

Research, Policy, and the Federal Role in Prevention Initiatives for Children

Carol H. Ripple

Department of Psychiatry, Yale University School of Medicine

Edward Zigler

Department of Psychology, Yale University
Yale Child Study Center

ABSTRACT

With the ability and the funds to implement programs on a national level, federal policy is a potentially potent tool in primary prevention. Despite the U.S. government's history of ambivalence toward intervening in child rearing and limited national support for primary prevention, several initiatives have been implemented for children and families with some measure of success. The successes, however, are mitigated by limitations of the initiatives themselves and by the inconclusive nature of much of the evaluation data. This review of 5 federal policy-based initiatives for children and families provides the backdrop for discussing aspects of federal prevention program design, implementation, policy, and research.

Although much is known about the positive effects of school, family, and community-based primary prevention efforts (e.g., [Price, Cowen, Lorion, & Ramos-McKay, 1988](#)), there is less awareness of data on successful federal policy-based prevention initiatives for children and families. This is dramatically out of balance with the scale of these programs. For example, over \$55 billion in federal funds have been spent on Head Start since its inception in 1965, even though it remains only partially funded and serves about half of eligible children. Reviews of specific federal initiatives notwithstanding (e.g., [Lorion, Iscoe, DeLeon, & VandenBos, 1996](#)), little evidence on federal prevention policies for children has made its way into the public consciousness.

This gap in the knowledge base is unfortunate because public policy is potentially the most powerful tool there is to foster preventive services for children. Federal policy has the ability to shape programs and approaches to prevention nationwide and can direct considerable federal funds toward primary prevention initiatives. Even when it does not provide significant funding, federal policy is a potent voice in setting the national agenda (education is an example, in which the federal government seeks to set national education

policy despite paying just 7% of costs). In this article we provide an overview of research on federal prevention initiatives for children and families, highlight successes and limitations, and suggest ways for prevention science to enhance programs, policies, and research.

Historical precedence, attitudes toward primary prevention, and the current sociopolitical context provide the background for this discussion. Historically, federal policies for children can be traced to the establishment of the Children's Bureau in 1912 ([Garwood, Phillips, Hartman, & Zigler, 1989](#)). Then, as now, the nature and extent of the government's relationship to children and families were fraught with tension between protecting individual and family rights on the one hand, and concern about child welfare and disintegrating social conditions on the other. In contrast to other countries where governmental responsibility for child welfare is assumed (e.g., France, where even noncitizens are eligible for a broad array of children's services), America's history of individualism has meant that public policies for children have not been universally endorsed. Policy debates surrounding child care and parental leave exemplify ambivalence toward a federal role in child and family policy (see [Steiner, 1981](#)).

In addition to this ambivalence, policymakers contend with a dearth of commitment to primary prevention. Broadly speaking, the United States is a nation that reacts to existing problems and only rarely adopts a preventive approach to potential future difficulties. Limited national support for early and universal prevention persists in spite of the costly and often ineffectual nature of indicated prevention approaches ([Albee, 1986](#)).

Two salient aspects of the current sociopolitical context affect federal policies. First, the new federalism—characterized by widespread pressure to devolve programs from federal to state control, thus emphasizing states' rights—has to some degree touched all of the policies we discuss. Devolution, typically accomplished by block-granting programs to states, holds both promise (states gain the ability to tailor programs to serve their specific constituencies) and peril (program quality may suffer with the loss of centralized control) for prevention programs. Second, federal prevention policies reflect the way the focal problems, such as lead poisoning or poor birth outcomes, are viewed. Namely, policies are most often developed in response to high levels of a particular problem among citizens who are seen as unable to help themselves. The result has been to treat each problem in isolation and to marginalize target populations, namely the poor and ethnic minorities.

This review covers a selection of federal prevention initiatives that (a) are aimed at children and families (but not exclusively disabled children), (b) have existed long enough to have been evaluated, and (c) have shown some measure of success. Whether by design or de facto, they address problems of children and families living in poverty. We include a range of definitions of success, such as improved outcomes, better access to services, and cost-effectiveness. On the basis of our criteria, we do not cover many other large-scale programs such as Title I. Selected evaluations of the programs we have included—Head Start, lead poisoning prevention, Medicaid, Special Supplemental Program for Women, Infants, and Children, and the Earned Income Tax Credit—are

listed in [Table 1](#). Our aim is to shed light on these initiatives, to examine factors related to their successes and limitations, and to suggest directions for strengthening federal prevention programs, policies, and research.

Federal Policy-Based Prevention Programs for Children and Families: Brief Overview

Project Head Start

As part of the 1960's War on Poverty, Head Start was first implemented in the summer of 1965 (see [Zigler & Valentine, 1997](#)). Based on a two-generation, comprehensive approach to primary prevention, Head Start features nutrition, physical, and mental health services, parent and community involvement, home visits, social services for families, and early-childhood education. The goal of this enduringly popular program is to improve school readiness among children living at or below 100% of the federal poverty line. Most often, Head Start is implemented as a center-based, half-day, nine-month program for four-year-olds and their families. It is the only federal program that awards grants directly to community grantees, circumventing the state level altogether. Recognizing the importance of intervening earlier in children's lives, Early Head Start was first implemented in 1995 to serve low-income families with children, prenatally to age three.

Data support Head Start's success in improving school readiness (see [Table 1](#)), and results from a random-assignment national evaluation of Early Head Start indicated gains in several domains of child and parent functioning ([Love et al., 2002](#)). Despite documented successes, a [U.S. General Accounting Office \(GAO, 1997\)](#) report found insufficient evidence to support Head Start effectiveness, citing the lack of large-scale, carefully controlled outcome studies. In answer to the GAO report, a consortium of research organizations has been contracted to conduct a random-assignment national impact evaluation of Head Start. In addition, the Head Start Family and Child Experiences Survey has been implemented to assess program process and outcomes in a less rigorous design ([Zill et al., 2001](#); see [Whitehurst & Massetti, in press](#), for a critique of the evaluation).

Head Start faces challenges on several fronts. Proposals to devolve the program from federal to state control threaten to compromise its comprehensive model ([Ripple, Gilliam, Chanana, & Zigler, 1999](#)). Because funding constraints may limit the program to serving children for half days, Head Start alone often cannot meet the needs of working families; many programs collaborate with child care to provide full-day care. President George W. Bush has argued that Head Start should focus more narrowly on improving children's literacy and that it should be moved from the Department of Health and Human Services to the Department of Education. This proposal would essentially devolve Head Start to state control, in addition to deemphasizing its comprehensive approach. Even considering its limitations, Head Start's national role in promoting comprehensive school readiness among low-income children remains critical: Although poor children typically benefit more from prekindergarten than do children from nonpoor families, they are less likely to

attend ([Wirt & Livingston, 2002](#)). When asked to identify the most important aspects of school readiness, kindergarten teachers cite social-emotional adjustment and health more than specific cognitive skills, providing a clear indication that comprehensive services are essential to ensuring all children are ready to learn ([West, Hausken, & Collins, 1995](#)).

Lead Poisoning Prevention

Despite the potentially serious consequences of lead exposure among children, it is a common and preventable threat to child well-being ([American Academy of Pediatrics, 1998](#)). Primary prevention involves removing lead from the environment (abatement) and screening children for blood-lead levels. The federal government has long had an active role in combating lead poisoning among America's children, with the involvement of the Department of Health and Human Services, the Department of Housing and Urban Development, and the Environmental Protection Agency.

Population data show dramatic decreases in the incidence of lead poisoning cases associated with the passage of federal legislation: Average blood-lead levels among children have fallen approximately 80% since the late 1970s ([Centers for Disease Control and Prevention \[CDC\], 2000](#)). The numbers speak for themselves, but as is often the case with national statistics, important underlying trends qualify the findings. Funding allocations for lead screening, which is meant to be provided as part of Medicaid's Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program, are determined at the state level. However, a [U.S. General Accounting Office \(1998\)](#) investigation found that just 21% of Medicaid children had been screened, and some argue that screening is not cost-effective because so few children are likely to be positive. Incidence reports reveal disturbing sociodemographic trends: Lead poisoning now occurs predominantly among low-income and urban children and those living in older housing ([Centers for Disease Control and Prevention, 2000](#)). On the basis of steadily decreasing incidence, the CDC has recommended universal screening for all children living in high-risk areas ([Centers for Disease Control and Prevention, 1997](#)). Meanwhile, however, the need for prevention persists, with nearly 8% of children under age six still affected with low-level lead poisoning ([Centers for Disease Control and Prevention, 2000](#)).

Medicaid

Compounding multiple health risks associated with poverty, many low-income families do not have access to adequate health care or preventive services. This lack has been associated with problems such as poor perinatal outcomes, high infant mortality, poor child health, and cognitive deficits. Medicaid is a federal-state matching program that provides medical assistance to many low-income Americans, including pregnant women and children (see [Coughlin, Ku, & Holahan, 1994](#)). Preventive services include prenatal care, visits to primary health care providers, and the EPSDT program—the nation's only entitlement to comprehensive child health services.

Providing prenatal care has been linked to a decrease in the incidence of low birthweight and infant mortality ([Moss & Carver, 1998](#)), and cost-benefit data indicate that Medicaid

is cost-effective (see [Table 1](#)). However, inconsistencies across the literature suggest that coverage alone is insufficient to improve birth outcomes in light of the complexity of problems facing pregnant, low-income women ([Devaney, Ellwood, & Love, 1997](#)). In addition, and in spite of eligibility expansion, the number of individuals, particularly low-income parents, covered by Medicaid dropped when welfare reform decoupled welfare and Medicaid eligibility ([Dion & Pavetti, 2000](#)). Because Medicaid has failed to fully cover children, the State Children's Health Insurance Program (SCHIP) was proposed in 1997 to expand coverage for 10 million uninsured, low-income children, by either expanding Medicaid or some other state-determined mechanism. After early low-enrollment rates forced states to return SCHIP funds to the federal government, enrollment has been increasing. Nonetheless, funding cuts that began in 2002 will result in reduced enrollment: The Office of Management and Budget has projected that 900,000 children will lose their coverage between 2004 and 2006 ([Park, Ku, & Broaddus, 2002](#)).

Implementation issues have compromised EPSDT's effectiveness, particularly because states have wide latitude in interpreting federal requirements, and many families may not be informed that the services are available to them ([Rosenbaum & Sonosky, 2000](#)). Although the importance of preventive services has remained undisputed by health service providers, policy debates have swirled around issues of political control over the program (often in tension between federal and state control) and not children's health ([Sardell & Johnson, 1998](#)). Despite federal attempts to improve state-level EPSDT implementation, political resistance to federal control has limited the program's success ([Sardell & Johnson, 1998](#)). Yet the need to implement effective prevention strategies to ensure child health remains critical, particularly as differences in children's health status based on family income persist ([Federal Interagency Forum on Child and Family Statistics, 2001](#)).

Special Supplemental Program for Women, Infants, and Children (WIC)

Although severe and even moderate malnutrition can impair cognitive and motor performance, the effects of all but the most severe cases are reversible ([Nutrition-Cognition National Advisory Committee, 1998](#)). Passed in 1972, WIC legislation was inspired by research linking malnutrition with low IQ, as well as a surge in popular concern over malnutrition among poor American children and populations in nonindustrialized countries ([Ricciuti, 1991](#)). WIC provides federal grants to states for supplemental foods, health care referral, and nutrition education for low-income pregnant and postpartum women, and to infants and children at nutritional risk (see [Table 1](#)).

Data suggest that WIC mothers have higher birthweight babies, fewer perinatal complications ([Devaney, 1998](#); [U.S. General Accounting Office, 1992](#)), and lower infant mortality ([Moss & Carver, 1998](#); [Rush, Alvir, Kenny, Johnson, & Horvitz, 1988](#)) than other low-income mothers. Cost-benefit analyses demonstrate significant federal savings associated with the prevention of birth problems ([U.S. General Accounting Office, 1992](#)). Among children, improved nutritional intake ([Rose, Habicht, & Devaney, 1998](#)) and beneficial effects on cognitive development ([Pollitt, 1994](#)) have been associated with WIC participation. Some, however, argue that data on WIC's effectiveness are

inconclusive because methodological problems plague existing research ([U.S. General Accounting Office, 2001](#)). Even as the debate on effectiveness continues, the United States lags behind much of the industrialized world in infant health and mortality, where we ranked 28th in the world in 1998 ([National Center for Health Statistics, 2002](#)). Further, subgroup differences persist: Within the United States, infant mortality rates differ by maternal education level and ethnicity, with babies born to Black mothers at highest risk ([National Center for Health Statistics, 2002](#)).

Earned Income Tax Credit (EITC)

Each of the above-mentioned policy initiatives is designed to prevent problems without getting at what many social scientists identify as the root cause, namely, poverty itself. By providing a tax benefit to low-income workers, EITC increases the take-home pay of poor workers in low-paying jobs. The amount of the credit is determined by income and family size; those without children are eligible for a smaller credit. Viewed as an incentive to work that benefits the deserving poor (as opposed to the unemployed, undeserving poor), EITC has enjoyed broad-based, bipartisan support. As of 2002, 10 states and the District of Columbia offered refundable earned-income credits to complement the federal policy, and another 5 states offered nonrefundable credits ([Cauthen, 2002](#)).

Data show that EITC is successful in lifting working families out of poverty (see [Table 1](#)). The EITC policy was credited with raising 2.6 million children above the poverty line in 1999 ([Johnson, 2001](#)). An analysis of the effects of EITC by the National Center for Children in Poverty ([Bennett, Li, Song, & Yang, 1999](#)) suggested that poverty among young children in 1997 would have been 24% higher without EITC. Among working poor families, EITC was more successful than other programs in reducing the number of poor children and in reducing the severity of poverty among those who remained poor ([Porter, Primus, Rawlings, & Rosenbaum, 1998](#)).

Problems with EITC center around the gatekeeping mechanism: False claims may constitute over 20% of all payments ([Internal Revenue Service, 1997](#)). Whereas improved record-keeping can reduce erroneous credits, EITC's targeted nature may render it politically vulnerable despite its success and popularity. When struggling to balance the budget at the end of fiscal year 1999, a House of Representatives proposal would have delayed EITC payments considerably. Although the proposal was ultimately defeated, it exemplifies the political dangers facing categorical programs: No other group of households besides low-income workers—the group that needs the refunds the most—would have been subject to the delayed refund.

Summary

Leaving the pitfalls aside for the moment, federal prevention policy has been effective in reducing problems and enhancing outcomes in school readiness, health, and poverty. Research presented here provides a glimpse of the potential for a federal role, suggesting

that the necessary knowledge, ability, and funds exist to implement successful policies. What are the underlying reasons for these successes?

Head Start's ability to improve school readiness speaks to the importance of preschool and of adopting a comprehensive, multidomain approach to prevention. Using federal policy to provide preschool to children from poor families on a national scale has been popular and, by some accounts, empirically successful. Head Start continues to fill an important niche in providing comprehensive programming to low-income children, particularly because rapidly expanding state preschool initiatives typically do not adopt a comprehensive approach ([Ripple et al., 1999](#)).

Federal policy has been successful in improving health outcomes. Reductions in the national incidence of lead poisoning provide a dramatic example. Multiagency efforts to remove lead from the environment initially were mounted in a sweeping demonstration of political will, benefiting children and adults from all socioeconomic levels. Both Medicaid and WIC have positively affected birth outcomes among poor women through improved access to prenatal care and nutrition, and prevention has been cost-effective by contributing to infant and maternal health.

EITC has been the most effective strategy to raise children out of poverty. By increasing income among the working poor through tax credits and providing an incentive to work, EITC has reduced a significant risk factor for a broad range of poor outcomes.

Directions for Federal Policy-Based Prevention

Programmatic successes demonstrate that people have the knowledge to do what works and that there is a role for federal policy in prevention. Yet these programs fall short, to some degree, in two ways: programmatic limitations and inadequate evaluations.

Programmatic Limitations

Although federal policy has produced successful prevention efforts, the shortcomings noted here belie unqualified claims of success. What has kept federal policy from living up to its potential as the most powerful tool in prevention? The answers lie in politics—implementing policy-driven prevention is at heart a political process—and in the programs' underlying ideological limitations. With the notable exception of Head Start, narrow conceptualizations that fail to account for the clustering of risk factors have led to program design and implementation strategies that have limited the success of the initiatives mentioned here.

Targeted programs for low-income children and families.

Historically, American public family policy has existed on the premise that the target population cannot take care of itself. By targeting marginalized, typically low-income families, the policies allow policymakers (the “haves”) to distance themselves from program recipients (the “have-nots”). Programs that are formulated to serve only low-

income groups, then, are subject to political sidelining. For example, EPSDT's half-hearted implementation at the state level and the lack of attention to its fate have been tied to its categorical focus on poor children ([Meisels, 1984](#)). Similarly, some argue that lead poisoning prevention has not been aggressively enforced because the problem has become concentrated among poor urban minority children ([Silbergeld, 1997](#)). Evidence suggests that targeted federal programs remain vulnerable when devolved to the states: Block granting can reduce funding for low-income programs in favor of those for middle-class families ([Hayes, 1995](#)).

Adopting a universal approach to prevention policy is one way to avoid the pitfalls that plague these targeted programs. Head Start would benefit in many regards if it were made universal, and it might then enjoy a degree of protection from political peril. Some states have adopted universal preschool legislation (Georgia, New York, Oklahoma, and West Virginia) that promote innovative ways to blend funding streams and promote collaboration among private, community, state, and federal agencies to offer services to all children. Whereas the cost of universal programs constitutes a formidable barrier, failing to pursue strategies for universal access will result in unserved children when the need to serve all children—poor and nonpoor alike—is critical. Data on the difficulties facing working poor and near-poor families demonstrate the inadequacy of both federal poverty standards to assess income insufficiency and programs that rely on those standards to determine eligibility ([Acs, Phillips, & McKenzie, 2000](#)).

Narrow conceptualizations and strategies.

Head Start is the only program reviewed here that adopts a comprehensive prevention model. This approach acknowledges the multiplicity of problems facing low-income families and the importance of supporting child development across multiple domains to affect positive outcomes. By and large, federal policy-driven initiatives are problem oriented, failing to take into account the complicated etiology of the target problem and the significant overlap of multiple problems among individuals and groups. As a result, programs address distinct problems rather than the children and families themselves.

The United States stands virtually alone among Western industrialized nations in its limited support for broad-based family policies ([Kamerman, 2000](#)). Short of expecting a single program to meet every need, researchers can urge policy toward conjoining programs so that they complement one another to provide comprehensive primary prevention. Common risk and protective factors across problems and programs have been cited, and the overlap of problems associated with poverty ([Durlak, 1998](#)) and social ills in general ([Albee, 1986](#)) has been well documented. For example, lead poisoning and iron deficiency tend to cluster in children and may interact synergistically ([Pollitt, 1994](#)), WIC participation can result in Medicaid savings through better medical referrals and nutrition, and all of these initiatives together can improve school readiness and academic success through early prevention.

In terms of health policy, adopting an epidemiological approach would push federal policy-based prevention to move beyond a simplistic problem-centered approach, to focus more on primary prevention, and to offer comprehensive services with universal

access. For example, if the CDC recommends that lead poisoning be treated as a public health issue, then a more effective community-based screening program for the entire population (in this case, defined as all children living in areas of significant risk) would be indispensable. This framework can be applied just as readily to a range of policies beyond physical health: Focusing on communities rather than individuals in delivering primary prevention services would result in better coordination of services for individuals and groups, and consequently, improved cost-effectiveness ([Black & Krishnakumar, 1998](#)).

Implementation.

Federal initiatives are most often implemented at the state or local level. In the case of ESPDT, state resistance to federal control has contributed to its limited effectiveness ([Sardell & Johnson, 1998](#)). Weaknesses in the link between federal programs and state implementation are often fundamentally rooted in politics and in state and local interpretations of federal rules and local needs. Part of the answer to resolving the tension between federal mandates and state control may lie in devolving federal programs to the states, as with the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (Pub. L. 104-193). Giving states increased control over policy and implementation through block grants can reduce political tension; however, resolving state-level implementation issues with or without devolution is essential to improving prevention service delivery. Evidence from past experience with devolution has shown that, in states that had no previous experience with or structure for the initiatives, devolved programs tended to falter under state control ([U.S. General Accounting Office, 1995](#)). Whether federal policy initiatives stand to be devolved or not, research can help to promote better service delivery through needs assessments, comparing methods of funding and implementation, analyzing successes and failures, and assessing the benefits of coordinated services.

Inadequate Evaluations

With a federal mandate demanding accountability assessments for federal programs, improving evaluation research has become more urgent than ever. Weaknesses in existing data need just as much attention as programmatic pitfalls. Why do GAO studies continually find a lack of convincing evidence on federal prevention policies? In the research we have cited here, reasons include the following.

1. Federal programs are large and implementation is uneven: In most cases, there is not one uniform program to assess, and as a result the data are equivocal.
2. Research design or implementation may make it impossible to tell if the program or the evaluation is to blame for a lack of significant effects ([Gilliam, Ripple, Zigler, & Leiter, 2000](#)).
3. Recruiting a nontreatment control group may be difficult because of ethical considerations, and because thorough program implementation or the availability of similar programs may make it hard to find unserved children.

4. Broadly defined outcomes (e.g., school readiness, child nutrition) may result in an array of measurement strategies and may result in inadequate or inappropriate assessments ([Zigler, 1987](#)).
5. Program goals in broad federal initiatives may be difficult to assess: Measuring the incidence of low birthweight among WIC babies by reviewing hospital records is feasible, but assessing maternal nutrition is less straightforward.

Even if some of these problems in assessing federal initiatives prove intractable, there remains a vital role for evaluation: Research on federal policy-based prevention should be used to help set the programming agenda. Just as successful prevention needs to go beyond focusing on single problems, evaluations of federal programs should adopt a contextual, multivariate approach to assessing effects. Prevention researchers have a responsibility to remind policymakers about the interrelatedness of many problems currently targeted by distinct initiatives and to urge a broad conceptualization of services ([Weissberg, Kuster, & Gullotta, 1997](#)). Policymakers can be educated about the unfeasibility of random-assignment studies to evaluate large-scale social programs, as well as about the validity of other, more appropriate and less costly methods such as meta-analysis and combining quasi-experimental and qualitative methods ([Tebes, Kaufman, & Connell, 2003](#)).

Examples of possible applications for this approach abound. Examining interaction effects in evaluations of WIC, for example, would account for coexisting multiple risk factors such as poverty and poor health care, thus yielding data germane to service-delivery issues. Applying a transactional design to Head Start research can focus on family and neighborhood influences and the range of childhood experience, thereby helping to tailor programs to participants' needs ([Takanishi & DeLeon, 1994](#)). High rates of child immunization through WIC participation ([Hoekstra et al., 1998](#)) demonstrate the success of program coordination and comprehensiveness, just as the precipitous drop in Medicaid enrollment following welfare reform ([Dion & Pavetti, 2000](#)) demonstrates the inadequacies of disjointed service delivery.

Conclusion

Taking into account contextual factors such as the new federalism, and considering the strengths and shortcomings noted in our review, it may be useful to take a step back and reexamine what federal policy is best suited to accomplish in primary prevention. The following recommendations are aimed at policymakers and researchers alike.

1. Piecemeal programs should be reexamined, and a shift away from isolated problems and toward a whole-child and family approach should occur. Federal funding can promote links between programs at the state and local levels.
2. Federal policy should promote universally accessible prevention programs. This is the best and perhaps only way to avoid eligibility standards that fail to provide equitable access to families in need of services. Strategies such as sliding-scale fee structures (with fees calibrated to income) or graduated service provision

- (providing more intensive services to children and families who need them but not to families with other resources in place) could be applied.
3. The success and popularity of EITC suggest that the tax code is a potent federal prevention strategy. It is not subject to uneven state implementation, provides a model for states to adopt, and may be the most logical approach to promoting equity. The Child Care Tax Credit is a similar example of this strategy.
 4. Federal policy should continue to promote and fund prevention program evaluation. Data are critical to informing policymakers and to improving service delivery and impact.

An important component of conducting federally funded evaluations is researchers' ensuring that findings are communicated to policymakers in clear and practical terms. Doctoral programs should train students to link research and policy. Researchers can educate policymakers in the wisdom of child- and family-centered approaches, as opposed to problem-centered orientations, by designing studies based on these principles.

Although federal policy cannot assure that prevention programming is implemented fully at the local level, it can and should address issues of equity on a national scale. Particularly in light of persistent within- and between-states differences based on income and ethnicity, and because states' rights will likely continue to directly affect implementation, the federal policy bully pulpit should be used to promote equity in opportunity and access to services to citizens across income, ethnicity, and geographic lines.

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Correspondence may be addressed to Carol H. Ripple, The Consultation Center and Division of Prevention and Community Research, Yale University, 389 Whitney Avenue, New Haven, CT 06511.

Table 1. Brief Summary of Selected Research on Head Start, Lead Poisoning Prevention, Medicaid, Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the Earned Income Tax Credit (EITC)