

Other Home Visiting Programs for At-Risk Families

Program description:

This broad grouping of programs focuses on mothers considered to be at risk for parenting problems, based on factors such as maternal age, marital status and education, low household income, lack of social supports, or in some programs, mothers testing positive for drugs at the child's birth. Depending on the program, the content of the home visits consists of instruction in child development and health, referrals for service, or social and emotional support. Some programs provide additional services, such as preschool. This group of programs also includes a subset that is specifically targeted toward preventing repeat pregnancy and birth in the adolescent years.

Typical age of primary program participant: 19

Typical age of secondary program participant: 1

Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
			ES	SE	p-value	First time ES is estimated			Second time ES is estimated		
						ES	SE	Age	ES	SE	Age
High school graduation	P	1	0.06	0.09	0.50	0.06	0.09	22	0.06	0.09	22
Major depressive disorder	P	4	-0.08	0.09	0.00	-0.07	0.09	24	-0.02	0.03	29
Repeat teen pregnancy	P	6	-0.11	0.12	0.38	-0.04	0.12	19	-0.04	0.12	19
Repeat teen birth	P	6	-0.32	0.11	0.00	-0.19	0.11	19	-0.19	0.11	19
Test scores	S	6	0.30	0.13	0.02	0.08	0.13	2	0.04	0.06	17
Child abuse and neglect	S	11	-0.41	0.21	0.05	-0.22	0.21	10	-0.22	0.21	17
Out-of-home placement	S	6	-0.11	0.23	0.64	-0.10	0.23	8	-0.10	0.23	17

Benefit-Cost Summary

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.	Program Benefits					Costs	Summary Statistics			
	Partici-pants	Tax-payers	Other	Other Indirect	Total Benefits		Benefit to Cost Ratio	Return on Investment	Benefits Minus Costs	Probability of a positive net present value
	\$2,970	\$1,233	\$295	\$640	\$5,138	-\$5,603	\$0.92	n/e	-\$465	44%

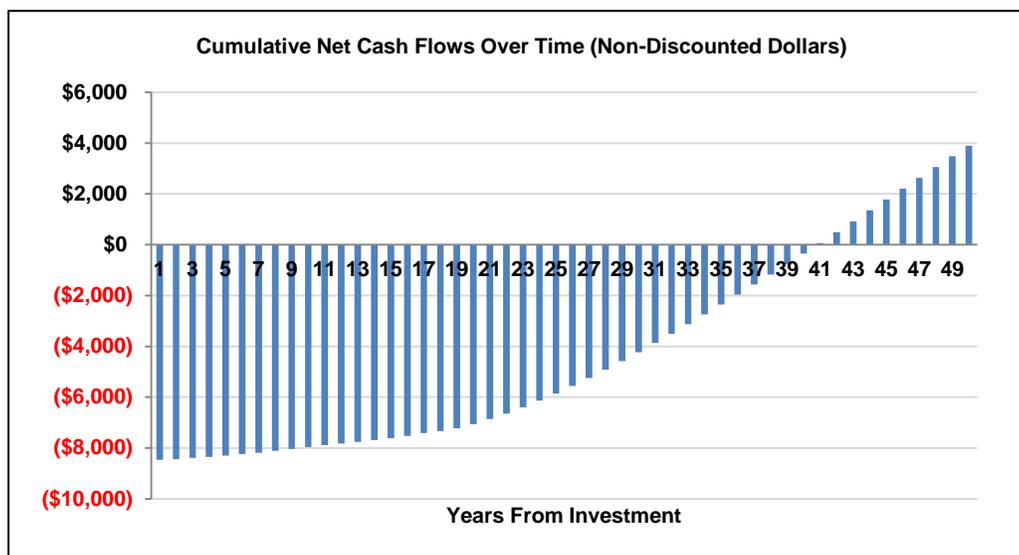
Detailed Monetary Benefit Estimates

Source of Benefits	Benefits to:				
	Partici-pants	Tax-payers	Other	Other In-direct	Total Benefits
From Primary Participant					
Earnings via depressive disorder	\$80	\$29	\$0	\$15	\$124
Health care costs via depressive disorder	\$24	\$74	\$73	\$37	\$208
From Secondary Participant					
Crime	\$0	\$92	\$229	\$48	\$369
Earnings via test scores	\$2,341	\$862	\$0	\$448	\$3,651
Child abuse and neglect	\$523	\$85	\$0	\$44	\$652
Out-of-home placement	\$0	\$37	\$0	\$20	\$57
K-12 special education	\$0	\$24	\$0	\$12	\$36
Health care costs for alcohol disorder	\$0	\$1	\$1	\$0	\$2
Health care costs for illicit drug disorder	\$0	\$1	\$1	\$1	\$4
Property loss from illicit drug disorder	\$0	\$0	\$1	\$0	\$1
Health care costs via depressive disorder	\$2	\$7	\$7	\$4	\$20
Health care costs via education	-\$3	\$21	-\$15	\$11	\$13

Detailed Cost Estimates

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.	Program Costs			Comparison Costs			Summary Statistics	
	Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or - %)
	\$5,368	1	2008	\$0	1	2008	\$5,589	10%

Source: WSIPP analysis, based on costs published in Black, M.M., H. Dubowitz, J. Hutcheson, J. Berenson-Howard, and R.H. Starr Jr. (1995) "A randomized clinical trial of home intervention for children with failure to thrive." *Pediatrics* 95(6): 807-814; Dawson, P., Van Doorninck, W.J., Robinson, J.L. (1989) Effects of home-based, informal social support on child health. *Developmental and Behavioral Pediatrics* 10(2):63-67; Ernst, C.C., T.M. Grant, A.P. Streissguth, and P.D alcohol and drug-abusing mothers: II. Three-year findings from the. Sampson. (1999) "Intervention with high risk Seattle model of paraprofessional advocacy." *Journal of Community Psychology* 27(1): 19-38; and Hardy, J.B. and Streett, R. (1989) "Family support and parenting education in the home: An effective extension of clinic-based preventive health care Institute analysis, based on costs published in Black, M.M., H. Dubowitz, J. Hutcheson, J. Berenson-Howard, and R.H. Starr Jr. (1995) "A randomized clinical trial of home intervention for children with failure to thrive." *Pediatrics* 95(6): 807-814; Dawson, P., Van Doorninck, W.J., Robinson, J.L. (1989) Effects of home-based, informal social support on child health. *Developmental and Behavioral Pediatrics* 10(2):63-67; Ernst, C.C., T.M. Grant, A.P. Streissguth, and P.D alcohol and drug-abusing mothers: II. Three-year findings from the. Sampson. (1999) "Intervention with high risk Seattle model of paraprofessional advocacy." *Journal of Community Psychology* 27(1): 19-38; and Hardy, J.B. and Streett, R. (1989) "Family support and parenting education in the home: An effective extension of clinic-based preventive health care services for poor children." *Journal of Pediatrics* 115: 927-931.



Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	0.5
2- Well-implemented comparison group design, often with many statistical controls.	0.5
3- Well-done observational study with many statistical controls (e.g., IV, regression discontinuity).	0.81
4- Random assignment, with some RA implementation issues.	0.81
5- Well-done random assignment study.	1.00
Program developer = researcher	0.25
Unusual (not "real world") setting	0.5
Weak measurement used	0.54

The adjustment factors for these studies are based on a multivariate regression analysis of 106 effect sizes from evaluations of home visiting programs within child welfare or at-risk populations. The analysis examined the relative magnitude of effect sizes for studies rated a 1, 2, 3, or 4 research design quality, in comparison with a 5 (see Technical Appendix II for a description of these ratings). We weighted the model using the random effects inverse variance weights for each effect size. The results indicated that research designs 1 and 2 have effect sizes about twice the size of studies rated as a 5, and research designs 3 and 4 have effect sizes about 24 percent higher than a 5.

The analysis also found that effect sizes were statistically significantly higher when the program developer was involved in the research evaluation, or when a weak outcome measure was used.

Studies Used in the Meta-Analysis

- Barlow, J., Davis, H., McIntosh, E., Jarrett, P., Mockford, C., & Stewart-Brown, S. (2007). Role of home visiting in improving parenting and health in families at risk of abuse and neglect: Results of a multicentre randomised controlled trial and economic evaluation. *Archives of Disease in Childhood*, 92(3), 229-233.
- Barth, R. P., Hacking, S., & Ash, J. R. (1988). Preventing child abuse: An experimental evaluation of the child parent enrichment project. *Journal of Primary Prevention*, 8(4), 201-217.
- Barth, R. P. (1991). An experimental evaluation of in-home child abuse prevention services. *Child Abuse & Neglect*, 15(4), 363-375.
- Black, M. M., Nair, P., Kight, C., Wachtel, R., Roby, P., & Schuler, M. (1994). Parenting and early development among children of drug-abusing women: Effects of home intervention. *Pediatrics*, 94(4), 440-8.
- Brayden, R. M., Altemeier, W. A., Dietrich, M. S., Tucker, D. D., Christensen, M. J., McLaughlin, F. J., & Sherrod, K. B. (1993). A prospective study of secondary prevention of child maltreatment. *The Journal of Pediatrics*, 122(4), 511-516.
- Cappleman, M. W., Thompson, R. J., Jr., DeRemer-Sullivan, P. A., King, A. A., & Sturm, J. M. (1982). Effectiveness of a home based early intervention program with infants of adolescent mothers. *Child Psychiatry and Human Development*, 13(1), 55-65.
- Caruso, G.-A. L. (1989). Optimum Growth Project: Support for families with young children. *Prevention in Human Services*, 6(2), 123-139.
- Ernst, C. C., Grant, T. M., Streissguth, A. P., & Sampson, P. D. (1999). Intervention with high-risk alcohol and drug-abusing mothers: II. Three-year findings from the Seattle Model of Paraprofessional Advocacy. *Journal of Community Psychology*, 27(1), 19-38.
- Field, T., Widmayer, S., Greenberg, R., & Stoller, S. (1982). Effects of parent training on teenage mothers and their infants. *Pediatrics*, 69(6), 703-707.
- Fraser, J. A., Armstrong, K. L., Morris, J. P., & Dadds, M. R. (2000). Home visiting intervention for vulnerable families with newborns: Follow-up results of a randomized controlled trial. *Child Abuse & Neglect*, 24(11), 1399-1429.
- Gray, J. D., Cutler, C. A., Dean, J. G., & Kempe, C. H. (1979). Prediction and prevention of child abuse and neglect. *Journal of Social Issues*, 35(2), 127-139.
- Hardy J. B., & Streett R. (1989). Family support and parenting education in the home: An effective extension of clinic-based preventive health care services for poor children. *The Journal of Pediatrics*, 115(6), 927-931.
- Huxley, P., & Warner, R. (1993). Primary prevention of parenting dysfunction in high-risk cases. *American Journal of Orthopsychiatry*, 63(4), 582-588.
- Infante-Rivard, C., Filion, G., Baumgarten, M., Bourassa, M., Labelle, J., & Messier, M. (1989). A public health home intervention among families of low socioeconomic status. *Children's Health Care*, 18(2), 102-107.
- Kelsey, M., Johnson, A., & Maynard, R. (2001, July). *The potential of home visitor services to strengthen welfare-to-work programs for teenage parents on cash assistance* (Mathematica Policy Research Document No. PR01-67). Philadelphia: University of Pennsylvania (with Mathematica Policy Research).
- Loman, L. A., & Sherburne, D. (2000, April). *Intensive home visitation for mothers of drug-exposed infants: An evaluation of the St. Louis linkages program*. St. Louis, MO: Institute of Applied Research.
- Lyons-Ruth, K., Connell, D. B., Grunebaum, H. U., & Botein, S. (1990). Infants at social risk: Maternal depression and family support services as mediators of infant development and security of attachment. *Child Development*, 61(1), 85-98.
- Mulsow, M. H., & McBride Murry, V. (1996). Parenting on edge: Economically stressed, single, African American adolescent mothers. *Journal of Family Issues*, 17(5), 704-721.
- Quinlivan, J. A., Box, H., & Evans, S. F. (2003). Postnatal home visits in teenage mothers: A randomised controlled trial. *Lancet*, 361(9361), 893-900.
- Stevenson, J., Bailey, V., & Simpson, J. (1988). Feasible intervention in families with parenting difficulties: A primary preventive perspective on child abuse. In K. Browne, C. Davies, and P. Stratton (Eds.), *Early prediction and prevention of child abuse* (pp. 121-138). New York: John Wiley & Sons.
- Stevens-Simon, C., Nelligan, D., & Kelly, L. (2001). Adolescents at risk for mistreating their children: Part II: A home- and clinic-based prevention program. *Child Abuse & Neglect*, 25(6), 753-769.
- Velasquez, J., Christensen, L., & Schommer, B. L. (1984). Part II: Intensive services help prevent child abuse. *American Journal of Maternity and Child Nursing*, 9(2), 113-117.