CHIP: Virginia’s Approach to Child Health Care
Emily Shearer

Juan González is a 31-year-old Hispanic man living in the Roanoke Valley with his wife, 29-year old María. They are raising five children: 7-year-old son José, 4-year-old son Antonio, 23-month-old daughter Carmen, and 9-month-old twin daughters Ana and Susana. Susana González is very ill with biliary atresia, a malformation or absence of bile ducts outside the liver. She will most likely require a liver transplant in the future. In October of 2002, the González family visits a Roanoke hospital, presumably seeking treatment for 9-month-old Susana. Although neither Juan nor María speak any English, hospital staff learns that their living conditions are minimally adequate. They are barely providing for themselves and their five children.

Social workers at the hospital learn of many ways in which the González family needs assistance. Their apartment is infested with rats. Given Susana's medical condition, the absence of a telephone in the apartment also concerns hospital staff. Juan and María González need lessons in home safety and parenting. They also need help paying for food, rent, and transportation to and from their children's medical appointments.

Although their parents care for them, the five González children also have many unmet needs. None of the children has health insurance, and all five need clothing and toys. Antonio González needs a Social Security card, Ana and Susana need baby formula, and Susana needs special multi-vitamins. The Roanoke hospital recognizes the severity of the González' situation and refers them to Roanoke’s Child Health Investment Partnership (CHIP).
Statewide Need

Unfortunately, there are many families like the González’ living in Virginia. According to the United States Census Bureau, 202,174 poverty-stricken children lived in the Commonwealth of Virginia in 1999. These children are less likely to be healthy than those with family incomes greater than the poverty line. Infant mortality, low birth weight, pre-term birth, and intrauterine growth retardation are all more common in babies born to poorer mothers. Children from poor families are also more likely to suffer from infectious diseases, chronic conditions, anemia, vision and hearing problems, poor dental health, psychosocial and psychosomatic problems, learning disabilities, emotional and behavioral problems, delays in growth and development, lead poisoning, and non-fatal injuries. They are also more likely to suffer from physical, emotional, or sexual abuse and from physical, emotional or educational neglect. These children would benefit from primary health care and other community resources.

The Comprehensive Health Investment Project (CHIP of Virginia) is a non-profit organization dedicated to meeting the health and related support needs of Virginia’s poorest children and families. The organization outlines its goals in the following Mission and Vision Statements.

The Mission of CHIP of Virginia is [to] improve young children’s health and promote wellness and self-sufficiency in low-income families through partnerships with local communities.

---

1 Names are fictitious.
2 “Child Health Investment Partnership, Family Strengthening Program.” CHIP of Roanoke Valley. p 15-16
3 United States Census Bureau, American FactFinder. 8 Mar. 2003 <http://factfinder.census.gov/>
Vision: To lead Virginia and the nation in developing community based service systems to promote wellness and improved health status, and to improve the quality of life for young children and families in need.⁹

CHIP has three related components to better provide children and families with the help they need. First, it provides children with a medical home. Second, it coordinates care and support programs to meet their medical needs. Lastly, it provides services to strengthen families and increase self-sufficiency.

This paper explores the foundation and importance of CHIP and evaluates it in terms of its cost and benefits. CHIP provides many services beyond what is already being provided by Medicaid. Is Medicaid not enough? Are these extra services CHIP provides necessary? How do children and their families benefit from these services? What are the extra costs associated with these extra services? Are the benefits of these extra services worth the cost? If so, why does this program not serve all areas of the Commonwealth of Virginia?

CHIP History

After a year of planning, CHIP began in 1988 in Roanoke, Virginia. Initial funding came when the Virginia Department of Health awarded Total Action against Poverty (TAP) money from the Maternal and Child Health Block Grant.¹⁰ CHIP initially offered children a primary care medical home and case management services. Funding from the W.K. Kellogg Foundation allowed CHIP to expand its services in 1989 to include family support programs and transportation.¹¹ Impressed by the success of the program, the W.K. Kellogg Foundation granted CHIP additional funding in 1990 to replicate the program in other areas of Virginia. TAP established the Comprehensive Health Investment Project of Virginia to oversee the statewide

⁹ Comprehensive Health Investment Project. 4 Apr. 2003. <www.chipofvirginia.org>
replication of CHIP of Roanoke. In 1992, the first round of replication began operation in Charlottesville, Southwest Virginia, and Richmond. Also, CHIP of Virginia separated itself from TAP by becoming incorporated as an independent non-profit organization. The following year CHIP of Virginia established sites in Chesapeake, the New River Valley, Norfolk, and Williamsburg. Poor families in Petersburg and Portsmouth began receiving CHIP services in 1994. Arlington was added in 1996.12

CHIP developed its programs based on the ideas of a few individuals and organizations. Lisbeth Schorr’s *Within Our Reach: Breaking the Cycle of Disadvantage*13 had a large influence on CHIP’s founders. Other events and publications that influenced CHIP’s conceptual foundation included the creation of the National Center for Children in Poverty, its publication of *Five Million Children*,14 the Carnegie Corporation’s *Starting Points*, and the publication of *Ready to Learn*.15 Lorraine Klerman’s writings on the effects of poverty on health status and on non-financial barriers to health care also influenced CHIP’s founders.16

*Within Our Reach: Breaking the Cycle of Disadvantage*

Lisbeth B. Schorr provides much of CHIP’s conceptual foundation in *Within Our Reach: Breaking the Cycle of Disadvantage*. Schorr describes how living in poverty harms children and families. She discusses several complex and expensive programs to show her readers what it takes to help impoverished families. She recognizes the importance of economic policy and welfare reform in helping people escape from poverty, but she claims that non-economic

---

15 Another document or book. No other information could be found on this source.
16 The list of documents serving as CHIP’s conceptual foundation comes from “Program Overview.” CHIP of Virginia, April, 1996.
strategies for working with the poor are just as essential. Schorr praises all-encompassing programs that address the problems of poverty at their roots.

Lisbeth Schorr claims that programs working with families and young children are the best ways to affect change. Programs can help adolescents in poverty become responsible and self-sufficient adults, but help earlier in childhood is both more economical and more effective. The longer children live with neglect, deprivation, and constant failure, the more expensive and difficult it becomes to reverse the problems those conditions cause.

Schorr also writes about how the presence of multiple risk factors impacts children in poverty. Risk factors at birth include being born within 24 months of another child, to a teenage mother, at a low birthweight, prematurely, or with congenital handicaps. Childhood risk factors include suffering from poor health, malnutrition, or physical defects; being neglected, abused, or unnecessarily removed from the home; growing up without nurturing, protection, and guidance; having problems early in school; and failing to acquire the skills necessary to become independent and productive. Studies show that children encountering only one risk factor are no more likely to be seriously affected by that risk than are children who encounter no risk factors. Children that encounter two or more risk factors, on the other hand, are four times more likely to experience a bad outcome. When four risk factors are present the chance of a bad outcome is tenfold. Children growing up in persistent and concentrated poverty are nearly
guaranteed to encounter multiple risk factors. Effective programs must recognize the effect of multiple risk factors on children and address many of the risk factors present.

Schorr also stresses the importance of family planning and prenatal care. Making subsidized family planning services available to women drastically reduces the incidence of early and unplanned pregnancy. Research and common sense show that a child born to a reluctant mother is more likely to be born prematurely, at a low birth weight, and with congenital defects. Children born prematurely can suffer from several conditions; the likelihood of suffering from these conditions increases if the family is poor, the parents are unemployed, the family is socially isolated, or a parent is impaired. Having many children in rapid succession can lead to bad outcomes as well, especially in poor families.

Prenatal care is also very important as it increases a mother’s chance of giving birth to a healthy child. Mothers that receive prenatal care are more likely to give birth to babies at full term, at a normal weight, and without handicaps. Good prenatal care also results in improved infant health and fewer difficulties in early parent-child relationships.

Necessary prenatal care includes prompt (within the first trimester), comprehensive, routine, and high-quality care during pregnancy. A lack of money and a lack of insurance coverage are the two main reasons more women do not receive appropriate care. Programs can have a large effect on early-child health by ensuring that mothers receive good pre-natal care.

Family planning and prenatal care can help prevent risk factors, but they are not enough. It is incredibly important for children to grow up in a strong family. Infants benefit from a loving and predictable relationship with their parents. Psychologists and psychoanalysts believe that having a secure connection with a caring adult increases a child’s later capacities for love, trust, self-confidence, conscience, and the abilities to feel guilt, to keep rules, and to form lasting social relationships.\textsuperscript{34} Poverty, family violence, inadequate housing, chronic hunger, poor health, and surroundings of hopelessness and despair cause family stress.\textsuperscript{35} As family stress increases, a parent’s capacity for nurturing decreases. When this happens children are at greater risk of suffering from abuse and neglect.\textsuperscript{36} Studies show that family support programs can reverse an unhealthy family life.\textsuperscript{37}

Foster care systems across the nation fail children in so many ways. Lisbeth Schorr discusses a program that strengthens families on the brink of losing children to foster care. Homebuilders trains professionals to go into the family’s home to do nearly anything required to help rebuild the family.\textsuperscript{38} One therapist cleaned the home and provided the family with a refrigerator, mattresses, sheets, blankets, and other household necessities. She earned the mother’s trust, and was better able to provide the mother with meaningful therapy.\textsuperscript{39} Homebuilders works closely with schools, courts, and other community agencies with the same goal of strengthening families.\textsuperscript{40} The staff helps families resolve the crisis and learn new ways of coping that will lessen their chances of losing their children to foster care. Homebuilders uses

individual and group therapy sessions to teach family members more effective parent-child interactions. \(^{41}\) Over the years its services have allowed many families to remain intact.

Schorr realizes that it costs a great deal of money to have highly-trained professionals providing such intense support. She believes that it is worth the cost. Homebuilders estimates that the return on every dollar invested in a family is 5- to 6-fold. \(^{42}\) She would argue, however, that the real returns are the healthier families and the children able to avoid foster care.

In addition to the high dollar-and-cents return on programs, Schorr asserts that there are other costs of letting the poor remain in such a hopeless situation. Filling the country’s prisons to capacity and losing productivity are a couple of the human costs of not helping the poor. \(^{43}\) Other human costs include children growing up without the nurturing of a healthy family, homelessness, hunger, and “hostility amidst America’s wealth and splendor.” \(^{44}\) Schorr does not quantify the human costs of doing nothing, but she clearly believes that they are great.

CHIP incorporates many of Schorr’s recommendations in its program. She says programs should work with families and young children; CHIP’s target population is the youngest of poor children and their families. Schorr warns against the effects of multiple risk factors; CHIP addresses many of the risks its children face. She promotes prenatal care and family planning; CHIP talks with families about family planning and affects their birth spacing. Schorr advocates home visiting to strengthen families and avoid foster care; every CHIP family receives home visitors for education and support.


Medicaid History

Good health care is also essential in preventing some of Schorrs’ risk factors from developing. CHIP ensures that children receive the medical care they need. Most CHIP children rely on Medicaid for health care coverage. Medicaid guarantees medical services to low-income mothers and their children, to the disabled, and to the elderly. States administer the program under federal guidelines and with federal assistance if they meet those guidelines. Medicaid provides medical services such as doctor visits, well-baby check-ups, hospital visits, emergency care, vaccinations, prescription medications, tests, x-rays, dental care, and vision care. Medicaid covers more than one in ten Americans, including one in every four children and one in every three births. In 1996, Medicaid paid $155.4 billion to provide health services to 41.3 million people. Low-income parents and their children make up 77.8% of Medicaid’s beneficiaries, yet they account for just 26.5% of Medicaid’s direct spending. Providing low-income children with health care is relatively inexpensive.

Medicaid was passed into law as an entitlement program in 1965. Between 1965 and 1983, states managed their programs with little federal oversight. Coverage varied from state to state since Medicaid eligibility was tied to welfare eligibility for most people. As a result, Medicaid failed to provide some of its patients with comprehensive and high quality care.

Congress addressed this problem by making several changes to Medicaid between 1984 and 1992. The federal government took a more active role in overseeing the program and expanded coverage. As part of the Balanced Budget Act of 1997, Congress began the State Children’s Health Insurance Program (SCHIP) to guarantee healthcare to more poor children. SCHIP requires that states insure children for almost all health services, including dental and vision care.

Virginia’s SCHIP program is Family Access to Medical Insurance Security (FAMIS). FAMIS insures children under 19-years-old from families earning less than 200% of the poverty line. In 2002, FAMIS insured 313,571 of Virginia’s children. FAMIS estimated that there were 411,642 children eligible for coverage, leaving an estimated 98,389 of them uninsured. CHIP helps address this problem by ensuring that its children receive the health care to which they are entitled.

CHIP Enrollment

CHIP’s target population is children from birth to six years old and their older siblings. Their families must earn an income less than 185% of the federal poverty line at the time of enrollment. Once enrolled, families must continue to earn less than 200% of the poverty line. If families earn more than that, the transition off CHIP services is gradual; CHIP works with them to ensure that they no longer need its support. Even though CHIP tries to help families become self-sufficient, families do not often “income-out.”

<http://www.famis.org/English/Reports/EnrollmentReport02-03.htm#ER>  
<http://www.famis.org/English/PressReleases/FAMISNotice12-30-02EstimatedEligibles.htm>  
Medicaid insures almost all of the children CHIP serves. In fact, it covers over 98% of children enrolled in CHIP of Roanoke. The other 2% of CHIP’s children are uninsured. Unfortunately, not every child in need of help is enrolled. There are almost 6,000 Roanoke children eligible for CHIP services. Limited resources, however, allow for only a small fraction of them to enroll in CHIP. As a result, there are about 250 children in the Roanoke Valley on the wait list for CHIP services.

CHIP of Virginia has eleven sites serving children and families in 30 cities and counties across Virginia. In January of 2003, this network of eleven CHIP sites reported an enrollment of over 3,550 children in 2,329 families. The following table summarizes the enrollment data for all eleven sites as of January 31, 2003.

---

59 Comprehensive Health Investment Project of Virginia. 8 Mar. 2003 <www.chipofvirginia.org>
60 “CHIP Enrollment Report 01/31/03.” CHIP of Virginia. 17 Mar. 2003
CHIP Enrollment Jan. 31, 2003

<table>
<thead>
<tr>
<th>Site</th>
<th>Service Area</th>
<th>Enrollment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Children 0-6</td>
<td>Families</td>
<td>Prenatal</td>
<td></td>
</tr>
<tr>
<td>Arlington</td>
<td>Arlington County</td>
<td>143</td>
<td>91</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>JAC</td>
<td>Charlottesville</td>
<td>525</td>
<td>376</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Albemarle County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fluvanna County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Louisa County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chesapeake</td>
<td>Chesapeake</td>
<td>296</td>
<td>198</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>New River Valley</td>
<td>Radford</td>
<td>195</td>
<td>119</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Montgomery County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Giles County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulaski County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Floyd County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norfolk</td>
<td>Norfolk</td>
<td>244</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petersburg</td>
<td>Petersburg</td>
<td>169</td>
<td>106</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Portsmouth</td>
<td>Portsmouth</td>
<td>165</td>
<td>93</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Greater Richmond</td>
<td>Richmond</td>
<td>342</td>
<td>231</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chesterfield County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Henrico County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roanoke</td>
<td>Roanoke</td>
<td>1118</td>
<td>764</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Salem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roanoke County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Botetourt County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Craig County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwest Virginia</td>
<td>Bristol</td>
<td>252</td>
<td>145</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Washington County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Russell County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buchanan County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dickenson County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater Williamsburg</td>
<td>Williamsburg</td>
<td>101</td>
<td>76</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>James City County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>York County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network-wide</td>
<td></td>
<td>3550</td>
<td>2329</td>
<td>115</td>
<td></td>
</tr>
</tbody>
</table>

CHIP Services

Finding a Medical Home

In the case of the González family mentioned earlier, CHIP matches every one of the five children with a pediatrician and dentist in the Roanoke Valley. This component of CHIP

---

61 “CHIP Enrollment Report 01/31/03.” CHIP of Virginia. 17 Mar. 2003
provides children with a medical home, which includes a physician and dentist in the private sector. As a result, every child enrolled in CHIP should see a physician and dentist regularly for both healthy and sick visits. Children see their doctors in their offices, where their records are kept, the children are known, and a doctor can be reached 24 hours a day, 7 days a week. As of January 31, 2003, this network of CHIP of Virginia practitioners included 247 physicians, 66 dentists, 26 nurse practitioners, and 66 other providers across the state.63 While Medicaid pays for an overwhelming majority of the children’s health care, CHIP reimburses doctors and dentists at Medicaid rates for any uninsured children.64

Readers may ask what service CHIP actually provides since Medicaid insures a vast majority of its children. Despite being insured by Medicaid, there are still many children not registered with a doctor. They therefore rely on the emergency room for treatment when they are ill. CHIP recognizes the inadequacy of insurance when children are not assigned health care providers and gives them a medical home.

**Care Coordination**

In addition to finding the González children a medical home, CHIP staff helps coordinate their health care. They meet with the children to see what care they need, give them over-the-counter medicines their parents cannot afford, and help their parents develop a plan for dealing with Susana’s illness.65 When Susana requires specialized care, CHIP helps with the referral process to ensure that she receives the best care possible.

Community health nurses provide four main services under Care Coordination:

1) Health assessments and early developmental screening of children

---

63 “CHIP Enrollment Report 01/31/03.” CHIP of Virginia. 17 Mar. 2003
65 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 15-16
2) Comprehensive plans of care

3) Referrals and follow-up for primary and specialty care

4) Health education. Specifically, community health nurses check that CHIP children are the appropriate height and weight for their age and that they take advantage of preventative care such as seeing their physician for check-ups, going to their dentist for routine cleanings, and keeping up to date on immunizations. CHIP’s Care Coordination staff checks in with families to be sure that they go to their doctor appointments and keep up with the treatment their practitioners recommended. Community health nurses at the CHIP site in Roanoke also dispense over-the-counter medications when necessary and help parents cope with caring for children with chronic or long-term health problems. They are likely working with Juan and María González to be sure that they understand Susana’s illness and treatment.

Family Strengthening

CHIP helps the González family in many other ways that fall under this last category of services. A two-person team including a case manager and nurse visits their home at least once a month to assess their needs and teach Juan and María home safety and parenting skills. A CHIP interpreter speaks with their landlord about the rat infestation and he exterminates the rodents. The case manager applies for rent assistance on the family’s behalf and is able to get them $100 toward their rent. She also transports the family to Social Services to apply for cards and turn in disability papers. The nurse gets carpet donated to cover the family’s living room and bedroom floors. CHIP ensures that they are enrolled in WIC, provides them with clothes, gives them

---

66 Comprehensive Health Investment Project. 4 Apr. 2003. <www.chipofvirginia.org>
donated baby items, and helps them apply for food stamps. Lastly, they see that a church adopts the family for Thanksgiving so that they have enough to eat for dinner.\textsuperscript{70} Because of all of CHIP’s assistance, the family has many more reasons to be thankful.

Clearly CHIP’s third component includes a wide variety of services designed to strengthen poor families and help them become self-sufficient. CHIP lists six main services:

1) Needs assessment and goal setting

2) Educational and support services to assist parents in acquiring parenting skills, learning about growth and development, and responding effectively to the behavior of their children

3) Outreach services to ensure that parents are aware of and able to participate in family resource and community service activities

4) Referral services to assist families in obtaining community resources, including health care, mental health care, Medicaid or other insurance, employment resources, and other social services

5) Follow-up to ensure that families receive necessary services that are effective in meeting their needs

6) Transportation to services and appointments\textsuperscript{71}

CHIP provides parent group meetings to supplement and enhance its home visits. While in the home, family case managers and nurses teach parents about parenting skills, education, nutrition, housing, and employment.\textsuperscript{72} In 2002, case managers conducted 1172 educational visits to CHIP homes in the Roanoke Valley.\textsuperscript{73}

\textsuperscript{70}“Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 15-16
\textsuperscript{71}Comprehensive Health Investment Project. 4 Apr. 2003. <www.chipofvirginia.org>
\textsuperscript{73}Child Health Investment Partnership. 8 Mar. 2003. <http://www.chipofroanokevalley.org/>
These home visits have many effects on children and families. They improve birth outcomes, improve parenting skills, prevent child abuse and neglect, enhance child development, improve overall child health by promoting preventive health services, improve the mother’s life through better employment or education, and refer children and families to other health and social services.\(^{74}\) While visiting the home, family case managers use a curriculum from Parents as Teachers (PAT), a seventeen-year-old national organization. It offers low-cost programs that provide parents with research-based information and guidance to help them realize how significant they are in their children’s lives.\(^{75}\) While visiting families in their homes, family case managers support parents and use PAT educational materials and modeling to help build parenting skills and family effectiveness. They inform parents about developmentally appropriate play, activities, and life skills; home and child safety; methods of controlling a child’s behavior; and instilling positive self-images in children.\(^{76}\) Family case managers also use PAT materials to teach parents effective ways to discipline their children. They discourage the use of physical punishment and verbal abuse and encourage the utilization of re-directions and time-outs.\(^{77}\) Ideally, this focus on improving parenting skills would help children avoid foster care, a goal Lisbeth Schorr would support.

Home visitors also promote literacy and reading. Family case managers provide families with books and stress the importance of reading aloud with children at all stages of development. They inform parents that reading with their children brings them closer as a family and develops listening and language skills.\(^{78}\)

\(^{74}\) “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 2
\(^{75}\) “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 2-3
\(^{76}\) “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
\(^{77}\) “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
\(^{78}\) “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
During home visits, family case managers help families learn problem solving and communication skills. CHIP provides parents with pocket calendars to keep track of appointments and to schedule CHIP transportation in advance so they have time to make other arrangements if there is a conflict. Family case managers advocate for the family with social workers, schools, doctors, and landlords. They also teach parents communication skills so they can become their own advocates. When necessary, family case managers help parents fill out Social Services forms and documents.

As all working parents know, finding affordable childcare and reliable transportation are common problems. CHIP family case managers encourage parents to sign their kids up for Early Head Start. They also talk to parents about transportation to and from work. When a car or cab ride is too expensive, CHIP employees encourage parents to explore the possibilities of taking the bus or riding with a coworker or relative.

Many families need additional help, and family case managers assist in accessing resources made available by other community organizations. For example, CHIP case managers gather the relevant forms and applications to give to the families during their monthly home visits. They also frequently help CHIP parents access educational opportunities like earning their GED and gaining post high school education.

Some families have a mental health case manager visit their home. The Roanoke CHIP site’s full-time mental health case manager carries a caseload of 30 children, conducts home visits. 

---

79 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
80 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
81 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
82 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
83 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
84 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3
85 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 3-4
visits, and develops individualized plans for emotionally at-risk families. The mental health case manager works closely with CHIP nurses and family case managers to work with the children monthly. He or she collaborates with “partner agencies to assist in developing a mental health system for early childhood intervention.”

CHIP offers parent group meetings using the Meld program. Meld, a national non-profit organization based in Minneapolis, believes that parents can learn from each other, support each other, and make informed decisions. Meld has nine core programs that community organizations alter to meet their needs. Each CHIP site using Meld has a trained Meld Site Coordinator, who provides support and training to Parent Group Facilitators. These facilitators are usually home visitors, nurses, former CHIP parents, or volunteers with effective parenting skills and a background similar to that of many CHIP parents. CHIP and Meld provide their sites with Meld curriculum materials that cover topics such as health, nutrition, child development, and the use of community resources. Group meetings allow parents to come together to share their successes and challenges through discussion, group activities, arts and crafts, outings, and guest speakers.

The Roanoke Valley CHIP site also has a Family Friend Mentoring Program that matches CHIP families with volunteer mentors. These mentors help families meet larger needs. They tutor parents trying to earn their GED and provide transportation to out-of-town medical appointments. These mentors can provide great informal support to CHIP families.

---
86 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 4
87 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 4
89 Comprehensive Health Investment Project. 8 Apr. 2003. <www.chipofvirginia.org>
90 Comprehensive Health Investment Project. 8 Apr. 2003. <www.chipofvirginia.org>
92 Comprehensive Health Investment Project. 8 Apr. 2003. <www.chipofvirginia.org>
One service CHIP does not offer that Lisbeth Schorr advocates is family planning. CHIP does not, however, ignore the need for such services. CHIP staff pays close attention to family planning and birth spacing and helps parents understand the benefits of planning and spacing childbirths. CHIP also suggests that families take advantage of other community organizations and opportunities for family planning. CHIP notes that fewer than 6% of families enrolled for a year or more have children less than 24 months apart. Approximately 20% of families in CHIP’s target population have children less than 24 months apart. Despite not offering family planning services, CHIP manages to affect the birth patterns of the low-income families it serves.

CHIP Success Stories

The González family is certainly not the only family CHIP has helped move toward self-sufficiency as well as improved health and living conditions. CHIP services aid thousands of families throughout the Commonwealth of Virginia. Another CHIP success story involves a single 26-year-old mother and her two CHIP-enrolled children. The family lives with relatives. The four-year-old girl has severe Cerebral Palsy, requiring constant therapy and in-home care. She sees her primary care physician and receives physical and occupational therapy from Easter Seals, neurologists, and other specialists. This family does not need help finding a physician, but the mother and her children need other assistance.

Care Coordination staff helps the mother coordinate her daughter’s appointments and therapy. They also provide the family with over-the-counter lotions that Medicaid does not cover. Family Support staff gives them special equipment, special clothing that accommodates her implanted feeding tube, and resources for diapers the girl will probably wear for the rest of her life. Lastly, CHIP provides the young girl with her first dental visit. Because of her

---

condition, the young girl has to visit a dentist for children with special needs, a specialty not found in the Roanoke Valley. CHIP Medical Home and Family Support staff finds her a dentist and arranges for her to travel to Charlottesville to have her teeth cleaned and sealed.97

Cerebral Palsy is the most common cause of crippling in children, and there are more stories of how CHIP Roanoke has been able to help children suffering from this condition. One such story involves a family of four children, two of whom are enrolled in CHIP. One of the CHIP-enrolled children is a six-year-old girl with Cerebral Palsy. The family lives in an isolated section of Botetourt County, and their house is in such bad condition that sections of the upper floor are boarded up because they lack floorboards. It is possible to see through the levels of the house. In order to continue to be able to walk, the six-year-old requires surgery, after which she needs to be in a wheelchair for two to four months.

Several problems with the house make it impossible for her to navigate in a wheelchair. There is no wheelchair accessible ramp leading into the house, and the house requires many repairs so that the girl can sleep downstairs: floor tiles are missing, pieces of walls are missing, and the floorboards are so warped that a wheelchair cannot roll across them. CHIP’s Family Support staff helps the family find a local church that donates money and labor. As a result, the young girl has a wheelchair ramp into the house, re-plastered walls, re-tiled floors, and a newly painted room.98

Tess is born addicted to cocaine, with three holes in her heart and a chromosome disorder with three points of Downs Syndrome. Her mother is incarcerated soon after giving birth, and Tess’s father, Henry, gains custody of her. He comes to CHIP for help. During the following few months, CHIP’s Family Support staff helps Henry apply for Social Security and provides

97 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 13
Henry and Tess with transportation to and from appointments with Tess’s pediatrician and cardiologist. CHIP staff attends these appointments to ensure that Henry understands Tess’s medical condition and treatment. CHIP nurses help Henry read Tess’s heart monitor.

At age four months, Tess requires a 12-hour surgery at the University of Virginia Medical Center to repair the holes in her heart. CHIP’s Family Support staff arranges for the family’s transportation to Charlottesville and for Henry to be able to stay in the Ronald McDonald house while Tess is in the hospital. Tess’s operation is a success and she fully recovers from her surgery. Her father, however, is unable to continue caring for her. She is now in the custody of her aunt. Tess’s three points of Downs Syndrome and her cocaine addiction at birth still put her at risk for developmental delay, and CHIP home visitors see her regularly to educate her caretaker and monitor her development.99

Is Paternalism Necessary?

Many people would argue that the policies recommended by Lisbeth Schorr and adopted by CHIP are overly paternalistic. Some people would say that the majority of parents are good caretakers capable of taking care of their children. They do not require the intrusion of case managers and nurses visiting their home and calling to make sure they keep their appointments. Parents truly desire the best for their children, and paternalism is unnecessary if a program is correctly designed and administered. Unfortunately, that is simply not the reality of many situations. Children deserve adequate health care, and some parents do not have the ability to provide them with the necessary care. The following true story illustrates why a paternalistic approach to providing pediatric health care is sometimes necessary.

98 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 13
99 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 14
Perhaps the most saddening recent CHIP story is that of the Duncan family, which includes a newborn boy, his father, 30-year-old Terry Dale Duncan, and his mother, 18-year-old Katherine Duncan. At the time of birth, hospital staff notes that Katherine is mentally slow and refers the family to CHIP, which places them on the waiting list in early April 2002. Shortly thereafter, the hospital readmits the boy for the second time for failure to thrive. Hospital staff determines that Terry and Katherine are not preparing the boy’s formula correctly and that the infant has a urinary tract infection. Hospital staff becomes concerned, CHIP removes the Duncans from its wait list, and a team visits their home to offer them help on April 23, 2002.

While in the home, CHIP staff notes several needs and problems to address. The infant needs a bed, and the family has no fuel service because the Duncans are unable pay their bill. The Duncans have no hot water or fuel to use the stove; they use a hot plate to heat the baby’s formula. Furthermore, neither parent is employed. CHIP staff later learns that Terry suffers from uncontrolled seizures and that Katherine is “mentally delayed.” They do not have health insurance or enough money to buy medication, adequate food, or reliable transportation.

CHIP’s Medical Home component matches the infant with a pediatrician. The Family Support component provides them with material needs such as a crib, baby clothes, and formula. It also ensures that the Duncans apply for WIC, makes sure that they get food from local food banks, urge Terry and Katherine to apply for Medicaid disability benefits, and explains that a CHIP van can help with transportation to and from the infant’s medical appointments. CHIP’s mental health worker begins working with the family and is able to get emergency funding to reconnect fuel service.

In early May, the baby boy’s pediatrician notifies CHIP Care Coordination that he failed to show up for his appointment. CHIP staff reschedules the appointment and goes to the
family’s apartment. Terry and Katherine are reluctant to let CHIP staff see their son because he has red marks all over his eyelids, face, and neck; his hands are covered with socks; and his leg is swollen, painful, and firm to the touch. According to Terry, the infant had become tangled in the crib bars during the night and injured his leg. The CHIP home visitors and parents take the infant to the hospital, where doctors find that his right leg is fractured in three places and his clavicle bones are broken. Child Protective Services is notified and begins to investigate possible charges of abuse and neglect. The infant is placed in protective custody with foster parents. This is one case where even Schorr would not advocate trying to preserve the family. In this case, the infant is better off in foster care.

The Roanoke Times reports a few more details about the family and the infant’s injuries. There appears to be a cigarette burn at the back of the child’s throat. Terry Duncan used his bare hands to break his son’s bones and caused black eyes by striking him in the face with his bottle. Terry does not believe the baby is his and had planned to kill the boy. The surprise visit by CHIP nurses saved the child’s life, although he has a long recovery ahead. Court-ordered DNA tests indicate that Terry Duncan is, in fact, the infant’s biological father. He is charged with aggravated malicious wounding and felony child abuse.

Katherine Duncan undergoes psychological and educational testing, revealing a childlike intelligence. She initially lies to CHIP workers about the cause of her son’s injuries because Terry Duncan has told her to lie and has threatened to kill her if she does not. As of mid-May 2002, Katherine Duncan has not been charged with any crime.

Without the paternalistic nature of the CHIP program, this infant would have lost his life. Had CHIP staff not been in touch with the infant boy’s pediatrician, and had the nurse and case

---

100 “Child Health Investment Partnership: Family Strengthening Program.” CHIP of Roanoke Valley. p 17-18
manger not visited their home, he may not have been discovered alive. The arguments against paternalism hold little ground when poor outcomes threaten the lives of innocent children.

Clearly not all of CHIP’s cases are so dramatic, and one case involving one family cannot support paternalism on its own. The fact is that CHIP parents welcome home visitors into their homes. CHIP is a voluntary program; if families do not want CHIP staff in their home or calling about medical appointments, they can ask them to leave and not call. Very few families object to CHIP’s home visits because parents are most comfortable meeting in their own homes, “where they are most in control and empowered.”

Also, families recognize that these home visits are necessary. During these home visits families gain some of the skills necessary to become more self-sufficient and less reliant on social programs.

Family Outcomes

As a result of Family Strengthening services, many families are able to improve their situation. Across the state, 3,038 families had 23,961 home visits during 2000. Many parents increase their level of formal education with CHIP’s help. Twenty-nine percent of Roanoke CHIP parents without a high school degree earn their diploma or GED after two years in the program. Eight percent of CHIP Roanoke parents with a high school degree or GED further improve their education status. This study is promising; however, it does not mention a control group. CHIP should carefully conduct another study.

There is also a focus on helping unemployed parents find jobs. One of CHIP of Virginia’s main goals is to help families become self-sufficient. At the time of enrollment in

---

103 “CHIP Means Healthier Children,” CHIP of Virginia, 2002
104 “Child Health Investment Partnership: Family Strengthening Program,” CHIP of Roanoke Valley, p 6
105 “Child Health Investment Partnership: Family Strengthening Program,” CHIP of Roanoke Valley, p 6
CHIP of Virginia, 38.3% of families have neither parent employed.\textsuperscript{106} After receiving CHIP services for a year, 43.6% of the families have at least one employed parent.\textsuperscript{107} Again, these statistics are promising, but the study does not mention a control group. CHIP needs to conduct careful research to examine how it affects parental employment.

**Child Outcomes**

One of the main ways in which CHIP of Virginia measures success is by tracking the percentage of fully immunized children. At the time of enrollment in CHIP of Virginia, 87.1% of the children are fully immunized.\textsuperscript{108} After one year in the program, 92.4% of the children are fully immunized.\textsuperscript{109} That is a 6.08% change after one year in the program. Across the state, 82% are fully immunized.\textsuperscript{110}

The Roanoke CHIP office has statistics on fully immunized two-year olds. Eighty-four percent of their children have all thirteen recommended vaccinations.\textsuperscript{111} The national Medicaid population benchmark is to have 52.2% of two-year-olds fully immunized.\textsuperscript{112} Although the national statistic is interesting, it would be better to compare CHIP results to Virginia’s Medicaid-insured children.

Readers may wonder why so many of CHIP’s children are fully immunized at the time of enrollment. It seems that immunization would be a good indicator of parental attention to child health. If that is true and CHIP children are more likely to be immunized at enrollment than the average Virginian, it looks as if CHIP is targeting the wrong children. According to Judith Cash, Executive Director of CHIP of Virginia, some of their statistics are misleading in that regard.

\textsuperscript{106} "CHIP Means Healthier Children,” CHIP of Virginia, 2002
\textsuperscript{107} "CHIP Means Healthier Children,” CHIP of Virginia, 2002
\textsuperscript{108} "CHIP Means Healthier Children,” CHIP of Virginia, 2002
\textsuperscript{109} "CHIP Means Healthier Children,” CHIP of Virginia, 2002
\textsuperscript{110} "CHIP Means Healthier Children,” CHIP of Virginia, 2002
Most sites serve a very high-risk population with lower than average immunization rates, low parental motivation, and families with multiple problems. Other sites serve a less at-risk population, possibly with programs in place to promote immunization. Therefore, the statewide immunization rates may be a little misleading.

CHIP also keeps track of how many of their children have a medical home. At the time of enrollment in CHIP of Virginia, 89.8% of the children have a medical home.\textsuperscript{113} After one year in the program, 94.4% of them have a medical home.\textsuperscript{114} This is a 5.12% change in the percentage of children with a medical home. Statewide, only 75% of all children have a medical home.\textsuperscript{115} Nationally, less than 83% of Medicaid-insured children have the level of access equal to that of CHIP children.\textsuperscript{116} Readers may ask why so many of CHIP’s children already have a medical home at the time of enrollment. CHIP enrolls children for many reasons, and lacking a medical home is only one of these reasons. And again, differences in sites may skew this statistic.

CHIP needs to perform some more studies and collect additional data. Families remain in the program for an average of less than two and a half years.\textsuperscript{117} What happens to them after they leave it? Should CHIP extend its services to cover older children as well? CHIP becomes less worth the cost if families return to their pre-CHIP state soon after leaving the program. Also, do CHIP services affect the incidence of other risk factors Lisbeth Schorr mentions? Are children enrolled in CHIP more likely to receive plenty of guidance and nurturing during their teenage years? Are they more likely to graduate from high school and be healthy adults? Are CHIP children any less likely to be teenage parents, to inadequately space their children, to have

\textsuperscript{113} “CHIP Means Healthier Children,” CHIP of Virginia, 2002
\textsuperscript{114} “CHIP Means Healthier Children,” CHIP of Virginia, 2002
\textsuperscript{115} “CHIP Means Healthier Children,” CHIP of Virginia, 2002
\textsuperscript{116} Child Health Investment Partnership. 8 Apr. 2003. <www.chipofroanokevalley.org>
\textsuperscript{117} Cash, Judith. “Re: CHIP Research Project.” Email to the author. 4 Apr. 2003.
unhealthy children, or to abuse their children? These questions take time to answer, but CHIP should be keeping track of children to check these outcomes.

Savings

In October of 1996, the Virginia Department of Medical Assistance (DMAS) gave CHIP evaluators data on all of the Medicaid claims made by 1,295 CHIP children. DMAS also provided CHIP evaluators with the same data for a control group of children not enrolled in CHIP but similar to CHIP children in location, age, gender, race, and reason for Medicaid eligibility. Analysis confirms that CHIP successfully changes the health care patterns of high need/high cost populations. Prior to enrollment, CHIP children used 2½ times more Medicaid dollars than non-CHIP children. This shows that CHIP correctly identifies those children most in need of additional help. CHIP children use fewer Medicaid dollars than they did before enrolling in CHIP. The following table summarizes the medical costs of CHIP and non-CHIP children.

<table>
<thead>
<tr>
<th>Medical Service</th>
<th>CHIP children</th>
<th>Non-CHIP children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Enroll</td>
<td>Change</td>
</tr>
<tr>
<td>In hospital</td>
<td>$1,074</td>
<td>-$434</td>
</tr>
<tr>
<td>Emergency Room</td>
<td>$186</td>
<td>-$35</td>
</tr>
<tr>
<td>Outpatient non-emergency unit</td>
<td>$335</td>
<td>+$59</td>
</tr>
<tr>
<td>Private Office</td>
<td>$918</td>
<td>-$15</td>
</tr>
<tr>
<td>All Medical Claims</td>
<td>$2,533</td>
<td>-$424</td>
</tr>
</tbody>
</table>

This data is very promising regarding CHIP’s success, but the data is at least seven years old. With medical costs changing and shifting so rapidly, another study is necessary.

Cost and Funding

The average cost per child varies from site to site, but it averages between $1000 and $1200 per child per year.¹²² For this $1,000, children, families, and society gain from CHIP’s help. Children receive the medical care they need, the love and attention of parents with better parenting skills, and more hope for a better future. Parents receive support from other parents, formal education, and lessons that help them develop better parenting skills and a stronger bond with their children. Society gains healthier, self-sufficient families that can contribute to society rather than lean on it for help.

Several sources of funding cover CHIP’s costs. The W.K. Kellogg Foundation funded CHIP’s expansion to sites beyond the Roanoke Valley. The Virginia General Assembly also provides CHIP with funding. The state gave CHIP $2.4 million for 1996-1998, $3.2 million for 1998-2000, and $4.3 million for 2000-2002.¹²³ CHIP partners with community offices and organizations such as health departments and community action agencies to provide services. It also receives private and corporate donations of money, goods, and services. Some sites hold additional fundraising events, and CHIP receives some federal support. In the areas it serves, CHIP has become a community-wide effort with many people, organizations, and corporations supporting its programs.

Conclusion

CHIP ended up having a large impact on the González family. They now live in a rat-free, carpeted apartment. Juan and María know more about home safety and parenting. They know more about Susana’s illness and how to care for her. They have enough food and can pay their rent. The children all have Social Security cards and medical insurance, see a doctor and

dentist regularly, and have transportation to and from their appointments. They have clothes and age-appropriate toys. Ana and Susana have baby formula and Susana has her multi-vitamins. They are on their way to being a healthy, self-sufficient family with a bright future.

CHIP of Virginia clearly provides valuable services to a very specific portion of Virginia’s low-income population. Readers may ask why CHIP services are limited to only those eleven sites. CHIP chooses its sites for very specific reasons. It operates in some of the highest-risk areas of Virginia. Children living in those areas are some of the most likely to suffer from abuse and neglect. If CHIP were to expand to areas of lower-risk, those communities would see a smaller improvement. That is not to say that CHIP could not do a great deal of good or that the benefits would not be worth the cost; more site-specific data would be necessary to make those determinations.

CHIP also needs additional and more recent data on the sites it already serves. CHIP greatly enhances and adds to services that Medicaid provides. As a result, CHIP generates additional cost. In addition to increased cost, though, are increased benefits. Just how large and long lasting of an impact CHIP has on its communities is yet to be proven. Available data indicate, however, that the benefits to children, families and society are numerous and great. The González family is one of thousands of families that would agree.