

## **ABSTRACT**

### **THE SSBG: IMPLICATIONS FOR POPULATION BASED HEALTH AND REDUCE HEALTH COSTS**

The health of people in American is poor compared to other industrialized countries. The U.S. has low positions on such health measures as life expectancy, infant mortality, quality life years and other measures of well being. At the same time, health care cost far outpaces other countries and are estimated at \$2.6 trillion per year. There has been little attention provided to the social determinants of health which are environmental factors that influence the health of individuals and communities. Federal budgets reflect these events. The purpose of this investigation is to examine social determinants of public health that are associated with Social Service Block Grant (SSBG) and cite human and economic costs for not making a substantial contribution to SSBG to improve human health and economic conditions in the U. S..

#### **Procedures**

The Center for Disease Control and Prevention provides the tools for addressing population based health issues. They have listed over twenty factors associated with population based health and have identified public health goals associated with these factors. The SSBG has identified 29 elements of service that are a part of the program. Thus, an analysis identified those elements of SSBG that had functions related to social determinants of public health. Fiscal costs were then examined from a sample of the social determinates that were related to the SSBG programs

#### **Results**

The results of the analysis revealed there were 23 of the 29 elements of SSBG that had components of social determinants of public health. Cost associated with the sample of prevention of obesity, substance abuse and violence were in the hundreds of billions for each area of related health care productivity losses.

#### **Conclusion**

Estimates are that health care is 15% of health. The rest is primarily with the social determinants of public health. Therefore, SSBG should funded at a level that can make a substantial contribution to a healthier America through improving social determinants of health to lower acute health care costs.

# THE SSBG: IMPLICATIONS FOR POPULATION BASED HEALTH AND REDUCED HEALTH COSTS

The health of people in American is poor compared to other industrialized countries. The U.S. has low positions on such health measures as life expectancy, infant mortality, quality life years and other measures of well being. At the same time, health care cost far outpaces other countries and are estimated at \$2.6 trillion per year. There has been little attention provided to the social determinants of health which are environmental factors that influence the health of individuals and communities. Federal budgets reflect these events. The purpose of this investigation is to examine social determinants of public health that are associated with Social Service Block Grant (SSBG) and cite human and economic costs for not making a substantial contribution to SSBG to improve human health and economic conditions in the U. S..

## Procedures

The Center for Disease Control and Prevention provides the tools for addressing population based health issues. They have listed over twenty factors associated with population based health and have identified public health goals associated with these factors. The SSBG has identified 29 elements of service that are a part of the program. Thus, an analysis identified those elements of SSBG that had functions related to social determinants of public health. Fiscal costs were then examined from a sample of the social determinates that were related to the SSBG programs

## Social Determinant of Public Health

Social determinants of health of the Center for Disease Control and Prevention (CDC) are expressed in SSBG programs. The CDC has major focus areas that are delineated into objective target areas. The goals and objective targets are: ***Increase Years of Healthy Life/Prevent Disability:*** (Mental and Physical Impairment and Disabilities). ***Promote Healthy Behavior:*** (Physical Activity, Nutrition, Unintentional injuries, Tobacco, Substance Abuse), ***Protect Health:*** (Environmental Health, Occupational Health, ***Access to Health Care:*** Clinical Preventive Services, Mental Health Services), ***Strengthen Community Prevention:*** (Violent & Abusive Behavior, Community Interventions). ***Eliminate Health Disparities:*** People with Disabilities, Low Income, Gender, Age, and Race/Ethnicity. An analysis of the Presidents FY 2012 Budget reveals diminished funding of the SSBG from 1985 of \$2.8 billion to \$1.7 billion, not adjusted for in the Presidents\ FY2012 budget,

## Public Health Social Determinants are in Nine Federal Departments

The role of CDC social determinants of health is to prevent disease and disability. Thus, there is need for initiatives by CDC and Federal Departments and agencies with public health social determinant function to collaborate with one another to effectively

implement public health initiatives to improve population based health that can lower health cost. A disconnected and under funded public health system, may in part, be responsible for low U.S. standing, when compared to other industrialized countries, on population-based morbidity and mortality measures which contribute to diminished health, chronic health conditions and disability.

### **Social Determinants of Health, Health Costs and SSBG**

There are many public health functions that are to be implemented in SSBG that support improvement of life quality and include promoting and protection of individuals and communities. (See appendix B). Some examples of the social determinant goal of “promoting health through SSBG would be prevention of obesity (i.e. nutrition and physical activity) which is related to chronic health conditions and a major driver of health care costs. Other public health functions are substance abuse that escalates health cost by billions of dollars, community and domestic violence, and case management and counseling associated with access to health services.

Targeting interventions at special risk groups and focusing upon relatively low-cost interventions of SSBG increases the probability of human and fiscal benefit to government. Investment through SSBG prevention and intervention programs for children and youth, including quality early childhood programs, comprehensive evidence-based school, after school, and summer school programs, mentoring programs, mental health and substance abuse treatment programs, and alternative intervention programs that have lead to decreased youth arrests, decreased delinquency, lower recidivism, can produce financial savings.

### ***Poor Population Based Outcomes, Poor SD Support, and High Medical Costs***

The population based health of the U.S. is poor compared to other industrialized countries in the U. S.. For instance, one World Health Organization report had the U. S. 76<sup>th</sup> in the world on life expectancy adjusted for disability. But Health care costs are exorbitant at \$2.6 trillion; double those of most industrialized countries. Health care is 15% of population based health. Most of the rest of health is associated with social determinants of health which are non-medical reimbursements. The SSBG programs provides considerable benefits from social determinants of health that can improve population based health and lower costs of the acute health care system.

### ***Addressing Obesity and Chronic Health Conditions through SSBG***

Health care spending is expected to rise by 25% by 2030. Chronic diseases are responsible for 50% of health care costs. Two of the social determinants of health related to SSBG are adequate nutrition and opportunity for recreational physical activity, which in combination can prevent obesity. The cost of obesity related diseases total in the hundreds of billions of dollars (see appendix C) that increase medical costs for the federal Medicare and Medicaid programs, employers and American consumers. If all physically inactive Americans became active, it would save \$77 billion in medical costs annually. According to U. S. Department of Agriculture, healthier diets could prevent at least \$71 billion per year in medical costs, lost productivity and lost lives.

### ***Violence Prevention Trough SSBG May Contribute to Diminished Health***

Violent crime accounts for \$426,000,000,000 per year and domestic violence and child abuse are part of the cost of violence. The U.S. medical costs for domestic violence, a part of violent crime, have been estimated \$31 billion per year. One-quarter to one-half of domestic violence victims report that they have lost a job due, at least in part, to domestic violence. In addition, there are estimates that the prevention of child abuse and neglect can help stop a cycle of violence and save up to \$5.00 for every \$1.00 invested in preventing such abuse and neglect.

### **Funding for SSBG and Social Determinants of Public Health**

There are hundreds of Federal programs that address the social determinants of health that are spread through many agencies of nine of federal government departments that also contribute to population based health. However, federal funding for these programs has been severely cut over the past 25 year. The SSBG program is an extreme case of revenue loss. It was funded at \$2, 8 billion in 1985 and funds are projected at \$1.7 billion in FY2012, not adjusted for inflation. This diminished source of revenue for SSBG, and other programs that address the social determinants of health, may be part of the reason for the poor population based health outcomes of Americans and the exorbitant health care costs.

## Summary

The population based health of the U.S. is poor compared to other industrialized countries. But health care costs are exorbitant at approximately \$2.6 trillion per year. Health care is 15% of population based health. Most of the rest is with social determinants of public health that are non-reimbursable medical expenses. The SSBG programs provide considerable benefits from social determinants of health that can improve population based health and lower costs of the acute health care system. There are hundreds of programs that address the social determinants of health that are spread through many agencies of nine of the federal departments of government that also contribute to population based health. However, federal funding for these programs has been severely cut over the past 25 year. The SSBG program is an extreme case of revenue loss. It was funded at \$2, 8 billion in 1985 and funds are projected at \$1.7 billion in FY2012, not adjusted for inflation. This diminished source of revenue for SSBG, and other programs that address the social determinants of health, may be part of the reason for the poor population based health outcomes of Americans and the exorbitant health care costs.

## APPENDIX A

There are twenty-nine elements that are a part of SSBG. Twenty-three of these SSBG elements are related to public health issues. A description of the public health issues associated with the twenty-three SSBG elements are in bold.

### 1. Case Management Services

Case management services for ***Mental health and substance abuse, family health, violence unintentional injuries, access to health care all of which can prevent disability*** are services or activities for the arrangement, coordination, and monitoring of services to meet the needs of individuals and families. Component services and activities may include individual service plan development; counseling; monitoring, developing, securing, and coordinating services; monitoring and evaluating client progress;

### 2. Congregate Meals

Congregate meals are those services or activities designed to prepare and serve one or more meals a day to individuals in order to prevent malnutrition, Component services or activities may include the cost food; assessment of nutritional and dietary needs; nutritional education and counseling.

### 3. Counseling Services

Counseling services are those services or activities that apply ***therapeutic processes to personal, family, and occupational health*** in order to bring about a positive resolution of the problem or improved individual or family functioning and ***health***. Problem areas may include family relationships, parent-child problems, or drug abuse.

### 4. Day Care Services—Adults

Day care services for adults are those services or activities provided to adults who require care and supervision in a setting for ***health protection*** for a portion of a 24-hour day. Component services or activities may include health supports or assistance in obtaining health services; counseling; recreation and general leisure time activities; meals; personal care services.

## 5. Day Care Services—Children

Day care services for children (including infants, preschoolers, and school age children) are services or activities provided in a setting that in a center or in a home, for a portion of a 24-hour day. Component services or activities may include a comprehensive and coordinated set of appropriate ***developmental activities for children, recreation, meals and snacks, health support services, social service counseling for parents,*** and monitoring of child care homes and facilities ***against abuse and violence.***

## 6. Family Planning Services

Family planning services are those educational, comprehensive medical, or social services or activities that enable individuals, including minors, to promote health through determine freely the number and spacing of their children. Specific component services and activities may include preconception counseling, education, and ***general reproductive health care, including diagnosis and treatment of infections*** that threaten reproductive capability.

## 7. Foster Care Services—Adults

Foster care services for adults are those services or activities that assess the need and arrange for the substitute care and alternate living situation of adults in a setting suitable to the individual's needs, which ***include health needs.*** Individuals may need such services because of ***social, physical, or mental disabilities, or as a consequence of abuse or neglect.*** Component services or activities include assessment of the individual's needs; case planning and case management to assure that the individual receives proper care in the placement; counseling to help with personal problems and adjusting to new situations; assistance in obtaining other necessary supportive services; determining, through periodic reviews, the continued appropriateness of and need for placement;

## 8. Foster Care Services—Children

Foster care services for children are those services or activities associated with the provision of an alternative family life experience for ***abused, neglected,*** or dependent children, between birth and the age of majority. Services may be provided to children in foster family homes, foster homes of relatives, group

homes, emergency shelters, residential facilities, child care institutions, pre-adoptive homes, or a supervised independent living situation. Component services or activities may include assessment of the child's needs; case planning and case management to assure that the child receives proper care in the placement; **medical care** as an integral but subordinate part of the service; counseling of the child, the child's parents, and the foster parents; referral and assistance in obtaining other necessary supportive services; periodical reviews to determine the continued appropriateness and need for placement; and recruitment and licensing of foster homes and child care institutions.

## **9. Health-Related and Home Health Services**

**Health-related and home health services** are those in-home or out-of-home services or activities designed to assist individuals and families to attain and maintain **a favorable condition of health**. Component services and activities may include providing an analysis or assessment of an individual's health problems and the development of a treatment plan; assisting individuals to identify and understand their health needs; assisting individuals to locate, provide, or secure and utilize appropriate **medical treatment, preventive medical care, and health maintenance services, including in-home health services and emergency medical services; and providing follow-up services as needed**.

## **10. Home-Based Services**

Home-based services are those in-home services or activities provided to individuals or families to assist with household or personal care activities that **improve or maintain adequate family well-being**. These services may be provided for reasons of illness, incapacity, frailty, absence of a caretaker relative, or to prevent abuse and neglect of a child or adult. Major Service components include homemaker services, chore services, home maintenance services, and household management services. Component services or activities may include protective supervision of adults and/or children to help **prevent abuse**, temporary nonmedical personal care, house-cleaning, essential shopping, simple household repairs, yard maintenance, teaching of homemaking skills, training in self-help and self-care skills, assistance with meal planning and preparation, sanitation, budgeting, and general household management.

## **11. Home-Delivered Meals**

Home-delivered meals are those services or activities designed to prepare and deliver one or more meals a day to an individual's residence in order to prevent institutionalization, *malnutrition*, and feelings of isolation. Component services or activities may include the cost food; *assessment of nutritional and dietary needs; nutritional education* and counseling; and information and referral.

## **12. Housing Services**

Housing services are those services or activities designed to assist individuals or families in locating, obtaining, or retaining suitable housing, *which are in safe environments from violence. toxic chemicals such as lead, asbestos, radon, infestation of rodents and insects and others.* Component services or activities may include tenant counseling; helping individuals and families to identify and correct substandard housing conditions on behalf of individuals and families who are unable to protect their own interests.

## **13. Independent and Transitional Living Services**

Independent and transitional living services are those services and activities designed to help older youth in foster care or *homeless youth and vulnerable populations* to make the transition to independent living, or to help adults make the transition from an institution, or from homelessness, to independent living. Component services or activities may include educational and training in daily living skills, and housing assistance. Specific component services and activities may include supervised practice living.

## **14. Information and Referral Services**

Information and referral services are those services or activities designed to provide information about services provided by public and private service providers and a brief assessment of client needs (but not diagnosis and evaluation) to facilitate appropriate referral to these community resources *to protect health*

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## **15. Pregnancy and Parenting Services for Young Parents**

Pregnancy and parenting services are those services or activities for married or unmarried adolescent parents and their families designed to assist young parents in coping with the social, emotional, and economic problems related to pregnancy (*a health function*) and in planning for the future. Component services or activities may include securing necessary health care and living arrangements; and providing counseling, child care education, and training in and development of parenting skills, *which protect and promote health*.

## **16. Prevention and Intervention Services**

Prevention and intervention services are those services or activities designed to provide early identification and/or timely intervention to support families and *prevent or ameliorate the consequences of abuse, neglect, or family violence*, or to assist in making arrangement for alternate placements or living arrangements where necessary. Component services and activities may include investigation; assessment and/or evaluation of the extent of the problem; counseling, including *mental health counseling* or therapy as needed; developmental and parenting skills training; and other services including supervision, case management.

## **17. Protective Services—Adults**

Protective services for adults are those services or activities designed to prevent or remedy abuse, neglect, or exploitation of adults who are unable to protect their own interests. Examples of situations that may require protective services are injury due to *maltreatment or family violence; lack of adequate food, clothing, or shelter; lack of essential medical treatment or rehabilitation services*. and other resources. Component services or activities may include investigation; immediate intervention; emergency medical services; emergency shelter; developing case plans; initiation counseling for the individual and the family; assessment/evaluation of family circumstances; making alternative or improved living arrangements; and case management and referral to service providers.

## **18. Protective Services—Children**

Protective services for children are those services or activities designed to prevent or *remedy abuse, neglect, or exploitation of children who may be harmed through physical or mental injury, sexual abuse or exploitation, and negligent treatment or maltreatment, including failure to be provided with adequate food, clothing, shelter, or medical care.* Component services or activities may include immediate investigation and intervention; emergency medical services; emergency shelter; developing case plans; initiation of legal action (if needed); counseling for the child and the family; assessment/evaluation of family circumstances; arranging alternative living arrangements; preparing for foster placement, if needed; and case management and referral to service providers.

## **19. Recreational Services**

Recreational services are those services or activities designed to provide or assist individuals to take advantage of individual or group activities directed towards *promoting physical, cultural, and/or social development.*

## **20. Residential Treatment Services**

Residential treatment services provide short-term residential care and comprehensive treatment and services for children or adults whose problems are so severe or are such that they cannot be cared for at home or in foster care and need the specialized services provided by specialized facilities. Component services and activities may include diagnosis and psychological evaluation; alcohol and drug detoxification services; individual, family, and group therapy and counseling; training in activities of daily living; supervised recreational and social activities; case management; and referral to and utilization of other services.

## **21. Special Services for Persons with Developmental or Physical Disabilities, or Persons with Visual or Auditory Impairments**

Special services for persons with *developmental or physical disabilities, or persons with visual or auditory impairments, are services or activities to maximize the potential of persons with disabilities; help alleviate the effects of physical, mental, or emotional disabilities;*

***and to enable these persons to live in the least restrictive environment possible.*** Component services or activities may include personal and family counseling; respite care; family support; recreation; transportation; aid to assist with independent functioning in the community; and training in mobility, communication skills, the use of special aids and appliances, and self-sufficiency skills.

## **22. Special Services for Youth Involved in or at Risk of Involvement with Criminal Activity**

Special services for youth involved in or at risk of involvement with criminal activity are those services or activities for youth ***who are, or who may become, involved with the juvenile justice*** system, and for their families. Component services or activities are designed to enhance family functioning and/or modify the youth's behavior with the goal of developing socially appropriate behavior and may include counseling, intervention therapy, and residential and medical services if included as an integral but subordinate part of the service.

## **23. Substance Abuse Services**

Substance abuse services are those services or activities that are primarily designed to deter, reduce, or ***eliminate substance abuse or chemical dependence. Except for initial detoxification services, medical and residential services may be*** included but only as an integral but subordinate part of the service. Component substance abuse services or activities may include a comprehensive range of personal and family counseling methods, methadone treatment for opiate abusers, or detoxification treatment for alcohol abusers. Services may be provided in alternative living arrangements such as institutional settings and community-based halfway houses.

## APPENDIX B

There are many public health features related to the elements of SSBG. A description of the SSBG elements and the related public health functions appear below.

- *Nutrition:* provides access to healthy foods and nutritional quality and provides opportunities to address obesity
- *Physical Activity:* provides opportunities to confront obesity through recreational physical activity
- *Access to Health service:* protects health of pregnant mothers and funds health education programs, case management has provisions for access to health care and counseling
- *Substance Abuse:* provides case management and counseling for drug interventions
- *Environmental Health:* addresses environmental contamination in housing and work settings and is associated with safe housing
- *Violence Prevention:* provides supported initiatives to combat violence in local communities and supports women victims violence, including domestic abuse and sexual assaults
- *Substance Abuse:* supports a comprehensive approach to combating drug abuse and provides case management for residential substance abuse treatment programs
- *Community Health:* increases public safety efforts where vulnerable populations live. proposes to strengthen built environments to improve health through physical activity, works to reduce homelessness, provides for counseling and case management for decent housing
- *Worker Safety:* supports safe and healthy work places and advocates to protect health of workers and working conditions
- *Health Disparities:* provides for the unique health needs of women from vulnerable populations with specialized medical and counseling services
- *Unintentional Injuries:* develops a smarter infrastructure that will promote population safety from unintentional injuries
- *Mental Health:* continues to emphasize specialized mental health care for vulnerable populations

## APPENDIX C

### **COSTS: INADEQUATE NUTRITION-PHYSICAL ACTIVITY-OBESITY**

Obesity may result in the form of several chronic health conditions for which there are significant medical costs. Some of the costs of chronic health conditions associated with overweight and obesity appear below.

#### **Costs of Diet-and-Inactivity Related Diseases**

Cancer (11)	\$190 billion
Coronary Heart Disease (12)	\$142 billion
Obesity (13)	\$117 billion
Diabetes (14)	\$132 billion
Stroke (15)	\$57 billion
High Blood Pressure (16)	\$60 billion
Osteoporosis (17)	\$17 billion

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## **APPENDIX D**

### **HEALTH CARE SYSTEMS COSTS FOR OBESITY**

The costs to the medical health care delivery system as a result of inadequate physical activity and nutrition associated with obesity and other chronic health conditions are considerable. A list of costs associated with the consequences of the disability risk factors associated with obesity and health care costs appears below.

- From 1979 to 1998 annual hospital costs for treating obesity-related diseases in children rose three-fold (6)
- The annual cost of obesity to families, businesses, and governments in the United States is \$123,000,000,000, to \$117 billion, half of which is paid through Medicare and Medicaid;
- Estimates the annual expenditures related to overweight and obesity in adults in the United States to be \$264,000,000,000
- Annual hospital costs for children and youth associated with obesity tripled over 2 decades, rising from \$35,000,000 in the period 1979 through 1981 to \$127,000,000 in the period 1997 through 1999.

## **APPENDIX E**

### **COST SAVINGS THROUGH PREVENTION OF VIOLENCE**

The SSBG has the potential for considerable fiscal savings through effective programs that are associated with the reduction of violent behavior. A list of cost savings follow.

- The cost of intimate partner violence exceeds \$5,800,000,000 each year, \$4,100,000 of which is for direct medical and mental health care services;
- The annual cost of lost productivity due to domestic violence is estimated at \$727,800,000 with over 7,900,000 paid workdays lost per year;
- Estimates are that domestic violence costs United States employers between \$3,000,000,000 and \$5,000,000,000 annually in lost time and productivity, while other reports have estimated the cost at between \$5,800,000,000 and \$13,000,000,000 annually.
- United States medical costs for domestic violence have been estimated to be \$31,000,000,000 per year
- The cost of domestic violence in 2003 was more than over \$8,300,000,000
- Violent crime accounts for \$426,000,000,000 per year and rape exacts the highest costs per victim, and accounts for \$127,000,000,000 per year
- The prevention of child abuse and neglect can help stop a cycle of violence and save up to \$5.00 for every \$1.00 invested in preventing such abuse and neglect.