not as common as in the responses on contributors to a good life.

The following selected comments provide succinct, representative examples of common responses among the key informants:

"I think the most important contributors are ready access to healthy food, ready access to health care, an ability to move about safely, and access to education."

"I think resources and economic security are fundamental to be able to have a healthy life. Fitness and exercise, movement and of course diet."

"Having places where people can actively recreate or actively transport themselves to their place of work, or places where they shop, where they meet. I think having safe places [that people will access]. I think having access to healthy foods and to those places to recreate is important. I think another really important factor is education."

A more extensive selection of comments can be found in *Appendix C*.

Contributors to a Healthy Community

As part of the opening series of questions, interviewers inquired about important contributors to a healthy community. Responses from key informants included similar themes, but tended to consider environmental and systems factors more frequently. Findings are presented by theme in Table 5, followed by a summary of comments provided by respondents.

Table 5: Important Contributors to a Healthy Community

Question 9: From a population perspective, what are the most important contributors to a healthy community?

Contributor	N
Access to Healthy and Affordable Food	15
Environment/Access to Health Care, Housing, Resources	13
Access to Places for Physical Activity/Built Environment Encouraging Physical Activity	13
Clean and Attractive Natural Environment	9
Safety	9
Social Connectedness/Support/Culture	9
Community Activation and Engagement	7
Adequate Education	6
Opportunity for Work/Financial Resources	6
Conscientious Political Leadership/Political Will/Health in All Policies	3

- Many of the common themes were components of the social determinants of health: access to healthy and affordable foods, health care, housing, transportation, community centers, and other resources or services. One respondent mentioned that overall equity in access to resources was critical in supporting healthy communities.
- Clean air, water, and community environments where residents work and live were common themes.
- Safety received enough comments to count the frequency of those points separately from other social determinants.
- Social support and connectedness was again raised as a theme, including ideas such as a culture promoting healthy choices, good community partners, and a spiritual element to community life.
- Community activation or engagement was another common theme, including mentions of advocacy and political engagement among community members, common goals among residents, and cooperative efforts.
- Respondents also felt that education, opportunity for work, access to financial resources, and political leadership on health issues were important factors in fostering community health.

The following selected comments provide succinct, representative examples of common responses among the key informants:

"I would say reduced crime rate, good housing, a socially-connected community, community resources that are accessible and that are safe to utilize, good public transportation, and access to health care in close proximity, or easy transportation from a community perspective."

"I think it has to be kind of a shared vision where everybody takes some responsibility for their health, but that there's also community networking that encourages a healthy lifestyle."

"..that would include housing stability, food stability, access to good, healthy foods and access to safe environments for unlimited physical activity. In other words, it's not limited by access to green space or places to play outside safely and to be physically active outside. So there's social equity in the community."

A more extensive selection of comments can be found in *Appendix C*.

Causal Connections – Etiology of High Rates of Obesity and Chronic Disease

After discussing their thoughts related to contributors to a good life, a healthy life, and a healthy community, respondents offered their thoughts on causes of high rates of chronic disease and obesity. Their wide-ranging responses touched on deficiencies in many of the themes already presented, but also identified detrimental social forces working against the health of communities. Table 6 provides the frequency of themes among the key informants. Additional detailed findings on the themes are provided following the table.

Table 6: Suspected Reasons for High Rates of Obesity and Chronic Disease

Question 10: If we assume that the majority of Americans believe that health is important to a good life, then why do we experience such high rates of diseases, like heart disease and obesity?

Contributor	N
Lack of Education/Awareness of Healthy Lifestyle and Behaviors	11
Social Determinants of Health	8
Food Industry/Marketing	6
Inadequate Health Care/Programs/Reliance on Medical Model Instead of Prevention	5
Values/Priorities	5
Built Environment/Community Issues	4
Stress/Busyness	4
Access to Unhealthy Food	3
Lack of Access to Affordable, Healthy Food	3
Other (Complexity of Factors, More Technology, Less Personal Responsibility)	3
Less Physical Activity	2

- Lack of education and awareness of healthy behaviors was featured prominently, including lack of exposure to healthy lifestyle models and poor understanding of the importance of healthy behaviors. Respondents also commented about the gap between knowledge and behavior—that populations may know what they need to do to stay at a healthy weight, but are not able or willing to do so due to taste preferences or desire for quick fix behaviors.
- Again, the social determinants of health were a prominent theme raised by respondents as direct influencers when considering causal contributors to chronic disease and obesity.
- Respondents frequently identified corporate agriculture and the processed food industry as providing ready access to cheap, unhealthy food, but also in crafting marketing and advertising strategies to target low-income populations.
- Inadequate health care coverage or public health programs, as well as overreliance on the medical treatment model to serve patients after conditions arise in lieu of prevention, were also stated. Some respondents noted that a huge portion of health-related efforts are ineffective, and that there is an overemphasis on highly priced, intensive medical care as a route to health and a lack of preventive care. Specifically, one respondent mentioned that “Highly intensive high-tech medical care that is really expensive cannot reverse [the chronic disease] process that is influenced by lifestyle, often genetics, and other choices that people have made over time that have contributed to those situations.”

Respondents made comments pointing to stressful life conditions and how busy family schedules are, noting that these situations reduce willpower for healthy behaviors and create vulnerability to unhealthy choices. The following selected comments provide succinct, representative examples of common responses among the key informants:

"Most families try to live healthy lives. They're unaware of the harmful effects of most of the foods that we eat, and they're also not aware of the need to have regular exercise."

"I'm not sure that all Americans really believe that health is important to a good life.…I think that you have to have some of your basic needs already taken care of before pretty much people can prioritize health. And I think that many people don't have the income, the socio-economic status to be able to sometimes make healthy choices."

"We experience the high levels [of obesity and chronic disease] because of our exposure to increased access to foods and activities that do not promote health. And other environmental exposure, too. There's a penchant in the United States to allow capitalism and free enterprise to make decisions and do things that are in the interest of their own corporate welfare, but they're not in the public's interest."

"I would also say that there is a lot of emphasis in our country on the idea that higher-priced, more intensive medical care will make you healthier. And the reality is, is that the opposite is more often true."

A more extensive selection of comments can be found in *Appendix C.*

Measurably Improving Health

Respondents were asked about their ideas to improve the health of a mostly urban, racially diverse, low-income community in California faced with preventable diseases such as heart disease and type 2 diabetes. The interviewers requested that the respondents consider how they would invest in that community given $7 million and three years to measurably improve the health of the community. Responses covered a variety of themes; however, the most prominent theme featured community-level intervention. Discussions with respondents to identify ways to address the issues faced by the example community featured content about working with the community to create local action. More than a third of the responses included themes about improving community assets or social determinants of health as a way to enhance community-level services and ultimately influence the health of residents.

An overview of themes and ideas shared within those thematic areas are provided in Table 7 and the following discussion.

Table 7: Ideas Explored to Measurably Improve the Health of a Community

Question 11: How would you invest the $7 million in this community over the next three years to measurably improve the health of this population and why?

Ideas/Themes	N
Neighborhood/Community/Social Determinants	39
Nutrition Education	15
Research/Measurement Issues	15
Physical Activity	11
Health Care Focused	10
School/Child- based	7
Holistic Care	5
Marketing/Communication	4
Economic Intervention – Incentives	3
Other	2

Community Involvement to Address Social Determinants

Comments from respondents frequently touched on the importance of addressing the social aspects of health and solving neighborhood issues collectively as a way to improve overall health in the community. More than a third of the comments about addressing the health of the community featured themes of this nature.

- Jobs, housing, financial independence, applying for social programs, reducing food insecurity, and access to clean water were some specific ideas provided. Even legal support to combat against sub-standard housing was presented as an approach.

There were other prominent thoughts within the community-level and social determinant theme.

- Approaches to engage with the community were raised most frequently as highly important when considering intervention options.
- Convening community leaders, forums, coalitions, panels, and partnerships to engage in discussion about changes needed and to build capacity for change was top of mind for many respondents. Capturing the voice of and input from each community was a theme that resonated among several respondents. Using technology such as YouTube where residents can ask questions was a suggestion.
- A couple of respondents suggested conducting assessments or research to determine greatest needs. A geographic analysis of the community was suggested by one respondent.
- Access to healthy foods through urban agriculture, mobile markets, community gardens, farmers' markets, and improvements in the built environment were presented as options. Creating opportunities for information sharing about health in the form of kiosks or some other visually prominent method throughout the community was an idea presented.
- Creating safe outdoor spaces, such as parks, where community members can be physically active or can gather together was mentioned. Beautification of outdoor spaces by adding trees was also suggested.

Nutrition Education and School or Child-based Interventions

Thoughts were shared regarding the importance of nutrition education in many contexts such as through teen centers, community classes, or the USDA Expanded Food and Nutrition Education Program (EFNEP). Comments related to nutrition education were the second most frequently cited points to improve the health of a community. Schools and early education facilities were seen as a channel to provide nutrition education and food service, which includes fruits and vegetables, to develop healthy habits. Respondents thought that working with children would be a better direction for prevention than focusing on adults. They suggested working with stakeholders to devise interventions through schools.

Research/Measurement Issues and Considerations

Several respondents reported concern about the short timeframe to attempt to accomplish a measurable change in health. Some mentioned that measurement requires careful consideration of how health is defined and that current measures are blunt and need differentiation between short- and long-term objectives. Few examples or ideas for measures were described over the course of the interviews. Others suggested using formative research to determine the needs of the community.

Physical Activity

Comments on physical activity were almost as frequent as those about nutrition with regards to measurably improving health.

- Ideas to encourage physical activity included improvements to the built environment with specific emphasis on outdoor spaces, incentivizing businesses to match costs that support improvements (e.g., sidewalks, renting bikes, bike paths, walking paths, transportation), and supporting community connections that foster activities such as through churches, walking groups, or Zumba® classes.
- Investing in physical education (PE) in schools by funding instructors and increasing the amount of time youth engage in physical activity was suggested as well.

Health Care and Coordinated Approaches

Several respondents mentioned the importance of including the health care system; however, ideas related to the health care system were expanded to consider ways to address social determinants of health. Some thought getting providers involved was an important strategy. Having access to holistic approaches that treat more than just the physical body, but also the needs of the whole person was suggested. Coordination between typical health care approaches and population health was mentioned.

- Thoughts were shared that health systems or community health centers act as brokers for food, employment, and housing, and that the community health centers should be located within neighborhoods.
- Treating the entire individual was raised as an important health care-oriented solution, so that programs are available to treat the physical, mental, social, and behavioral aspects of health. Specific examples included approaches to develop self-esteem, conflict resolution, and care for those with drug and alcohol addiction.

Other Themes

- One respondent shared thoughts about changing the marketing environment and messaging to reduce "fresh is best" to also promote canned, dried, or frozen fruits and vegetables.
- Several economic approaches were recommended such as grant programs, fruit and vegetable incentives, increasing utilization of CalFresh (California's SNAP) benefits, and making healthier foods less expensive.

The following comments provide examples of specific responses among the key informants:

"I think some of that money needs to be invested in supporting and developing strong leaders who understand systems thinking. And most of that money needs to be invested in supporting partnerships with organizations that deliver value to the community."

'…one [program] that has the most impact at improving fruit and vegetable consumption and improving diet generally is the EFNEP program – the Expanded Food and Nutrition Education program, which is a USDA program. I've never understood why this program isn't used more – because it's beautiful in the sense that the trainers are peers.'

"I would reinvest in physical activity in the schools, as the best way to have [reductions in overweight and obesity] happen equitably."

"What I would do is rethink health care centers in an urban area and move them away from what's been sort of this ivory tower of physical health mentality and model...to a center that is holistic around the health care needs of a community."

"I would try to connect every low-income person with the benefits that they're not currently receiving [through counseling], like food stamps or general assistance or the Earned Income Credit. I would help people as parts of that benefits counseling to do SSI [Supplemental Security Income] applications that have been rejected. I would provide them with legal support against landlords where they're living in sub-standard housing. I would have those same people working on helping people to establish checking accounts."

Measurably Improving Overweight and Obesity

Respondents were next asked about their ideas to reduce overweight and obesity in a similar low-income community in California. The interviewer again requested that the respondents consider how they would invest in that community given $7 million and three years to measurably reduce overweight and obesity. Responses resembled the themes in the prior question in many cases and the concept of community-level intervention again was the predominant subject of conversation. Respondents continued to identify ways to work with the community to implement local change. About a third of the responses included discussions featuring improvements in the built environment, as well as access to healthy foods, physical activity, and services. Below are common themes and content that emerged from the conversations.

Table 8 and the discussion that follows present the frequency of themes provided by key informants and additional detail regarding those themes.

Table 8: Ideas Explored to Measurably Improve Overweight and Obesity in a Community

Question 12: Now let's say that there are strings attached to the $7 million, three-year community investment. Let's say you have to use the money to significantly reduce overweight and obesity among the people living in this community.

How would you invest the money in this community over the next three years to measurably reduce the prevalence of overweight and obesity and why?

Ideas/Themes	N
Neighborhood/Community/Social Determinants	19
Nutrition Education	10
Research/Measurement Issues	8
Physical Activity	7
School/Child-based	6
Marketing/Communication	6
Health Care Focused	4
Economic Intervention - Incentives	2
Other	1

Community Involvement and Social Determinants of Health

Community-level approaches were the most frequently provided suggestions. They ranged from addressing the social determinants of health, a salient theme throughout these discussions, to new ideas about reducing access to unhealthy foods. The total number of comments was fewer (67 to reduce overweight and obesity compared to 111 to improve health), with ideas being more succinct and focused on targeted approaches specifically designed to reduce overweight and obesity in communities.

- A couple of respondents mentioned working with key partners and getting to the social root of problems and issues within this theme.
- Capacity building among local leaders, partners, and stakeholders, beginning with small efforts and then expanding over time, was presented as a way to engage in a sustainable approach.
- The Social Ecological Model was suggested by one respondent as a possible framework for community efforts that would provide a comprehensive approach by implementing action in all spheres of the model, from interpersonal, intrapersonal, organizational, and community levels to public policy.
- Safe neighborhoods were discussed as critical to helping communities encourage physical activity and create opportunities for programs in park spaces. Identifying locations for community gatherings to support local action and free or low-cost activities were presented as important to fostering community engagement.
- Increasing healthy food access continued to resonate as a vital issue to address, but reducing access to unhealthy food was also suggested.

Nutrition Education

Suggestions related to nutrition education featured ideas for very comprehensive approaches with testing and evaluation methods in place. Nutrition education was the second most frequent theme; however, comments related to physical activity were not far behind in number. In the area of nutrition education, respondents recommended approaches such as the following.

- Provide education and personalized counseling that covers the full cycle of meal planning, shopping, preparation, and consumption.
- Implement recommendations from the The National Academies of Sciences report, *Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation* (2012) and provide technical assistance to do so, as well as the use of behavioral economics to consider how individuals react and make decisions in their environment or in settings such as schools.
- Provide prescriptions for nutritious foods combined with nutrition education and support services.

Measurement Issues and Considerations

The potential for issues with measurement to determine success was again raised by respondents with considerable frequency, with eight of the 63 mentions dedicated to this theme.

- Key informants thought that an investment of time and money for baseline and evaluation research would be critical. Suggestions were made to support research to:
    - Evaluate barriers to physical activity and healthy eating;
    - Understand characteristics of subgroups such as children, elderly or veterans;
    - Provide findings that guide programs;
    - Build on evidence-based approaches; and
    - Identify nutrition and physical activity patterns that work.

There were mixed concerns on using BMI in a community as an outcome measure. One suggestion was to use the proportion of children entering kindergarten with a healthy weight and then seeing if they maintain healthy weight after the implementation of programs. Another idea was the use of school-based health centers to examine BMI of youth only.

Physical Activity

Increasing physical activity was a prominent theme. Respondents described programs that would include both nutrition and physical activity interventions together.

- Approaches to increase physical activity and reduce overweight and obesity included group activities such as classes, use of available facilities, and cost assistance for either free or subsidized activities.
- Suggestions to fund credentialed PE instructors to increase the quality and frequency of PE or to mandate PE in schools were raised again.

School and Youth-focused Efforts

- Schools were presented as central community locations to reach youth and families.
- Youth were seen as an important target audience to create opportunities for prevention because of the potential to change that group's behavior. Early childhood education was seen as a way to change the trajectory toward overweight and obesity.

Other Themes

- Suggestions were made to reduce the marketing of unhealthy foods, implement approaches such as behavioral economics, or to provide direct economic approaches, such as to increase the cost of unhealthy foods or provide fruit and vegetable prescriptions/incentives.

The following quotes provide examples of some responses among the key informants:

"I would want to make sure that there's access to fruits and vegetables, people have access to safe neighborhoods, and seeing how we could change the community environment and get community buy-in from the local community owners of stores and community people, and getting, really, a buy-in from the community itself, and with the caregivers of school-age children, so we could keep having those… and SNAP-Ed nutrition messages being reinforced and being taught over and over and over again, and having a community model so that the communities supported each other…"

"…it's like pretty much statistically impossible for me even to measure the BMI of the community-at-large in three years. But I probably could measure the BMI of the kids. I'd probably start on school-based health centers so that at least at the end of the three years I could say I couldn't prove to you the whole population, but look, I was able to prove to you that this segment of the population, we were able to actually move the BMI."

"I can open up a farmers' market here in the corner and, if there's no education, families are not going to go. And they really need to go hand in hand. And then, of course, the community empowerment piece, because I think families really need to feel motivated to make those changes."

"…for exercise, looking at the places where people do exercise in the community and find out why more people aren't using them, so maybe that's a public safety thing, maybe they need to feel safer before they're willing to do that, maybe there's no good indoor places to recreate."

Similarities and Differences in Responses on Health versus Overweight or Obesity

Thirteen key informants responded differently between the two scenarios of ways to measurably improve health versus ways to reduce overweight and obesity in a community, given three years and $7 million. Some respondents thought it was a simple difference between health versus overweight or obesity. Overall, the impression was that for health, there is more of an open-ended community input opportunity, but to reduce obesity, potential solutions are narrower. It was indicated that health is a broad term that means different things to different people and that obesity prevention is something that is very specific. Some believe that perceptions of health depend much more on values. Other respondents mentioned that health and obesity involve different measures and that health is much broader and inherently involves more metrics. Some suggested that the measurement of "health" should include self-reported quality of life – how people feel physically and mentally, such as the number of days feeling good or number of days at work/school – compared to obesity, which is generally measured simply by BMI. There was also the thought that obesity as a disease requires more of a prevention action when considered in a clinical approach. Specifically, obesity can be present for many years before it manifests as acute health problems later in life.

Nine respondents felt that their answers were similar and described how they connected the two conceptually in answering both questions. Some mentioned their responses were similar because the same principles apply to both goals, since weight is a major predictor of overall health. Respondents also provided reasoning supported by the social determinants of health, stating that access, education, and family resources are needed as solutions targeting both health and obesity. Some also felt that in both cases there is a need for the community to be on board. Three respondents reported they did not know or had nothing to share on differences or similarities.

Effective Approach Scenarios

Respondents were asked to consider and evaluate three unique approaches for reducing obesity with demonstrated effectiveness: (1) *Wholesome Wave Fruit and Vegetable Prescription Program*—an incentive-based program where fruits and vegetables were prescribed by physicians for use with participating retailers; (2) *Shape up Somerville*—a community-based intervention with programs and policies targeted toward sectors such as schools, worksites, restaurants, and the built environment; and (3) *Greenprint: Planting Trees for Public Health*—a tree-planting program aimed at schools and parks to improve the physical environment and increase physical activity. The interviewer read through each approach and asked the same series of questions after the description was provided. Responses were generally positive to all approaches. Concern or skepticism was expressed instead of reactions being purely negative. Positive or negative sentiment was coded to better understand the nature of the responses. Because of the complexity of the responses, multiple themes were coded for each response; therefore, the sum total of instances of different themes (the "n" value of responses in the following tables) exceeds the total number of respondents (n=25 respondents). Specific examples of coded quotes for each of the approaches are provided in *Appendix E*.

Reactions to *Wholesome Wave Fruit and Vegetable Prescription Program*

Table 9 provides a summary of the frequency of positive and negative reactions and their themes for the *Wholesome Wave Fruit and Vegetable Prescription Program*. Data from coded comments regarding the applicability of the program in California are also presented.

Table 9: Reactions to *Wholesome Wave Fruit and Vegetable Prescription Program*

Scenario Questions:

- *What, if anything, do you like about this approach?*
- *What, if anything, do you dislike about this approach?*
- *What other thoughts do you have about this approach?*
- *If we were to take a similar approach in California, what would you think about that?*

Ideas/Themes	Positive Reactions	Negative Reactions
Physician/Doctor Role	13	9
Reproducibility/Scalability/Sustainability	1	11
Incentive/Voucher/Benefit/Prescription for Fruits/Vegetables	10	4
Fruits and Vegetables Featured in Approach	9	0
Counseling/Motivational Component	8	1
Effectiveness of Approach	6	7
Methods for Measuring Impact of Intervention	2	4
Nutrition Education Component	1	4
Cost of Approach	1	4
Population for Intervention	0	4
Community/Built Environment/Safety/Access	3	0
Community/Leadership/Activation	2	2
Comprehensive/Synergistic	1	2
Research/Evaluation Needed	2	1
Nothing/No Comment	1	0
Reaction to Intervention Outcomes	0	1
School/Child Focus of Intervention, if applicable	1	0
Policy Component of Approach	0	0
Total	61	54

Positive Reactions

- Reactions were very positive to having physicians involved as credible, trusted sources providing the incentive. Respondents were receptive to physicians playing an active role in nutrition promotion.
- Many respondents liked the incentive for healthy foods and voucher or benefit system. Having a tangible, measurable, economic incentive was a positive aspect of the program for many respondents. They responded positively to fruits and vegetables being featured as healthy foods and the idea that food can be medicine.
- Respondents liked the motivational and counseling aspects with a conceptual framework for action that included follow-up visits, multiple points of contact, and positive reinforcement for healthy choices (economic incentive). They thought it was important to address more than a financial incentive as motivation.
- The reductions in BMI were impressive to several respondents.

Negative Reactions

- Although the frequency of positive themes about the program outweighed the negative, the negative reactions provided by respondents contained greater detail to assist with feedback for future program planning.
- There was skepticism that this intervention could be scalable to larger populations. Key informants had the impression that the intervention was too “high touch” with a lot of investment of time by the physicians and support staff, especially when there is a shortage of providers. There was the impression that this would be a “one-time” intervention and a lot of concern that the approach would not be sustainable. It was suggested that the approach could be made scalable if the physician component was removed and supported by other health care professionals in the community.
- Concerns were raised about the availability of appointments for physicians to see the participants, especially with over 5 million Californians newly accessing health insurance and fewer physicians available, in general.
- Respondents mentioned that there could be many people in low-income populations who would be missed because they do not visit the doctor. Suggestions were made that the counseling could be done outside of the health care environment to reach populations that may be missed due to scheduling, access, and availability of physicians with changes to the current coverage system.
- Some respondents questioned its effectiveness, with concerns raised about the proportion of program participants that did not redeem the prescription and increase fruit and vegetable consumption.
- There were a lot of concerns that BMI/pounds lost is not the best measure. However, few examples of or ideas for measures were described.
- Respondents thought that the approach was not the best way to reduce BMI/weight.
- Concerns were raised that the approach did not provide nutrition education with cooking or making fruits and vegetables more palatable.
- There was considerable concern about the funding for a reimbursement program model, with a few respondents mentioning that the program was expensive. Some thought that the funding would be better spent on a community approach, and there was strong indication that community involvement was missing.
- Additional concern was raised that the program did not offer a population-level prevention approach, that it targets only youth and families that already are facing weight-related issues, and does not have enough reach to address the source of problems and stop them from happening in the first place.
- There was concern that the approach did not include any physical activity components, such as giving them tools, programs, or community areas where they could engage in physical activity.
- Reactions also included concerns about the loss of fidelity for the counseling portion of the program and that implementation could be diluted.
- The issue was raised that fruits and vegetables should be considered normal foods and not as medicine.

Applicability

- Respondent comments were just about evenly split regarding the scalability or sustainability of the project and its potential effectiveness.
- Among those that reacted positively about the applicability of the approach, one suggested that it could be expanded to more forms of fruits or vegetables, not just fresh.
- There were also thoughts that the incentive could be provided by any physician’s office or that prescriptions could be provided by school nurses or pharmacists.

- Respondents mentioning that the approach was not as applicable also thought that it was too expensive, not comprehensive enough, the incentive amount was not enough, and it would only reach a small portion of the population. Applicability could be complicated in California with the potential need to coordinate among local agencies. There were concerns that some residents may have difficulty redeeming their prescriptions or vouchers in their neighborhood due to lack of access to fresh fruits and vegetables. Questions were also raised about how many physicians would participate, the need for monthly visits, and if any weight loss would be sustainable after the program. There was the suggestion that more data is needed to know if it would work.

Reactions to *Shape up Somerville*

Table 10 provides a summary of the frequency of themes identified from key informant responses regarding *Shape up Somerville*. An overview from coded comments about the applicability of the program in California is also presented.

Table 10: Reactions to *Shape up Somerville*

Scenario Questions:

- *What, if anything, do you like about this approach?*
- *What, if anything, do you dislike about this approach?*
- *What other thoughts do you have about this approach?*
- *If we were to take a similar approach in California, what would you think about that?*

Ideas/Themes	Positive Reactions	Negative Reactions
Community/Built Environment/Safety/Access	18	1
Community/Leadership/Activation	17	3
Comprehensive/Synergistic	11	1
Effectiveness of Approach	2	4
Reproducibility/Scalability/Sustainability	3	4
Population for Intervention	4	2
Policy Component of Approach	3	1
Methods for Measuring Impact of Intervention	1	5
Cost of Approach	0	0
Reaction to Intervention Outcomes	0	3
Fruits and Vegetables Featured in Approach	2	1
Research/Evaluation	0	2
Counseling/Motivational Component	0	1
Incentive/Voucher/Benefit/Prescription for Fruits/Vegetables	1	0
School/Child Focus of Intervention, if applicable	1	0
Nothing/No Component	0	0
Nutrition Education Component	0	0
Physician/Doctor Role	0	0
Total	63	28

Positive Reactions

- Respondents were very positive about the community aspects of the *Shape up Somerville* approach. Many remarked that they liked the increased access to healthy foods and physical activity opportunities. There were positive comments regarding the food systems approach; urban agriculture; working with different sectors, including retail; and creating built environment changes, such as making improvements to increase access to public transit.
- Positive reactions were recorded about community activation and leadership. Respondents liked how the whole community was mobilized, the collaborative nature of the project, how community capacity was increased, and that an investment was made in the community. It was suggested that working through community cooperation was better than reliance on physicians and the health care system. Respondents relayed that this made the approach more sustainable.
- There were consistent reactions that this approach was more comprehensive, multi-faceted, and diverse than the others shared during the interview. One respondent liked that it addressed all sectors of the Social Ecological Model. Another mentioned that it made sense to target the whole community and not just those who are obese.
- Respondents felt that this was a more population-level approach, yet it also targeted at-risk groups and communities experiencing health disparities.
- Respondents noticed that there were community coalitions and community-driven approaches to create policy change, and they liked that aspect of the approach.
- Key informant responses about effectiveness and scalability were mixed, with some positive and other negative impressions; however, when later asked about applicability in California, respondents felt the approach could be effective.

Negative Reactions

Positive reactions to the program outweighed the negative in frequency; however, negative comments were more descriptive to provide guidance on future direction for intervention approaches.

- *Shape up Somerville* received about half the number of negative comments as it did positive. The most frequent negative comments were regarding the outcome measures. There were mentions that BMI is not the best measure and that the significance of reductions was vague.
- Some respondents questioned whether the *Shape up Somerville* approach was scalable to low-income, blue collar, working-class communities. There was concern that there might be a need for specific solutions in each type of community.
- There was a concern that the broadness of the approach may preclude larger effects in any one area or issue, or in a larger community. The reaction was that if there are many approaches occurring simultaneously, that it would be difficult to determine which had the greatest effect or in a large community the effects could be difficult to detect if they are too targeted. There were thoughts that there were just too many intervention activities happening concurrently. Concerns also were raised regarding why successful outcomes had not been replicated elsewhere.
- Respondents mentioned that strong local leadership is required for this approach. There were thoughts that it would require a significant investment in coalition building if coalitions were not established previously. Some were concerned that implementation of any change could get messy with so many stakeholders involved.

- Some suggeseted that it was a short-term instead of a long-term intervention and that the approach focused on policy and less on intervention, specifically that policies could be developed but they may not be feasible to implement.
- Another respondent raised the question about including any self-reports of improvements in quality of life.
- Several respondents mentioned that there was not anything that they disliked.

Applicability

- Many respondents mentioned this approach was scalable to California, would be effective and receive support from the public health community, and would be terrific overall. There was the sense that this is already happening in California. Some thought it would be good to build on what already exists in communities instead of adding something new. However, there were also comments suggesting that there may be issues with scalability due to the vast cultural differences between communities.
- Other respondents thought that it would require strong community leadership to implement and that small communities should be piloted one by one. Respondents suggested that pilot communities are chosen based on the level of enthusiasm to adopt the approaches. They relayed that the outcomes could vary greatly depending on the communities chosen and suggested that funding support policy approaches.

Reactions to *Greenprint: Planting Trees for Public Health*

Table 11 provides a summary of the frequency of positive and negative reactions and their themes for the *Greenprint: Planting Trees for Public Health* approach. Data from coded comments regarding the applicability of the program in California are also presented.

Table 11: Reactions to *Greenprint: Planting Trees for Public Health*

Scenario Questions:

- *What, if anything, do you like about this approach?*
- *What, if anything, do you dislike about this approach?*
- *What other thoughts do you have about this approach?*
- *If we were to take a similar approach in California, what would you think about that?*

Ideas/Themes	Positive Reactions	Negative Reactions
Community/Leadership/Activation	20	2
Community/Built Environment/Safety/Access	19	1
Effectiveness of Approach	5	7
Reproducibility/Scalability/Sustainability	5	6
Reaction to Intervention Outcomes	2	6
Methods for Measuring Impact of Intervention	0	5
Comprehensive/Synergistic	4	4
Cost of Approach	4	2
School/Child Focus of Intervention, if applicable	3	0
Nutrition Education Component	0	2
Physician/Doctor Role	0	0
Population for Intervention	1	1
Fruits and Vegetables Featured in Approach	1	0
Nothing/No Comment	1	0
Research/Evaluation	0	1
Counseling/Motivational Component	0	0
Incentive/Voucher/Benefit/Prescription for Fruits/Vegetables	0	0
Policy Component	0	0
Total	65	37

Positive Reactions

- Positive reactions were heard twice as frequently as negative ones. The strongest reaction to the *Greenprint* program was to the community building and activation present as part of the approach. Respondents liked that the approach was place-based and the community context of the intervention. Respondents were moved by the idea that volunteers had a shared experience while contributing "sweat equity" to beautify a communal space and unify the community. They were impressed that through the tree planting process a sense of accomplishment and greater appreciation for the community were fostered. They liked the idea of people meeting each other and how new connections were created. Engagement and stewardship were themes that emerged from conversations and many responded positively to the evaluation finding of increased social cohesion.

- Respondents liked the community-level improvements of the program, specifically the physical and environmental impacts of the program, including beautification, making outdoor spaces more pleasant and safe, creating a park atmosphere, and the ecological service of the trees. They liked the idea that the trees could provide an aesthetic benefit, shaded areas, and safe places to play.
- Several respondents mentioned the potential for the trees to provide a lasting impact, and that they would still be there even when the funding ran out.
- There were positive comments linking tree care, stewardship, and maintenance to landscaping and related jobs. One respondent in particular thought that this approach could even create more jobs in a local community.
- Positive responses were received about the use of community members and sponsors to help the community, and the impression that it is inexpensive and could lower energy costs.
- The collaboration with schools and engagement with youth was also well received.
- Some respondents reported specifically that they thought the approach was great.

Negative Reactions

- A considerable number of respondents were skeptical that the approach could reduce obesity or advance chronic disease prevention. Thoughts were provided that it should address healthy eating, nutrition approaches, or that it should provide nutrition education. Several respondents felt that the ultimate benefit was unclear.
- Some respondents thought the evaluation criteria were vague and they were skeptical about the claims made.
- There was concern about ensuring safety for the community that the trees might provide only a cosmetic improvement, and safety could continue to be an issue.
- The question was raised whether the community had requested the trees or how it was decided to take this approach.
- Some respondents felt the approach was one-dimensional, that it only addressed one factor and was small-scale. They did not feel it was a standalone model, and one respondent suggested that it be combined with other approaches.

Applicability

- Respondents were concerned about the effectiveness and scalability of the project. Comments were split regarding the potential effectiveness, with half being positive and half negative.
- A few respondents thought that the approach would work in California; however, some mentioned that for the approach to be viable, it would depend on the goals of the community.
- It was suggested that interventions should be community-specific and include aggressive evaluations with baseline measurement.
- There was some thought about the current drought situation and that it may not be the best time to plant new trees.
- Respondents mentioned it was important to start with youth beginning at the preschool level. Several encouraged collaboration with schools overall.
- One respondent relayed the idea of the danger of over-selling the tree planting approach and that it may be a tough sell as a “health” program.

Key informants’ comments illuminated the complex and nuanced interactions of the components of each scenario. Selected verbatim comments are provided by theme in *Appendix D*.

Discussion and Recommendations

Community Engagement and Input

Respondents felt strongly about the importance of community building and engagement with residents and community leaders. Respondents relayed their sense that building partnerships and collective efficacy among residents will be critical to success. Any solution selected should give significant emphasis to engaging with residents and local leaders in order to ensure solution-oriented, collaborative decision-making about the plans for moving forward. Key informants also recommended that resources be devoted to capacity building in order for local leadership to participate effectively in intervention planning and implementation processes.

Social Determinants of Health and Community Infrastructure

There was robust discussion regarding the underlying social determinants of health and their influence on the prevalence of overweight and obesity, and health overall. Respondents consistently presented issues of quality housing, education, safety, economic stability, and access to health care as conditions that contribute directly to the health of communities and their residents. Neighborhood access to healthy foods and physical activity opportunities, and exposure to unhealthy conditions, mindsets, and marketing were other factors that respondents noted as reasons for high rates of chronic diseases, overweight, and obesity. Addressing the physical conditions in neighborhoods and underlying social determinants of health is important as part of any intervention or community-level solution.

Nutrition Education and Physical Activity Promotion

Respondents thought that approaches to nutrition education through classes or other direct contact, and creating opportunities for physical activity should play primary roles in reducing overweight and obesity in low-income communities. Supporting access to healthy foods and enhancing the built environment were raised as important strategies for improving health and reducing overweight and obesity. The use of urban agriculture, mobile fruit and vegetable markets, community gardens, and other locally sourced approaches to increase healthy food access were encouraged. Improving and increasing security in parks or other outdoor areas was suggested in order to effectively increase physical activity in low-income communities. Respondents also raised the importance of addressing the lack of awareness of the seriousness of obesity as a condition and the need to understand how healthy eating and physical activity influence overall health. Approaches using education and health promotion should link access and behavior change strategies.

A Role for Health Care

Key informants suggested that health care should play a role, but not a traditional one, which is separate from the community. Respondents noted that the health care system needs to consider the physical, mental, social, and behavioral aspects of health in any physician-related intervention. They also suggested that other health care team members could play a similar role to support intervention efforts. Respondents remarked that population-level approaches in any intervention setting would work better than those focused only on individuals.

Selection of Effective Scenarios

There were positive responses to all the example scenarios, but by far, the *Shape up Somerville* scenario received the most support as a scalable, comprehensive, population-level approach. Respondents shared some concerns about the approach, but there was a strong sense that it provided a good model, one that was relevant to the needs of California communities. *The Wholesome Wave Fruit and Vegetable Prescription Program* and *Greenprint: Trees for Public Health* approaches had elements that respondents liked. They have the potential to be incorporated into a more community-based and population-level intervention or series of initiatives. However, respondents felt that with any approach, it will be important to engage with communities to build coalitions and partnerships that will ensure sustainability. Meaningful, realistic measurement to identify effective approaches during and after implementation also was recognized as critical to success.

Appendices

Appendix A: Key Informant Interview Guide

Formative Research to Explore Obesity Prevention in the Medi-Cal Population

Script Outline

[Schedule interviews via email as a follow-up to invitation letter sent by DHCS.]

INTRODUCTION

Hi, this is _____ from the National Opinion Research Center (NORC). Thank you so much for agreeing to speak with me today. We really appreciate you sharing your thoughts and time. Just as a reminder, the reason we are conducting this interview is to identify health promotion approaches in both health care and community settings that are effective in fostering healthy communities. There are no "right" or "wrong" answers to the questions that I will be asking you today. We are interested in hearing your honest opinions. You may decline to answer any questions you do not wish to answer.

BACKGROUND

The University of California, Davis Institute for Population Health Improvement and California Department of Health Care Services are partnering to conduct a community health project to improve health among low-income Californians. This project is funded by the United States Department of Agriculture Supplemental Nutrition Assistance Program—Education (SNAP-Ed).

This interview will last approximately 1 hour. Your responses will be kept private. In any reporting, we will not include your name or title. All responses will be reported as a group response only, for example, "Most Key Informants reported that…" Your responses will be used for research purposes only and will not be shared outside the research team. We appreciate your open and honest responses. During the interview, you will be audio recorded, so that your responses can be reviewed, analyzed with the other responses, and captured in an aggregate report of the findings.

ORAL CONSENT

At this time, I'd like to read a statement for you to agree or disagree with:

Based on the Survey Introduction, I understand that the information I provide will be kept private and used only for research purposes. My responses will be combined with the responses of other Key Informants, and no individual names will be reported. I also understand this interview will be audio recorded.

I agree with the statement read to me and will complete the survey [CONTINUE]

I do not agree with the statement read to me and will not complete the survey [END]

continued on next page...

Questions Outline

Interviewer will complete the following before/after the interview:

Please enter today's date: _____

Please enter the start time: _____ AM PM

Please enter the end time: _____ AM PM

Participant's name (First, Last): _____

Name of organization: _____

Participant's gender: _____

Participant's phone number: (_____) - _____ - _____

Section 1: Professional Experience

My first set of questions asks about your role in your organization, your general background, and your training.

- Please tell me about the mission or goal of your organization.
- What is your current position or role with the organization?
- How long have you been in this position? Has it been: [select one]?
  - Less than 1 year
  - 1-4 years
  - 5-7 years
  - 8-10 years
  - More than 10 years
- Please describe the population you serve. If you do not work directly work with a specific population, please describe generally the group of people your work is targeted towards.
- Can you tell me about any affiliations you have with organizations outside of your work and how they may help shape your views on health promotion? For example, someone with an affiliation to the Sierra Club may see outdoor activities as an important aspect of living a healthy life.
- How many years of experience do you have in the field of obesity, nutrition, physical activity, or health promotion? Would you say [select one]?
  - Less than 1 year
  - 1-4 years
  - 5-7 years
  - 8-10 years
  - More than 10 years

Section 2: Warm-Up

Next, I'd like to learn more about your thoughts on personal and community health and well-being.

- From your perspective, what are the most important contributors to living a good life?
- From your perspective, what are the most important contributors to living a healthy life?
- From a population perspective, what are the most important contributors to a healthy community?
- If we assume that the majority of Americans believe that health is important to a good life, then why do we experience such high rates of diseases, like heart disease and obesity?

Section 3: Scenarios

[Note: Interviewees will have received scenario questions about 1 week before the interview.]

Measurably Improving Health

Now I'd like to talk with you about any ideas you might have for approaches to measurably improve health among low-income Californians. Imagine you were given a total of $7 million over the next 3 years to measurably improve the health of a mostly urban, racially diverse, low-income community in California with a population of 50,000 people. Highly preventable diseases, like heart disease and type 2 diabetes, are major health problems in this community, and related health care costs are of great concern.

- How would you invest the $7 million in this community over the next 3 years to measurably improve *the health* of this population and why?

Measurably Reducing the Prevalence of Overweight and Obesity

Now I'd like to talk with you about any ideas you might have for approaches to measurably improve health among low-income Californians. Imagine you were given a total of $7 million over the next 3 years to measurably improve the health of a mostly urban, racially diverse, low-income community in California with a population of 50,000 people. Highly preventable diseases, like heart disease and type 2 diabetes, are major health problems in this community, and related health care costs are of great concern.

- Now let's say that there are strings attached to the $7 million, 3-year community investment. Let's say you have to use the money to significantly reduce overweight and obesity among the people living in this community. How would you invest the money in this community over the next 3 years to measurably reduce the prevalence of overweight and obesity and why?
- I asked you first about investing to improve the health of a community and then I asked you about investing to reduce overweight and obesity; **Either:** Why were your responses to the 2 scenarios different? **OR:** Why were your responses to the 2 scenarios the same?
- After thinking about how we might improve a low-income community, why are we not seeing a substantial decline in the prevalence of obesity in California and more specifically among the low-income population?

Section 4: Approaches

Now I'd like to talk with you about any ideas you might have for approaches to measurably improve health among low-income Californians. Imagine you were given a total of $7 million over the next 3 years to measurably improve the health of a mostly urban, racially diverse, low-income community in California with a population of 50,000 people. Highly preventable diseases, like heart disease and type 2 diabetes, are major health problems in this community, and related health care costs are of great concern.

- ***Wholesome Wave Fruit and Vegetable Prescription Program***
- ***Shape Up Somerville***
- ***Greenprint: Planting Trees for Public Healt***h
  - What, if anything, do you like about this approach?
  - What, if anything, do you dislike about this approach?
  - What other thoughts do you have about this approach?
  - If we were to take a similar approach in California, what would you think about that?

Now that we've discussed all 3 approaches I'd like you to step back and respond to 2 more questions.

- What aspects of the three approaches do you think would work well, either separate or combined?
- In addition to the three approaches that we have just reviewed, what other approaches, if any, would you recommend that have demonstrated success?

Section 5: Closing Remarks

Thank you, I just have a few more questions to ask you. In order to ensure we interview a broad cross-section of leaders to help inform this project, we wanted to ask:

- What is your age? Between _____ years old [Select one]
  - 18 to 24 years
  - 25 to 34 years
  - 35 to 44 years
  - 45 to 54 years
  - 55 to 64 years
  - Age 65 or older
- Are you of Hispanic, Latino, or Spanish origin?
  - Yes
  - No
- What race do you identify as? [Select all that apply]
  - White
  - Black or African American
  - American-Indian/Alaska Native
  - Asian
  - Native Hawaiian/Pacific Islander
  - Other: _____

And finally, my last few questions are:

- Can we contact you again regarding your responses or other insights from the interview?
- Do you have any other thoughts, recommendations, or questions for me today?

Those are all of the questions we have for the interview. Thank you so much for your time and the information you provided. We are very grateful to you for sharing your insights and recommendations.

Appendix B: Key Informant Approach Scenarios

Key Informant Interviews

Section 4: Approaches with Demonstrated Effectiveness

Wholesome Wave Fruit and Vegetable Prescription Program

Purpose:
The Fruit and Vegetable Prescription Program promotes affordable access to fruits and vegetables and healthy eating in underserved communities through partnerships with health care providers, community organizations, and fresh produce retailers.

Approach:

- Patients between the ages of 2-19 years, who were diagnosed as overweight or obese, were enrolled in the Fruit and Vegetable Prescription Program at their health care clinic by their primary care physicians.
- Pediatric patients and parents/guardians attended at least 3 monthly visits over a 4- to 6-month period, where the patient and family received obesity treatment counseling from their physicians, including a diet and health assessment, motivational discussions about achieving a healthy weight, and physical activity goal-setting.
- Physicians wrote the participants a fruit and vegetable prescription equal to $1/day for each participant and household member. The prescriptions were then redeemed for fresh fruits and vegetables at participating retailers, where redemption was tracked.

Evaluation:
Pre and post surveys and clinical data of 202 pediatric patients in 2013 showed that:

- Nearly 22% lost an average of 4 pounds
- 35% reduced their BMI percentile
- Nearly 56% increased their fruit and vegetable consumption

Questions:

1. What, if anything, do you like about this approach?
2. What, if anything, do you dislike about this approach?
3. What other thoughts do you have about this approach?
4. If we were to take a similar approach in California, what would you think about that?

continued on next page...

Shape Up Somerville

Purpose:

Shape Up Somerville is a comprehensive program to build and support community-wide health, health equity, and social justice for all who live, work, and visit Somerville, Massachusetts.

Approach:

Shape Up Somerville:

- Engaged all sectors and levels of the community to create policy change that promotes community-wide health and equity
- Focused on engaging at-risk populations, including ethnic minorities, immigrants, low-income residents, and non-English speakers
- Increased access to healthy food by supporting food rescue systems, affordable mobile farmers' markets, school gardens and farm-to-school programs, a healthy restaurant program, school food service improvements, urban agriculture connections, and healthy worksites
- Increased access to physical activity opportunities by extending the community path and the green line subway, supporting structured physical activity throughout the school day; making streets more walkable and bikeable; and supporting healthy worksites

Evaluation:

A study of Shape Up Somerville measured the effect of improving physical activity options and overall availability of healthful foods, before-, during-, and after-school, at home, and in the community, of children in first through third grades. A secondary study compared pre- and post-surveys of parents whose children were a part of the intervention with parents in the control communities.

Pre- and post-assessments of both children and parents showed:

- Significant reductions in BMI z-scores among children exposed to the program
- Significant reductions in BMI among parents exposed to the program

Questions:

1. What, if anything, do you like about this approach?
2. What, if anything, do you dislike about this approach?
3. What other thoughts do you have about this approach?
4. If we were to take a similar approach in California, what would you think about that?

Greenprint: Planting Trees for Public Health

Purpose:

The Greenprint program planted over 1,000 trees in a mostly urban, low-income community near Sacramento, California to improve the health of community members and the environment.

Approach:

- A nonprofit tree organization worked with a local school district, community members, school board officials, the media, and over 100 youth and adult volunteers to plant and care for 1,000 trees in a low-income community.
- The trees were planted on elementary-, middle-, and high-school grounds, as well as parks—all of which were mostly barren.
- Trees, stakes, ties, and mulch were provided by a local utility company and tree experts supported the planting event over a 4-month period.
- Landscape professionals at the school and park districts are maintaining the trees and they have grown considerably since their original planting 5 years ago.

Evaluation:

A community assessment and tree modeling program showed significant:

- Increases in park and playfield use
- Improvements in walkability
- Reductions in energy use from trees providing shade during warm weather months
- Improvements in social cohesion
- Reductions in crime

Questions:

1. What, if anything, do you like about this approach?
2. What, if anything, do you dislike about this approach?
3. What other thoughts do you have about this approach?
4. If we were to take a similar approach in California, what would you think about that?

Now step back and consider these last two questions:

1. What aspects of the three approaches do you think would work well, either separate or combined?
2. In addition to the three approaches that we have just reviewed, what other approaches, if any, would you recommend that have demonstrated success?

Appendix C: Table of Selected Comments on Contributors to Good Life, Healthy Life, and Healthy Community

Legend for Comment Codes Across Questions

While key informants' thinking on contributors to a good life, healthy life, and healthy community shared many themes, the emphasis on these different themes varied from question to question. For instance, social determinants of health were spoken about in much more detail in "Healthy Community" than in "Good Life." To capture the different emphases in the three questions, the code frames for these questions had different levels of detail appropriate to the overall character of the responses. The legend below shows how the different code frames are related to each other. Coding was conducted independently by question as shown in the table columns. The table represents how the codes thematically have similarities across the three questions.

Meta-Category	Code	Good Life (Q7, Table 3)	Code	Healthy Life (Q8, Table 4)	Code	Healthy Community (Q9, Table 5)
Connection	A	Relationships/Love/ Belonging/Social Connections	A	Relationships/Love/ Belonging/Social Connectedness/Upbringing	A1	Social Connectedness/ Support/ Culture
Connection					A2	Community Activation and `Engagement
Environment / Social Determinants	B	Environment/Safety/ Access to Food, Healthcare, Housing, Jobs, Education	B1	Access and Affordability (Health Care, Healthy Foods, Physical Activity)	B1	Environment/Access to Health Care, Housing, Resources
Environment / Social Determinants			B2	Community Composition// Safety/Access to Cultural Resources	B2	Safety
Environment / Social Determinants					B3	Access to Healthy and Affordable Food
Environment / Social Determinants					B4	Access to Places for Physical Activity/Built Environment Encouraging Physical Activity
Environment / Social Determinants					B5	Clean and Attractive Natural Environment
Personal Health	C1	Personal Health Habits (Healthy Diet, Physical Activity)	C1	Personal Health Habits (Healthy Diet, Physical Activity, Sleep)		
Personal Health	C2	Personal Health (Physical, Mental, Emotional)	C2	Personal Health (Physical, Mental, Emotional, Balance)		
Work and Income	D1	Sense of Purpose/ Meaningful Work	D	Financial Resources/Job to Support Healthy Life	D	Opportunity for Work/ Financial Resources
Work and Income	D2	Financial Stability/Well-Paying Job				
Attitude	E1	Good Morals and Values/ Personal Responsibility				
Attitude	E2	Hope/Happiness/Low Stress				
Education			F	Knowledge/Education	F	Adequate Education
Other	G	Other (Equitable Society, Balance in Life, Maslow's Hierarchy of Needs Met)	G	Other (Social Ecological Model, Equitable Society, Leadership, Cleanliness)	G	Conscientious Political Leadership

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Selected Comments on Contributors to a Good Life (Q7)

Table 3 Codes	Good Life (Q7)
D1, E1, A, D2, B	…rewarding work, integrity and honesty…. Social connectedness, so grounding in a healthy family, community and professional relationships….Things like really even the opportunity to love and be loved are a central part of a good life, but also economic security. So having sufficient resources for basic needs, physical safety, and then things like the opportunity to develop interests and talents would really be the hallmark of a good life.
C2	I think life balance is very important to me. So, understanding how the components in the human make-up could contribute to a good life—emotional, intellectual, spiritual—and making sure they're balanced as they can be. Each individual has a different rating on those components, but all are important in a good and balanced life.
A, B, C2, E2	Having support within your family and your community is very important. Having enough resources to feed your family, live comfortably, and give your kids hope for the future is very important. Also, having good mental and physical health for yourself and your family member
B, D2, A, D1	Having a roof over your head. Having enough money to buy nutritious food. Having a strong social network. Having a job that has meaning. I think those are the most important things.
A, C2, D1, B, E2	Happy healthy family, a meaningful and rewarding job, a good place to live, a low stress level.
C2, A, D2, E2, C1	Having your health is important to having a good life; family, friends, a good social network… having stability in your life, having a job or some place you can have stable income…low stress, …being happy and having those around you feeling valued, feeling like you can contribute to society…having good health and friends, and having a good balance. And eating healthy…keeping yourself in good health.
A, D1	Developing healthy, supportive relationships and having a purpose that brings you satisfaction
E1, B	I would say having a sense of personal responsibility and also having sufficient education about what relates to good mental and physical health is probably the most important contributors to having a good life, obviously relative to disease state, having access to appropriate primary and specialty care as made necessary is important.
D2, G, A	A solid job and a just society. A loving family.
C1, B, A	One would be a physically active life. Second would be, access [to] and education [about] the use of healthy foods, and nutrition, and the third would be stability of a family environment, which would include housing and also a network of positive social influences.
A	Social connection, family, feeling well-loved. That's it.
D1, A, B, C1	You think of fulfillment from your vocation and fulfillment from your family and friends and your social group. Living in a comfortable place with adequate medical care, adequate housing, and adequate food. Opportunities for cultural improvement as well as physical activity. I think that's the good life.
D1	Either having purpose, being satisfied with your daily activities whatever they are—whether it's work or being home or being a student or caring for someone or going to the movies. Enjoying the time that you have and feeling like you're making a difference, I think—really important. In fact that last one, feeling like you are making a difference—I think from both a personal and a professional angle I think is really critical.
E2, D1	Living a good life, I mean, bottom line is hope and efficacy. People need to feel that they can, they are in control of their lives and that they can have an impact on their future and that they have something to hope for. I think without that, too many of the environments for our most vulnerable communities do not support health or do not support long quality lives. So people, this personal resiliency really needs to be strong when you have environments that are poor, and I don't mean poor monetarily; I just mean poor infrastructure, poor availability of those basic needs that – needs including safety, food, clean air, and clean water. So if I had to take it down to one thing, it's hope and efficacy.

Selected Comments on Contributors to a Healthy Life (Q8)

Table 4 Codes	Good Life (Q7)
B2, A, B1, F, C2	I would say living in really safe and vibrant neighborhoods…Health also comes from having high degrees of trust and feeling of belonging to your broader community, knowing that you have people that you can rely on, you have social support, and other people that can help you out when you're in need. I would also say having access to nutritious foods…I would also say having access to many different types of services, from mental health services to drug and alcohol treatment programs, services regarding personal enrichment and personal development, services that can help with supporting things like being able to have childcare facilities or transportation facilities or things like that, that's also really important. Then I would also say that having access to the internet and health information, particularly health information that's credible, scientific, and is actionable, is very important to just empower people and their family…to make wise decisions.
B1, F	I think the most important contributors are ready access to healthy food, ready access to health care. An ability to move about safely, and access to education.
C1, D, C2	I think resources and economic security are fundamental to be able to have a healthy life. Fitness and exercise, movement and of course diet... these are things that I think of in terms of having joy or energy or being content with your life. So I don't know if it's happiness as much as feeling energized, [as well as having] the time to recharge and rest and recreate.
A, B1, C2	Having had a healthy and supportive childhood is essential. Having opportunities to exercise and eat healthy foods. Then, having a balance of work and life commitments, so you feel both productive and that you connect with your family and community. They're all important.
B1, F	I think there's a number of factors. Having places where people can actively recreate or actively transport themselves to their place of work, or places where they shop, where they meet. I think having safe places [that people will access]. I think having access to healthy foods and to those places to recreate is important. I think another really important factor is education.
C1, B1, B2, F, A, D, C2	Contributors [include] where you live, socioeconomic background, the level of stress you have in your life, where you live in your housing conditions, income, community support, having access to fruits and vegetables, access to exercise, safe neighborhoods, having potable drinking water, being able to exercise, having your network of friends and family to support you, having stress levels being managed, having access to health care, your education level, your income level, some genetics, and community support.
C1, B1	I think it's important to be active, to be very cognizant of your health, have good health coverage, and to be proactive about your health, tests, various things like that.
C1, D	Exercise, healthful diet, purposeful work.
C1, C2, G	Having a healthy diet. Having a healthy activity level. Having minimal stress in one's life. And adequate relaxation, adequate sleep and rest. Absence of major diseases. Positive mental health and outlook on life. I suppose the absence of factors that would decrease one's health, which would certainly be smoking and pollution and all the environmental contaminants that would decrease one's health status. So positive, but also it has to be the absence of negative.
C2, F, C1	Balance is important to a healthy life. But early education and commitment to nutrition, exercise and just knowledge about healthy living lifestyle choices.
F, B1, D	Education. Security, food security, economic security.

Selected Comments on Contributors to a Healthy Community (Q9)

Table 5 Codes	Good Life (Q7)
A2, G	Making sure that elected officials and people in power, people who are decision makers, think about health as part of their decision-making process...it'll have to be a reciprocal process as you elect people into positions of power and the people who are elected have to listen to and respond to the needs of their constituents. Ensuring that people at the local level have really a voice in the political process.
G	I think having leadership, a leadership system that can organize the community resources in a way that make them available and effective.
B5, B2, F, A1	I think a lot of the things that we think about as factors in the community are directly related to health even if they are not popularly perceived that way. So, safety when you walk outside. Cleanliness of the area in which you live and work. The degree to which violence is a factor in your daily life experience, and also I would say the ability for people to make healthy choices, which implies that they understand what those choices are, so there is kind of an educational piece there. A highly educated community or a community that is well-educated - whatever that might mean, is - tends to be a healthier community, and I would also say sort of, the culture of the community is also really important, and whether or not the culture in that community supports healthy decision-making.
B1, B5, B3	At the community level, I really think that we need to figure out a way to deal with community trauma. We really need to deal, we need to figure out how to provide mental health support to populations that have been marginalized and pushed aside and really devalued. And we need to have a clean environment. We got to have clean air to breathe. We got to have clean water to drink. We got to have healthy food. We have a food industry [dominated by] corporate agriculture....Their profits, their efficiencies aren't necessarily the things that make communities and populations healthy.
B5, D, B2, A1, B3, B4	There's so many elements of health for a community. Clean air and safe water. I think even having some opportunity to connect with nature. Economic security, so opportunity and well-being, economic well-being, sufficient resources for basic needs. Safety, physical security. Social connectedness. Affordable and ready access to healthy foods. A built environment that encourages movement and physical activity. Ideally, all the sectors of a society and all the different places in a community would encourage and reinforce healthy behaviors through their environments, their policies and practices, you really can think of almost every institution within a community and how that can play out and how that might make a difference.
B1, B5, B3, F	I see a community very similar to an individual. So, having access to the different components that will allow people to have a healthy and balanced life. I certainly am a big believer in the contribution of social determents towards health in a community. So, access to safe housing, clean air, clean environment, healthy foods, education about lifestyle choices and nutrition all contribute.
B3, B1, D, F, B4	Again, having the resources to feed everyone, provide adequate housing, and opportunities for work is probably the most important. Having good schools and a park is essential, as well as opportunities to access healthy foods, and adequate transportation so that you're not in the car all the time would all be things that I would prioritize.
A2, G	Well, I think you have to have partners at the community level where good health and public health is a priority and there has to be a forum for the individuals that are living in these communities to engage those partners, to interact with those partners to ensure there's some accountability and ensuring there's a health community.
B2, B1, A1	I would say reduced crime rate, good housing, a socially-connected community, community resources that are accessible and that are safe to utilize, good public transportation, and access to health care in close proximity, or easy transportation from a community perspective.
A1, A2	I think it has to be kind of a shared vision where everybody takes some responsibility for their health, but that there's also community networking that encourages a healthy lifestyle.
B3, B4, B1	In terms of a population perspective, what most helps the community is access to healthy foods, engagement in healthy lifestyles, exercise, management of health variables.
B4	I think the really important contributors are having visual things that tell communities that they are healthy, and that they can be healthier.
B1, B3, B4	..that would include housing stability, food stability, access to good, healthy foods and access to safe environments for unlimited physical activity. In other words, it's not limited by access to green space or places to play outside safely and to be physically active outside. So there's social equity in the community.
D, A1	I think income is a big predictor; obviously I think this affects their resources to do certain things that they have trouble doing if they don't have income. But it's not the only one. I'd say social connectedness is probably another one. Sometimes they're low income but very well socially connected, do pretty well.
B1, B3, B4, D, F	We can talk about access to healthy foods. We can talk about healthy environments that encourage physical activity. We could talk about adequate jobs and financial resources for people to tap into and social programs for those that need it. A big part of me feels like education is the number one element here. From what I've read, when education improves, virtually every measure improves. It's one of the few measures that [correlates] with all of the health measures. The more educated someone is, the more likely they are to be healthy, period. It's really, really impressive when you look at the data around education.

Appendix D: Table of Selected Comments on Reasons for High Rates of Obesity and Chronic Disease

Legend for Comment Codes

Appendix Code	Suspected Reasons for High Rates of Overweight and Obesity (Q10, Table 6)
A	Lack of Education/Awareness of Healthy Lifestyle and Behaviors
B	Social Determinants of Health
C	Food Industry/Marketing
D	Inadequate Health Care/Programs/Reliance on Medical Model Instead of Prevention
E	Values/Priorities
F	Built Environment/Community Issues
G	Stress/Busyness
H	Access to Unhealthy Food
I	Lack of Access to Affordable, Healthy Food
J	Other (Complexity of Factors, More Technology, Less Personal Responsibility)
L	Less Physical Activity

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Selected Comments on Reasons for High Rates of Overweight and Obesity (Q10)

Appendix Code	Suspected Reasons for High Rates of Overweight and Obesity (Q10, Table 6)
	Lack of Education/Awareness of Healthy Lifestyle or Behaviors
A	Most families try to live healthy lives. They're unaware of the harmful effects of most of the foods that we eat, and they're also not aware of the need to have regular exercise.
A, E	I think some people don't know what's healthy or what's not, because that's just the way they've been brought up to eat or exercise, and fruits and vegetables weren't valued, and they don't really understand the risks.
A	I don't think that we should assume that everyone really understands what good health is or have been educated in an effective way to know what good health is….I don't think that that's something that we've made available to people in the way that is effective.
	Disconnect Between Knowledge and Behavior/Difficulty of Changing Habits
E	I would say that the gap between desired state and the rigor that it takes to achieve them is just notable….we have become addicted in our society, from my perspective, to the quick fix, the non-painful, no-cost, give-it-to-me-now in the form of a pill so I don't have to go to the gym and eat right and stop my addictions.
E, B, A	I'm not sure that all Americans really believe that health is important to a good life….I think that you have to have some of your basic needs already taken care of before pretty much people can prioritize health. And I think that many people don't have the income, the socioeconomic status to be able to sometimes make healthy choices.
E	That's very simple, which is that just believing something doesn't lead to behavior. That's pretty straightforward….Just because you're aware of something doesn't mean you're going to do something different.
	Social Determinants of Health
B	The social cohesion of whether it's families or communities has eroded, and so where we would see those sources of support, we don't often have them anymore in our lives. Then we end up engaging in these unhealthy behaviors that are further reinforced or supported by our environment
B	Our country has a system that will always result in one group of a people having an insufficient amount of money to take care of basic needs. Unlike European countries, which have a floor that people don't go below. We don't have such a floor. We have people who live at very low ends of socioeconomic status which produces bad care.
	Food Industry/Marketing
C, H, F	We experience the high levels [of obesity and chronic disease] because of our exposure to increased access to foods and activities that do not promote health. And other environmental exposure too. There's a penchant in the United States to allow capitalism and free enterprise to make decisions and do things that are in the interest of their own corporate welfare, but they're not in the public's interest.
C	Many of our food industry partners, they're much smarter in how they do marketing and promotion, and I think that it's, with all the data that's available, data that people share [on social media] is in this data that's used by the food industry, I think that that in itself is leading to really specific and targeted marketing practices that does lead to over-marketing and overconsumption of less healthy foods among people who are poor or among communities of color.
C, I, H	I think you look at the environments. You look at the marketing. You look at the goals of our corporate agriculture and you look at the goals of the purveyors of empty calories, sugar calories, in our communities. You see their aggressive marketing and you see the absence of healthy product. I think that this is the perfect storm for the poor health conditions we're having in our communities.
	Inadequate Health Care/Programs/Reliance on Medical Model Instead of Prevention
D	What we're finding is that 1% of the community-based organizations are meeting 50% of the social needs. When we make referrals for food, housing, or employment, it's only about 1% of those organizations that actively connect people or successfully connect people with 50% of the identified needs. And when we go sort of up to the next tier, it's 5% of those organizations are meeting 90% of the needs. So what's the other 95% of the organizations doing besides basically sort of existing?
D	I would also say that there is a lot of emphasis in our country on the idea that higher-priced, more intensive medical care will make you healthier. And the reality is, is that the opposite is more often true.
G, D	[People in lower-income brackets] can't take off five hours to sit in a health clinic, in the county health clinic, because five hours' pay for their family is critical. And these places don't have clinics on Saturdays or in the evenings, where it would be nice for these people to actually go to their clinics.

Appendix E: Table of Selected Comments on Approach Scenarios

Legend of Comment Codes for Approach Scenarios

Comment Code	Ideas/Theme
A	Community/Built Environment/Safety/Access
B	Community/Leadership/Activation
C	Comprehensive/Synergistic
D	Cost of Approach
E	Counseling/Motivational Component
F	Effectiveness of Approach
G	Fruits and Vegetables Featured in Approach
H	Incentive/Voucher/Benefit/Prescription for Fruits/Vegetables
I	Methods for Measuring Impact of Intervention
J	Nothing/No Comment
K	Nutrition Education Component
L	Other Health Care Issues
M	Reaction to Intervention Outcomes
N	Physician/Doctor Role
O	Policy Component of Approach
P	Population for Intervention
Q	Reproducibility/Scalability/Sustainability
R	Research/Evaluation
S	School/Child Focus of Intervention, if applicable

continued on next page...

Selected Comments By Effective Approach Scenario

Comment Code	Comments on Approach Scenarios
	Wholesome Wave Fruit and Vegetable Prescription Program: **Aspects Praised**
G	I do like the fact that we're using fruits and vegetables as medicine rather than using actual prescription drugs, because there are ways to improve health status just based upon what we eat.
N	It enhances I think the providers' ability to begin a conversation…It's a good role for the health system to play.
H	I really like the very direct addressing of financial constraints and the inclusion of a financial incentive, and it's actually a considerable incentive because it's a dollar a day for each participant and household member…
Q	It seems to really leverage well on the infrastructure, using already what's there. Of the three this one seems like it might have the greatest potential for scalability…
E	I very much like the idea of motivational discussions about achieving healthy weight.
N	I like that it uses health care providers who are a trusted source of information and have influence over the population.
A, H	I like that it engages farmers and retailers and helps to support local communities, local economies, through the use of the incentives, the prescriptions, at different local retailers… New money is staying and benefiting the community.
	Wholesome Wave Fruit and Vegetable Prescription Program: Issues and Concerns
P	It's very much a limited type of intervention, it's not really reaching a very large segment of the population.
D, Q	Having the physician at the center is a very high cost. That's a limiting factor to me in terms of scale.
L, N	I thought that, in particular, it was a burden to the health care agencies….It's using the wrong system to give the messages, because the health care systems are very overburdened right now
M	I don't like the outcome….only a third of them drop their BMI and about half of them actually change their fruit and vegetable consumption. To me that's not real successful.
P	[This type of program] is burdensome to the families. In order to get the education and the changes in understanding of their healthy – they need to attend these repeated clinics, which are very difficult for families to do, particularly if you're trying to organize both the children and the parents.
N	What I dislike about it is that it's downstream at the medical end and it's missing a communitywide approach, so it's missing all the people who don't see their doctor.
	Shape Up Somerville**: Aspects Praised**
A, C	They really brought it from a very broad perspective. They approach it from food systems…they really focused on improving the food environment, which I think is great. They've also thought about equally making changes to the physical activity and transportation environment.
C, P	I really like the comprehensiveness of it, very much like the focus on engaging at-risk populations.
B	It's the best way to make changes in the environment of children and families, rather than just taking them through the medical care system. It's really effective in those working with communities and finding out what the issues are, and also, mobilizing communities to solve their own issues.
C	I like the fact that this one addresses all sectors of the social ecological model.
M	I like that they showed significant reductions in BMI for children and parents exposed to the program.
M, Q	I think you're putting in place some community level capacities that will extend beyond the three years of the project…..
	Shape Up Somerville: **Issues and Concerns**
F, O	It seems very focused on just policy and not necessarily implementation.
Q	The downside is that it's messy and complicated to implement
F, P	Being able to translate this approach to a community that's actually is much more vulnerable and needs it more [than Somerville], would be something I think that would be a challenge.
B, Q	The biggest challenge is leadership and time. So we need some local leadership to come and bring people together, give a vision of the future and to promote collaboration. And it takes some time—it's not a quick intervention—but it does have more staying power if it is successful.
F, I	It seems really broad—really broad. As you were describing it, one of my thoughts was, what if you just picked three of those strategies and did them really well?

Comment Code	Comments on Approach Scenarios
	***Greenprint: Planting Trees for Public Health:* Aspects Praised**
A	Having that beautification of the park so it's a place where people want to be outdoors more to interact with one another - I really like that element of it. It's community-driven and it focuses on improving the environment and the land.
B	I love that [it] showed that if you build sweat equity from a community – so you get the community to participate in actually planting the trees – they're invested in that beautification project…Gosh, it's a win-win all the way around, right?
Q	I like the fact that they had a dedicated staff to actually maintain the trees
A, B	Improving walkability, reductions in energy, and the improvement in social cohesion. Because communities are getting together around these beautiful spaces.
D	One thing is it's a very affordable approach…A thousand trees with a lot of the volunteer and community mobilization is pretty inexpensive. That's great.
P	The other thing is that interestingly in my experience lower income communities often have lots of family gatherings. They don't have big houses, so they go to parks for family gatherings. So this is an approach that actually helps—lower-income people more than higher-income. So it'll help that equity factor.
	***Greenprint: Planting Trees for Public Health:* Issues and Concerns**
C	I don't see it as a standalone model, that this would be the sole investment of an initiative. I think the focus is too narrow, unless they were growing food with the trees that they're planting.
A	I think the next step in this program is to somehow reassure parents that it's safe for their kids to use this area.
F	I don't think that this very specifically will do something about obesity prevention.
I, R	I just wondered if there were benchmarks for evaluating. For example, increases in park use or playfield use. What sort of metrics were being looked at to bring things down to numbers?