

**California's Fostering Connections to Success Act and the Costs and Benefits of
Extending Foster Care to 21***

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EXECUTIVE SUMMARY

This report analyzes the potential costs and benefits of allowing foster youth to remain in care until age 21, the policy encouraged by the Fostering Connections to Success and Increasing Adoptions Act and proposed in California's Assembly Bill 12, the California Fostering Connections to Success Act. Our estimates of the costs of extending care are based on the experience of Illinois in providing care past age 18 and data on public assistance receipt by youth aging out of foster care. Our estimates of the potential benefits of extending care are based on college participation rates at age 21 suggestive of the effect of extending care on post-secondary educational attainment as well as data on increased work-life earnings associated with post-secondary education.

Our analyses lead to the following conclusions:

- We estimate that the average per youth cost of extending foster to age 21, net cost offsets associated with public assistance utilization when youth cannot remain in care, to be approximately \$37,948. Available state-level data on public assistance utilization suggest that the net cost of extending care in California may be a few hundred dollars less than our estimate. We would expect the Federal government to pay \$13,282, the State of California \$9,866, and the placing county \$14,800 per person to extend foster care in California to age 21.
- Our estimates of the benefits of extending care until age 21 on bachelor's degree completion range from approximately \$27,000 to \$196,000. The wide range reflects different assumptions about 1) college graduation by former foster youth generally and 2) the persistence over time of the educational advantages associated with remaining in care. Our best estimate is that the increase in bachelor's degree completion predicted to result from extending care to age 21 would increase per-person work-life earnings by approximately \$92,000. This represents about \$2.4 for every dollar spent.
- Even if we assume no continuation of the favorable educational trajectory observed at age 21 associated with the Illinois policy of extending care, we estimate that the per-person work-life earnings of foster youth making the transition to adulthood would increase by an average of \$84,000 as a result of allowing foster youth to remain in care until they are 21 years old. This conservative estimate is based only on the expected effect of extending care on the likelihood of completing at least some college and represents a return of over two dollars for every dollar spent.

There is good reason to believe that the stark differences in college attainment that we observe at age 21 and attribute to the extension of foster care in Illinois will, over time, result in advantages in terms of both degree completion and sub-baccalaureate attainment. Thus, it seems reasonable to assume that the average increase in work-life earnings that would result from extending foster care is substantially higher than either of our estimates suggest, although how much higher is not clear. Our estimates suggest that the costs associated with extending foster care to age 21--an option that is now much less costly to states as a result of the Fostering Connections Act--are more than offset by the potential benefits to foster youth and society.

Introduction

Although they make up a relatively small proportion of all children in foster care, foster youth approaching the transition to adulthood have, over the years, attracted considerable attention from policymakers. Title IV-E of the Social Security Act has been amended three times in the past twenty-five years as part of an effort to better support young people making this transition. The shift over time in federal policy arguably reflects an evolving understanding of normative transitions to adulthood, growing knowledge of the particular challenges faced by transitioning foster youth, and changing views of the state's role and responsibilities as corporate parent. In practice, few states allow young people to remain in care much beyond their eighteenth birthday largely because, until now, federal reimbursement for foster care maintenance and administration costs has been limited to youth under age 18, or until age 19 in the case of youth who are likely to graduate from high school or an equivalent program before their 19th birthday (Bussey et al., 2000).

However, the Fostering Connections to Success and Increasing Adoptions Act (Public Law 110-351, hereafter referred to as the "Fostering Connections Act"), passed unanimously in both houses of Congress and signed into law by President Bush in October 2008, amends Title IV-E of the Social Security Act to allow states, at their option, to care for and support foster youth until the age of 21 provided that the youth are either 1) completing high school or an equivalency program; 2) enrolled in post-secondary or vocational school; 3) participating in a program or activity designed to promote, or remove barriers to, employment; 4) employed for at least 80 hours per month; or 5) incapable of doing any of these activities due to a medical condition. Young people age 18 and older can be living independently in a supervised setting as well as placed in a foster home or group care setting, but the procedures afforded to state wards under age 18 (e.g., judicial or administrative case review every six months) would continue to apply. The Fostering Connections Act also requires child welfare agencies to help young people ages 18 and older develop a personal transition plan during the 90 days immediately before they exit care. The plan must be as detailed as the youth desires and include specific options for housing, health insurance, education, mentoring opportunities, continuing support services, workforce supports and employment services.

The Fostering Connections Act will begin reimbursing states that choose to extend foster care in fiscal year 2011 (i.e., October 2010).¹ In December 2008, California Assembly Bill 12, the California Fostering Connections to Success Act, was introduced. Among its provisions AB 12 would extend the California foster care program to age 21 in accordance with the provisions of the Fostering Connections Act. One factor that may help determine whether California policymakers decide to exercise this option is how the

¹ Depending on the state, the federal government provides reimbursement of 50% to 83% of foster care maintenance costs for children who are Title IV-E eligible, and states pay the rest. The federal portion or Federal Financial Participation (FFP) is the same as the state's Federal Medical Assistance Percentage (FMAP) and is based primarily on the state's per capita income. States with a higher per capita income have a lower FMAP. States are responsible for covering the entire cost of care for children who are not Title IV-E eligible. This would also apply to foster youth ages 18 and older.

benefits to foster youth and society compare with the costs to government. In this report, we provide some preliminary estimates of those benefits and costs using data from a variety of sources including the Midwest Evaluation of the Adult Functioning of Former Foster Youth (“Midwest Study”), the Illinois Department of Children and Family Services (DCFS), the 1988 National Education Longitudinal Study and the US Census Bureau.² We conclude that the benefits to foster youth and society of extending care outweigh the costs to government by a factor of at least two to one.

The Midwest Study

The Midwest Study is a collaborative effort among the public child welfare agencies in Illinois, Iowa, and Wisconsin, Chapin Hall at the University of Chicago, the University of Wisconsin Survey Center (UWSC), and Partners for Our Children (POC) at the University of Washington, Seattle. The Principal Investigator for the study, Mark E. Courtney, is currently Executive Director of POC and a Faculty Associate of Chapin Hall.

The Midwest Study is examining the transition to adulthood among foster youth from the three participating states who had entered care prior to their 16th birthday, were still in care at age 17, and whose primary reason for placement was not delinquency.³ Baseline interviews were conducted with 732 of the 758 young people eligible for the study, between May 2002 and March 2003 (63 from Iowa, 474 from Illinois, and 195 from Wisconsin) when they were 17 or 18 years old. That translates into a response rate of almost 97 percent. Eighty-two percent (n = 603) of this baseline sample (386 from Illinois, 54 from Iowa, and 163 from Wisconsin) were re-interviewed between March and December 2004 when nearly all (n = 575) were age 19. A third wave of survey data was collected between March 2006 and January 2007 from 81 percent (n = 591) of the baseline sample (364 from Illinois, 50 from Iowa, and 176 from Wisconsin) when almost all of the study participants were 21 years old. The interviews covered a variety of domains, including living arrangements, relationships with family of origin, social support, receipt of independent living services, education, employment, economic well-being, receipt of government benefits, physical and mental well-being, health and mental health service utilization, sexual behaviors, pregnancy, marriage and cohabitation, parenting, and criminal justice system involvement.

An important feature of the Midwest Study, and one that allows us to undertake this analysis, is that the three participating states have different child welfare policies regarding the age until which foster youth can remain in care. Foster youth in Iowa and

² This report was produced in response to a request from policymakers and advocates in California involved in developing legislation to extend foster care to age 21 in their state. The time constraints imposed by the legislative process meant that we needed to produce a best estimate of the potential benefits and costs associated with extending care using survey data from the Midwest Study. The authors of this report are engaged in a longer-term project aimed at a more thorough benefit-cost analysis of extending care than that reported here. We would like to thank the John D. and Catherine T. MacArthur Foundation and the Walter S. Johnson Foundation for their support of the work involved in producing this report.

³ For a more detailed description of the baseline study sample and procedures, see Courtney & Dworsky, 2006.

Wisconsin are generally discharged from care around the time of their 18th birthday and almost never after age 19. This is similar to what happens in most states. By contrast, Illinois is one of the few jurisdictions where foster youth can and routinely do remain in care until their 21st birthday.⁴ Despite some claims that many foster youth would choose not to remain under the care and supervision of the public child welfare agency and juvenile court beyond age 18 if given the opportunity, our data suggest that the opposite is true. Most of the young people from Illinois, who could have left care at any time after reaching the age of majority, were still in care on their 20th birthday, and many remained in care until age 21.

The Potential Costs of Extending Foster Care to 21

We estimate of the expected costs to government if foster care were extended until age 21 based on (1) the per day cost of caring for young people beyond their 18th birthday; (2) the average amount of time young people would remain in care after reaching age 18; and (3) the costs of public assistance that could be avoided if young people remained in care. The Illinois Department of Children and Family Services (DCFS) provided us with a weighted average of the per-day costs associated with different types of living arrangements (e.g., foster homes, supervised independent living, and subsidy payments for youth attending college) in 2007. Using their numbers, the average cost of keeping one Illinois youth in care after his or her 18th birthday is approximately \$20,800 per year.

We know from the Midwest Study that foster youth in Illinois are much older when they exit care than their counterparts in Iowa and Wisconsin. The average age at exit was 20 years old in Illinois compared with only 17.9 in Iowa and 17.8 in Wisconsin. This reflects the fact that all of the young people in the Wisconsin sample exited care before their 19th birthday as did nearly all of the young people in the Iowa sample. By contrast, more than half of the young people in the Illinois sample were still in care after their 20th birthday. Assuming that what happens in Illinois is similar to what would happen in other states if young people were allowed to remain in care until age 21, and that Iowa and Wisconsin are good examples of what happens in states that routinely discharge youth at age 18, extending care to age 21 would increase by about two years the average length of time states could expect to provide care. Multiplying the average estimated annual cost of extending care (i.e., \$20,800) by the average estimated increase in care years (2 years) produces an estimated average additional cost of \$41,600 per youth.

However, at least some of this cost would be offset by the avoidance of expenditures on public assistance. To estimate what those cost offsets might be, we draw primarily upon survey data collected from Midwest Study participants when they were 21 years old ($N = 555$). Table 1 shows both the percentage of study participants who reported that they

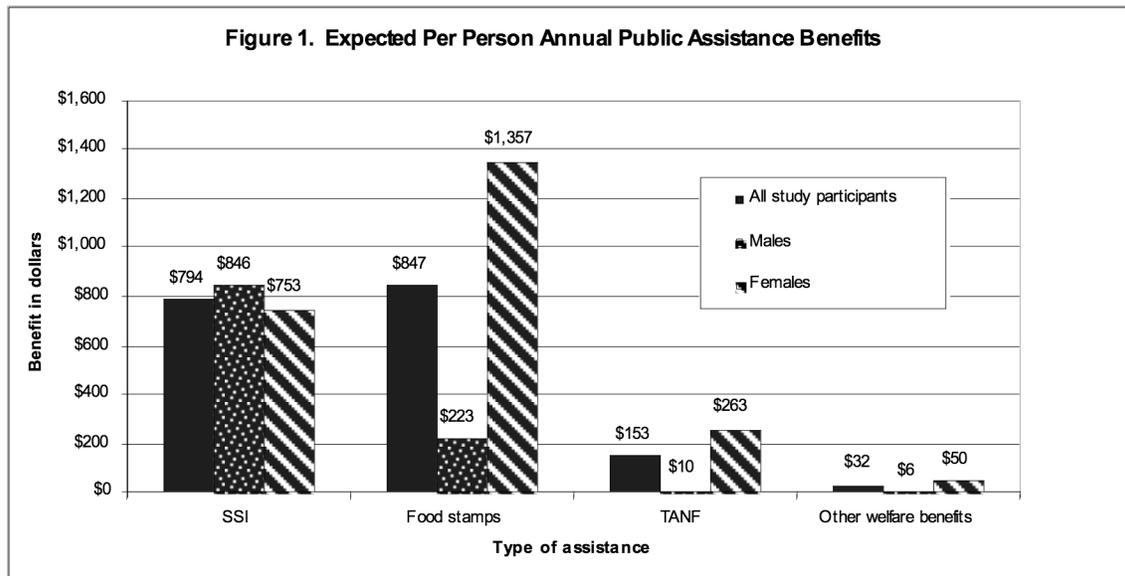
⁴ At the time these data were collected, Iowa foster youth could remain in care beyond their 19th birthday if the child welfare agency and juvenile court concluded that doing so would enable them to graduate from high school. However, only seven of the 63 Iowa youth in the Midwest Study sample were still in foster care at age 19.

were receiving public assistance as well as the mean benefit they were receiving each month.⁵

Table 1. Current Public Assistance Receipt at Age 21 (N = 555)

	% Receiving Assistance			Mean Monthly Benefit		
	Total	Male	Female	Total	Male	Female
SSI	11.9	12.8	11.2	\$555.90	\$550.59	\$560.00
Food stamps	32.5	9.9	50.2	\$217.24	\$187.33	\$225.31
TANF	2.9	0.4	4.8	\$440.13	\$200.00	\$456.13
Other cash welfare benefits	0.9	0.4	1.3	\$296.58	\$116.67	\$322.29

We used the reported monthly benefits to calculate what the annual benefits would be. If we assume that the percentage who were current recipients represents the probability of public assistance receipt, then the expected per person annual benefit is shown in Figure 1.



On average, Midwest Study participants received \$794 in SSI benefits, \$847 in food stamps benefits, \$153 in TANF benefits and \$32 in other welfare benefits, or a total of \$1,826 in benefits, over the course of a year. Because the young women were far more likely than young men to be custodial parents, and hence eligible for TANF, that value was considerably higher for females (\$2,423) and lower for males (\$1,083).⁶

Importantly, we limited our analysis to cash and “cash-like” (i.e., food stamp) benefits which were readily monetized. However, we know that some of these young people were receiving housing assistance (e.g., public housing, Housing Choice Vouchers) or benefits

⁵ “Other welfare benefits” would include SSI, general assistance, emergency assistance, or Cuban/Haitian or Indian assistance payments.

⁶ At age 21, 51 percent of the young women but only 11 percent of the young men were custodial parents.

from the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). If we had taken this other public assistance into account, the estimates shown in Figure 1 would have been higher.

Assuming average annual public assistance receipt of \$1,826 for each former foster youth between the ages of 18 and 21 and assuming that these costs are defrayed for two years on average when young people remain in care, the expected net cost of extending care would be reduced by \$3,652, or from \$41,600 to \$37,948. This is not a large reduction relative to the overall cost, but it should be acknowledged.

Estimating the Cost of Extending Care in California

It is important to consider whether the cost of extending care would be significantly different in California than in the three Midwest Study states. In the simplest terms, the cost to the California child welfare system of extending foster care from age 18 to 21 is a function of (1) the average cost per day of caring for young people age 18 and older in various placements under the new policy, (2) the number of youth in each kind of placement, and (3) the average increase in the number of days young people would remain in care beyond their 18th birthday. Unfortunately, these figures are unknown. In the absence of California-specific data, we assume that the per-day costs of extending care in California would be similar to the per-day costs in Illinois and that young people in California would behave like their Midwest Study counterparts and remain in care an average of two years longer than they do now. In other words, our best estimate of the additional costs to the California child welfare system of extending care would be \$41,600 per youth.

Although state-level data on public assistance receipt among 18-21 year olds, the population most affected by extending foster care, are not readily available, the cost offsets associated with the avoidance of public assistance receipt may be somewhat larger in California than the Midwest Study data would suggest. Between 2000 and 2002, the average percentage of low-income children receiving TANF benefits was 18 percent in California compared with only 11 percent in Illinois, 8 percent in Iowa, and 6 percent in Wisconsin (National Center for Children in Poverty, 2004). By contrast, Food Stamp receipt among low-income children varied relatively little across these states (National Center for Children in Poverty, 2004). Given that TANF benefits accounted for less than one-tenth of our estimated cost offset of \$3,652 per youth, the additional per youth cost offset in California is unlikely to exceed a few hundred dollars.

The costs of extending foster care to age 21 under the *Fostering Connections Act* will be shared among federal, state, and county governmental entities. In thinking about the fiscal implications of AB 12, California policy makers need to consider several factors: the state's Title IV-E reimbursement rate, the percentage of foster youth who would be Title IV-E eligible, and how costs are shared between counties and the state.

In California, for example, the proportion of foster children currently eligible for Title IV-E reimbursement is approximately 70 percent. Assuming that this proportion would

be the same for foster youth between the ages of 18 and 21, the federal government would pay half of what it costs the state to keep 70 percent of these older foster youth in care, or 35 percent of the total. In addition, California has a county-administered child welfare system, and foster care costs are shared between counties and the state, with counties paying 60 percent and the state paying 40 percent.

What this means in practice is that for the 30 percent of young people who would presumably not be eligible for Title IV-E reimbursement, foster care costs would be split between the county, which would cover 60 percent, and the state, which would cover 40 percent. By contrast, for the 70 percent of young people who would presumably be eligible for Title IV-E reimbursement, foster care costs would be divided among the county, which would cover 30 percent, the state, which would cover 20 percent, and the federal government, which would cover 50 percent. The overall breakdown is as follows:

Table 2: Allocation of the Costs of Extending Care Across Levels of Government

	Title IV-E Ineligible		Title IV-E Eligible		Total
Federal		+	50% * 70%	=	35%
State	40% * 30%	+	40% * 50% * 70%	=	26%
County	60% * 30%	+	60% * 50% * 70%	=	39%
Total	30%	+	70%	=	100%

The actual costs borne by each level of government would, of course, depend on the number of young people who choose to remain in foster care (as well as the number of years they choose to remain). Assuming the percentages listed in Table 2 and a total cost per person of extending care of \$37,948, we would expect the Federal government to pay \$13,282, the State of California \$9,866, and the placing county \$14,800 per person to extend foster care in California to age 21. Assuming that most foster youth in transition in California will remain in the state for most if not all of their lives, it is worth noting that the potential benefits to individuals and society of extending care in California are likely to be concentrated in California, even though the federal government assumes a significant proportion of the costs of extending care.

The Potential Benefits of Extending Foster Care to Age 21

The starting point for our analysis of the potential benefits of extending foster care were the findings that we described in *When Should the State Cease Parenting? Evidence from the Midwest Study* (Courtney, Dworsky, & Pollack, 2007), namely, that allowing young people to remain in care until age 21 was associated with increased post-secondary educational attainment, delayed pregnancy, higher earnings, and a greater likelihood of receiving independent living services. Because rigorous empirical studies have yet to demonstrate that receipt of independent living services has long-term positive effects (Montgomery, Donkoh, & Underhill, 2006), we had initially planned to estimate the potential monetary benefits associated with increased post-secondary educational attainment, delayed pregnancy, and higher earnings. However, further consideration led

us to focus exclusively on the first. Before discussing the potential monetary benefits due to increased post-secondary educational attainment, we explain our decision not to include the potential monetary benefits due to increased earnings and delayed pregnancy in our estimate.

As Courtney and colleagues reported, each additional year young people remained in care beyond their 18th birthday was associated with an increase in earnings of between \$470 and \$924 (depending on the statistical model that was used) during the year before the wave three interview at age 21 relative to mean annual earnings of \$6,894 (Courtney, Dworsky, & Pollack, 2007). At first glance it might make sense to try to estimate how this early earnings differential might translate into higher earnings over a young person's work-life. However, as we describe below, work-life earnings are strongly associated with educational attainment. Although our models predicting earnings during the year before the wave three interview controlled for differences in human capital (e.g., grade retention and reading level) and college aspirations at ages 17 or 18, they did not control for changes in educational attainment that occurred after the baseline interview. Thus, some or all of the earnings differences we observed at age 21 may reflect the effects of being able to remain in care on educational attainment. For this reason we chose not to include the earnings estimates reported in *When Should the State Cease Parenting* in our estimate of potential monetary benefits.

Courtney and colleagues also reported a relationship between remaining in care and delayed pregnancy (Courtney, Dworsky, & Pollack, 2007). Specifically, they found that being in care was associated with a 38 percent reduction in the risk of becoming pregnant between the baseline interview and the wave two interview at age 19. Given the wide range of challenges facing foster youth during the transition to adulthood and the likelihood that those who become parents during this period will do so under very unfavorable conditions (e.g., unstable or no employment, economic insecurity, no spouse or stable partner to assist with parenting), it seems reasonable to argue that this reduction in the risk of pregnancy associated with being in care would benefit the young women involved as well as society (Courtney et al., 2007). However, a review of the literature on teenage pregnancy revealed that almost all of the monetary benefits associated with pregnancy prevention comes from delaying births that would have occurred before age 18 until age 20 or 21 (Hoffman, 2006; Hoffman & Maynard, 2008). Delaying births to young women at ages 18 or 19 may have monetary benefits that have not been measured but we cannot quantify them at this point in time. Consequently, we chose not to include the potential monetary benefits of delayed pregnancy in our estimate of the potential benefits associated with extending foster care.

The Benefits of Extending Foster Care to Age 21 on Higher Education

The advantages of post-secondary education are well established. A bachelor's degree in particular is regarded as an investment that yields large returns over the life of an individual. According to the National Center for Educational Statistics, young adults with at least a bachelor's degree earn significantly more than those with less education, and the gap in median income between college graduates and high school graduates has

increased over time. In 2005, 25 to 34 year olds who had at least a bachelor's degree earned, on average, 61 percent more than those with only a high school diploma or GED (Planty, Provasnik, Hussar, Snyder, Kena, Hampden-Thompson, Dinkes & Choy, 2007).

We know that foster youth approach the transition to adulthood with significant educational deficits (Courtney, Terao, & Bost, 2004; Wolanin, 2005). For example, nearly two-fifths of Midwest Study participants were at least one year behind in school at age 17 or 18 (Courtney, et al., 2004), and one quarter did not have a high school diploma or GED by age 21 compared to 11 percent of their peers in the general population (Courtney, Dworsky, Cusick, Havlicek, Perez, & Keller, 2007).

There is a lack of a consensus among researchers regarding college graduation rates for former foster youth, with estimates ranging from as low as 1 percent to as high as 11 percent (Emerson, 2006; Pecora, Williams, Kessler, Downs, O'Brien, Hiripi, & Morello, 2003; Wolanin, 2005). These estimates, however, are based on non-representative samples of former foster youth, nearly all of whom left care before federally-funded Education and Training Vouchers (ETVs) were made available through the John H. Chafee Foster Care Independence Program in 2002. Moreover, the studies on which these estimates are based often assessed educational progress too early in adulthood to provide valid data on college degree completion. Nevertheless, there is ample evidence that former foster youth lag considerably behind their peers with respect to post-secondary educational attainment.

The potential benefits of extending foster care resulting from an increase in educational attainment will depend on our answers to two questions:

- 1) What is the expected baseline rate of educational attainment for foster youth making the transition to adulthood if they are not allowed to remain in care until age 21?
- 2) How much higher do we expect that rate to be if young people are given the option to remain in care?

Our focus is on educational attainment beyond a high school diploma or the equivalent because the returns to post-secondary education are considerable.

Advantages of Extending Care Associated with a Baccalaureate Degree

We begin by estimating the potential benefits of extending care on bachelor's degree completion and the effects of BA completion on work-life earnings. Given the lack of consensus regarding college completion rates among former foster youth, we draw upon the 1988 National Education Longitudinal Study (NELS) to provide both lower and upper bounds.⁷ This study found that 29.6 percent of 26 year olds in the US had a bachelor's

⁷ NELS involved a national probability sample of students from 1,057 public and private schools across all 50 states and the District of Columbia who were eighth graders in the spring of 1988 (US Department of Education, 2000).

degree.⁸ However, that percentage varied considerably by socioeconomic status (SES).⁹ Most notably, only 7.3 percent of young people in the lowest SES quartile obtained a bachelor's degree by age 26. The NELS also found a relationship between number of "risk factors" and rates of college graduation.¹⁰ The graduation rate among young people with three or more risk factors was only 4.5 percent compared with 10.4 percent among young people with two, 22.0 percent among those with one, and 40.2 percent among those with none.

Most, but not all, transitioning foster youth are eligible for Title IV-E funding, which means that they come from low income families.¹¹ Moreover, they have typically been removed from homes because their safety and well being were significantly at risk. Averaging the NELS college graduation rates for those who were in the bottom SES quartile and those who had three or more risk factors, we estimate a lower bound for bachelor's degree attainment of 5.9 percent. To estimate our upper bound, we use the average of the rate for the bottom three quartiles of the NELS SES distribution (18.6 percent) and the rate for youth with two risk factors (10.4 percent), or 14.5 percent. Taking the midpoint between these two estimates, we assume that approximately 10.2 percent of foster youth are likely to eventually earn a bachelor's degree.¹²

Data from the Midwest Study indicate that college attendance among former foster youth is considerably higher in Illinois, where young people have the option to remain in care until the age of 21, than in Iowa and Wisconsin, where young people are routinely discharged from care on or close to their 18th birthday. Specifically, at age 21, young people who had aged out of foster care in Illinois were 2.25 times more likely than their counterparts from Iowa or Wisconsin to have completed at least one year of college (Courtney, Dworsky, & Pollack, 2007). Because between-state differences in foster youth

⁸ Because the NELS estimates are based on educational attainment at age 26 and some individuals obtain college degrees after age 26, our figures most likely underestimate the percentage of adults who ultimately earn a bachelor's degree.

⁹ The NELS measure of SES is based on five equally weighted and standardized components: father's education, mother's education, family income, father's occupation, and mother's occupation.

¹⁰ Risk factors, measured in 8th grade, included living in a single-parent household; having a low-income family; having parents who had not graduated from high school; having an older sibling who dropped out of school; spending 3 or more hours alone at home after school per day; and having limited English proficiency.

¹¹ The Federal government reimburses states for the costs of foster care provided to children from low-income families through Title IV-E. For states to claim Title IV-E reimbursement, they must document that a child's family would have been income-eligible for the state's Aid to Families with Dependent Children (AFDC) under the criteria that existed before the program was eliminated in 1997. Although the percentage of children entering foster care who are Title IV-E eligible (commonly called the IV-E penetration rate) has always varied across states due to between-state differences in AFDC eligibility criteria, and have generally fallen since 1997, long-term national data on IV-E eligibility suggest that at least half of the children who entering foster care are IV-E eligible.

¹² Additional support for this figure comes from the Casey National Alumni Study (Pecora et al., 2003), the only study that provides reasonably recent data on college degree completion among former foster youth. Interviews were conducted with 1,087 young adults who had been in the care of Casey Family Programs in one of 13 states for at least one year between 1966 and 1998. Not all of these young adults had exited care by aging out, but most had spent time in care as adolescents and their average age at exit was 19 years old. Of the young adults who were age 25 or older, 10.8 percent had a BA degree. This is very similar to our midpoint estimate.

populations could account for some or all of this difference in educational attainment, we estimated a multivariate model predicting at least one year of college completion that controlled for a range of foster youth characteristics that might be expected to be associated with college enrollment. However, controlling for these factors only *increased* the difference between states. In other words, despite exhibiting characteristics associated with *lower* rates of college enrollment, young people from Illinois had estimated odds of completing one or more years of college that were more than three times higher than the estimated odds of their peers in Iowa and Wisconsin (Courtney, Dworsky, & Pollack, 2007).

We base our estimates of the long-term benefits of extending care on bachelor's degree completion on this finding that former foster youth from Illinois were more than twice as likely as their Wisconsin and Iowa counterparts to have completed at least one year of college by age 21. Our best estimate is that allowing youth to remain in care is associated with a doubling of college degree attainment. This assumes that the difference in educational attainment that we observed at age 21 will be relatively stable over time. However, it could be argued that extending care has diminishing returns as young people can no longer rely on the state for care and supervision once they are 21 years old. We take this possibility into account by estimating the long-term benefits of extending care under the assumption that allowing youth to remain in care increases bachelor's degree completion by a factor of 1.5. It can also be argued that our best estimate is too low given the results of our multivariate analyses which suggest that extending care is associated with a tripling of the odds of completing at least one year of college. Thus, we also estimate the long-term benefits of extending care under the assumption that allowing youth to remain in care increases bachelor's degree completion by a factor of 2.5.

US Census Bureau data indicate that individuals with a bachelor's degree can expect to earn approximately \$2.1 million in 1999 dollars over the course of their work-life whereas those with only a high school diploma can expect to earn approximately \$1.2 million (Day & Newburger, 2002).¹³ This \$900,000 difference reflects the added value in work-life earnings of a bachelor's degree beyond the value of a high school diploma alone. To calculate the expected return in earnings if extending foster care to age 21 increased the rate of college graduation, we multiply the added value of a bachelor's degree by the difference between the predicted rate of college graduation under a policy of extended care and the estimated "baseline" rate of college graduation under the policy that currently exists in most states (i.e., discharge at age 18):

$$\begin{aligned} & \textit{Estimated additional earnings per person from extending foster care to age 21} = \\ & \textit{Lifetime return in earnings for a bachelor's degree (\$900,000) x} \\ & \textit{(Predicted graduation rate if foster youth are allowed to remain in care until age 21 -} \\ & \textit{Estimated baseline graduation rate)} \end{aligned}$$

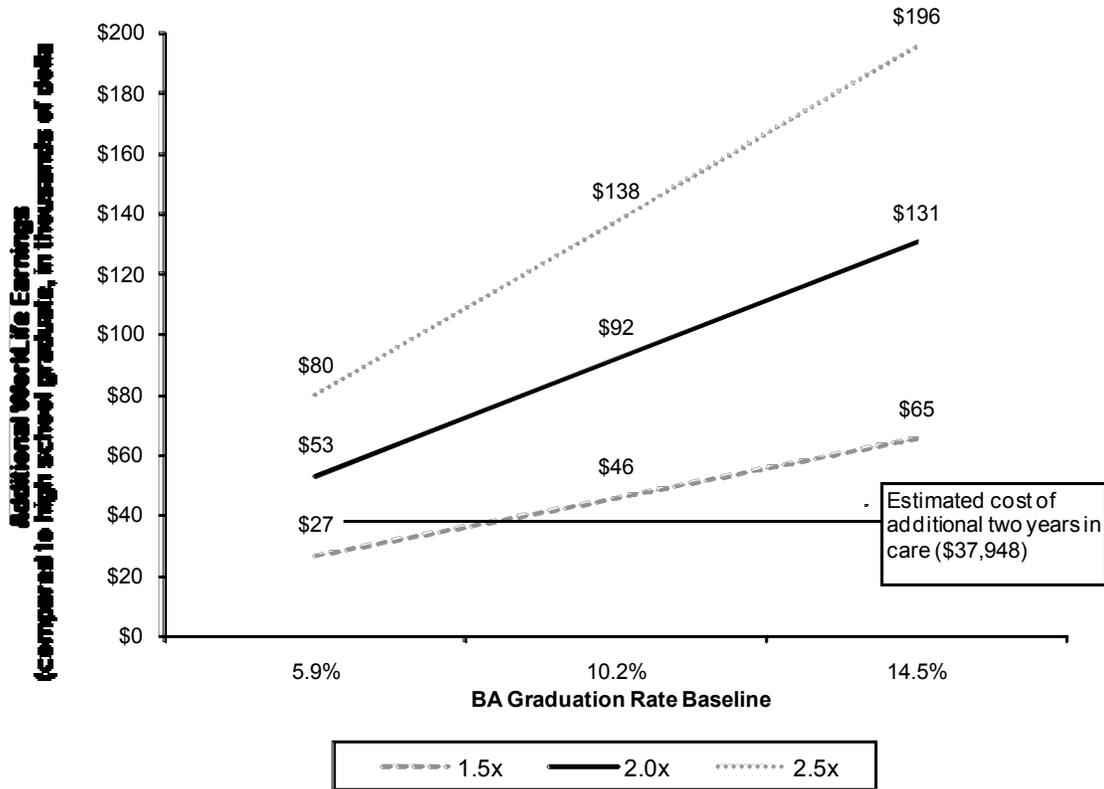
¹³ Day and Newburger (2002) estimated work-life earnings by summing age-specific average annual earnings for working people ages 25 to 64 years old. The total represents what similarly educated individuals could expect to earn, on average, in 1999 dollars, during a hypothetical 40-year working life.

The results of these calculations are illustrated in Figure 2. Note that the estimated additional earnings are heavily influenced by our assumptions about the baseline bachelor's degree completion rate and the increased bachelor's degree completion rate associated with extending care. The upper line represents the return in dollars if extending care increased the bachelor's degree completion rate by a factor of 2.5 and the lower line represents the return if extending care increased the bachelor's degree completion rate by a factor of 1.5. Our most realistic estimates are represented by the middle line which shows what would happen if extending care doubled the bachelor's degree completion rate---slightly lower than the difference observed in the Midwest Study.

Using our midpoint baseline college graduation estimate of 10.2 percent and our “best guess” that this rate will double if care is extended, we predict that 20.4 percent of foster youth would earn their baccalaureate degree if other states adopted Illinois' policy and allowed young people to remain in care until age 21. This is still considerably lower than the overall NELS estimate of 29.6 percent, but it does suggest that extending care would increase per person work-life earnings by an average of \$92,000.

Figure 2, which also shows the consequences of altering our assumptions regarding either the expected baseline rate of bachelor's degree completion or the effects of extending care on degree completion, indicates that the expected per-person work-life earnings increase associated with extending care ranges from a lower bound estimate of \$27,000 to an upper bound estimate of \$196,000. Note that for all but the estimate that assumes the lowest baseline graduation rate and the lowest projected increase in degree completion, the return in earnings exceeds the average cost of an additional two years in care (\$37,948), the average length of time that Illinois foster youth remain in care beyond their 18th birthday. Our midpoint (and most realistic) estimate translates into a benefit to cost ratio of \$2.4 dollars in increased earnings due to higher rates of degree completion for every dollar spent on extending foster care.

Figure 2: Estimated Earnings Benefits from Increased College Degree Attainment of Extending Foster Care to 21



Advantages of Extending Care Associated with Completing Any College

By limiting our estimates to the effects of completing a baccalaureate degree, we may be underestimating the benefits of extending foster care to age 21. Researchers have found “substantial and statistically significant” returns on sub-baccalaureate credentials, such as vocational certificates and associate degrees (Grubb, 1997, p241). For example, compared with individuals who have only a high school diploma, individuals with an associate’s degree earn an estimated 12 to 27 percent more (Surrette, 1997; Kane & Rouse, 1995). Moreover, according to Census Bureau estimates, completing any college increases work-life earnings by \$300,000, and completing an associate’s degree increases work-life earnings by \$400,000 relative to the work-life earnings of individuals with only a high school diploma (Day & Newburger, 2002).

This is important because data from the Midwest Study suggest that allowing youth to remain in care until age 21 is associated with significantly higher rates of college attendance (Courtney, Dworsky, & Pollack, 2007). Specifically, 58 percent of the former foster youth from Illinois had ever attended college by age 21 compared with only 29 percent of former foster youth from Iowa and only 31 percent of the former foster youth

from Wisconsin. It is also associated with a greater likelihood of completing at least one year of college. By age 21, 38 percent of the Illinois sample had completed at least one year of college compared with just 17 percent of the Wisconsin sample and 16 percent of the Iowa sample.

Given that post-secondary education can have benefits even if it does not result in a baccalaureate degree, and the fact that more follow-up data are needed to know whether Midwest study participants continue their educational trajectories, we also estimated the potential monetary benefits in terms of additional work-life earnings associated with extending care assuming that former foster youth terminate their education at age 21.¹⁴ This more conservative estimate represents the increase in per person work-life earnings we might expect due to the differences in educational attainment observed at age 21 between young people for whom remaining in care is an option and those for whom it is not:

$$\begin{aligned} & \textit{Estimated additional earnings per person from extending foster care to age 21} = \\ & \textit{Lifetime return in earnings for "some college" beyond HS (\$300,000) x} \\ & \textit{(Predicted college attendance if foster youth are allowed to remain in care until age 21 -} \\ & \textit{Estimated baseline college attendance rate)} \end{aligned}$$

Based on this formula, we estimate that the additional per-person work-life earnings associated with extending foster care would be \$84,000 (i.e., \$300,000 x (.58-.30)). In other words, even if former foster youth do not persist toward baccalaureate completion, the potential benefits of extending care exceed the costs by a factor of over 2 to 1.

Nonmarket Benefits of Post-Secondary Education

It is important to note that post-secondary education has a number of nonmarket benefits that are not easily monetized, at least not directly (Wolfe & Haveman, 2002; Baum & Ma, 2007). These benefits include improved personal and familial health, childbearing choices, and education choices of offspring. According to one estimate, if the “social gains from all of the categories of private nonmarket and external/public goods [...] are taken into account, their sum could equal estimates of the annual earnings impacts of an additional year of schooling” (Wolfe & Haveman, 2002, p118). Thus, if we were able to account for these nonmarket benefits in our estimates, extending foster care until age 21 could significantly increase the return to foster youth in transition and to society.

Limitations

Consideration of the conclusions reached in this report should take into account the limitations of the data and the methods that we used. First, our estimates of both the costs and benefits of extending care are largely based on observed differences between what happens in one state that allows young people to remain in care until age 21 and two other states with similar but not identical policies in which remaining in care until age 21

¹⁴ Data from interviews conducted at age 23 will be available in summer 2009 and from interviews at age 25 in Spring 2011.

is not an option. Caution should be exercised in applying these estimates to other jurisdictions that take a different approach to extending care than Illinois or that provide a different set of aftercare services to support post-secondary education than either Iowa or Wisconsin.

Second, we attribute all of the between-state differences in post-secondary educational attainment that we observe at age 21 after controlling for foster youth characteristics measured at baseline to the fact that in one state people can remain in care until age 21 and in the two other states they cannot. This assumes that other between-state policy or contextual differences, as well as unmeasured between-state differences in foster youth characteristics, cannot account for the between-state differences we observed in post-secondary educational attainment. We are reasonably confident in making those assumptions for reasons discussed elsewhere (Courtney, Dworsky, and Pollack, 2007), but recognize the limitations of the non-experimental nature of our analyses.

Third, we rely on estimates of returns to post-secondary education among the general population (e.g., Day & Newburger, 2002). Our estimates will be biased to the extent that returns to post-secondary education are different for young people making the transition from foster care to adulthood.

Fourth, we have not accounted for all of the potential costs and cost offsets that might be associated with allowing young people to remain in care until age 21. For example, states' ability to extend Medicaid coverage to former foster youth until their 21st birthday will not change under the new law. Nonetheless, extending care could affect Medicaid expenditures. On the one hand, it could increase Medicaid expenditures if being in care results in greater attention to young people's health care needs and to a subsequent increase in their health care service utilization. On the other hand, it could improve young people's access to primary health care and hence reduce Medicaid expenditures on emergency treatment. Another cost that we have not taken into account is the cost of maintaining court supervision for as many as three additional years.

Finally, we have not exhausted the tools of benefit-cost analysis. For example, we have not adjusted for the fact that the data on which our estimates are based often come from different years. Our estimates of the costs of providing care and supervision to 18 to 21 year old foster youth in Illinois were based on 2007 data, our data on educational attainment at age 21 were collected in 2006, and our work-life earnings estimates were based on "present value" figures for 1999 (Day & Newburger, 2002). Although we do not believe that adjusting for these differences would substantively alter our conclusions, it could result in more precise estimates. Another convention of benefit-cost analysis is to allocate costs and benefits between society as a whole and the individuals affected by a policy or program. We have not tried to allocate our estimated benefits between individuals and society. Increased work-life earnings may appear to benefit only the individuals who are employed, but at least some of those earnings are returned to society in the form of tax revenues.

Conclusion

We analyzed the potential costs and benefits of allowing foster youth to remain in care until age 21, the policy option encouraged by the Fostering Connections Act and proposed in California's AB 12. We estimate that the average per youth cost of extending foster care for two years, net cost offsets associated with public assistance utilization when youth cannot remain in care, to be approximately \$37,948. This estimate is based on cost data from Illinois, observed between-state differences in the age at which youth left care in the Midwest Study states, and Midwest Study survey data on public assistance utilization. Available state-level data on public assistance utilization suggest that the net cost of extending care in California may be a few hundred dollars less than our estimate suggests. California-specific data pertaining to the costs of providing out-of-home care to transition-age youth and the length of time that youth are likely to remain in care beyond age 18 could improve our estimate, but in the absence of such data we believe it to be the best available.

Our analysis of the benefits of extending care focused on potential increases in work-life earnings owing to increased higher education. Our estimates are limited primarily by the fact that Midwest Study data are only available on the educational attainment of foster youth at age 21. However, even if we assume no continuation of the favorable educational trajectory associated with the Illinois policy of extending care, we estimate that the per-person work-life earnings of foster youth making the transition to adulthood would increase by an average of \$84,000 as a result of allowing foster youth to remain in care until they are 21 years old. This conservative estimate is based only on the expected effect of extending care on the likelihood of completing at least some college and represents a return of over two dollars for every dollar spent.

Our estimates of the benefits of extending care until age 21 on bachelor's degree completion are based on more tenuous assumptions because most young adults do not graduate from a four year college or university until they are least 22 years old. Our estimates of the increase in average per-person work-life earnings associated with the predicted increase in college graduation range from approximately \$27,000 to \$196,000. The wide range reflects different assumptions about 1) college graduation by former foster youth generally and 2) the persistence over time of the educational advantages associated with remaining in care. Our best estimate is that the increase in bachelor's degree completion predicted to result from extending care to age 21 would increase per-person work-life earnings by approximately \$92,000. This represents about \$2.4 for every dollar spent.

These two estimates of the benefit-cost ratio of extending care are not mutually exclusive. The former estimate assumes no benefit of extending care on college degree completion whereas the latter estimate does not take into account the positive effects of extending care on sub-baccalaureate attainment. There is good reason to believe that the stark differences in college attainment that we observe at age 21 and attribute to the extension of foster care in Illinois will, over time, result in advantages in terms of both degree completion and sub-baccalaureate attainment. Thus, it seems reasonable to assume that

the average increase in work-life earnings that would result from extending foster care is substantially higher than either of our estimates suggest, although how much higher is not clear. Future analysis of Midwest Study survey data being collected at ages 23 and 25 should reduce the need for speculation. In the meantime, our estimates suggest that the costs associated with extending foster care to age 21--an option that is now much less costly to states as a result of the Fostering Connections Act--are more than offset by the potential benefits to foster youth and society.

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