

## Cost-Effectiveness in Individual Development Accounts

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## Abstract

Because resources are limited, the benefits and costs of social-work interventions—like all interventions—must be compared with the benefits and costs of alternatives. Evidence-based practice should ask not only “What works?” but also “How well does it work?” and “What does it cost?” Unfortunately, evaluations of social-work practice—like evaluations in any field—rarely can measure all the relevant variables. In particular, benefits are extremely difficult to measure. Costs are simpler to measure, but even so, few evaluations measure costs. In the end, all evaluations are inevitably incomplete and so must make subjective judgments about unmeasured factors. The key to evaluation, then, is not certainty nor objectivity but rather explicitness. An evaluation’s usefulness rests not in its (apparent) incontrovertibility but rather in its clarity of assumptions, its explicitness about subjective judgments, and its openness to meaningful review and critique. With these goals in mind, this paper analyzes the provision of Individual Development Accounts with a new cost-effectiveness framework meant to help make assumptions and judgments explicit. In the specific IDA program examined, one month of services for one participant cost about \$64. The mere existence of a cost figure—regardless of whether it is seen as high or low—has sparked many questions in the IDA community: How can costs be reduced without sacrificing quality? Which features of IDAs are essential? Are IDAs worth it? This sort of healthy questioning is precisely the purpose of cost-effectiveness analysis in social-work practice.

## Cost-Effectiveness in Individual Development Accounts

Social work has long been concerned with accountability and with the effectiveness of direct practice. As far back as 1931, Cabot challenged social workers to “measure, evaluate, estimate, appraise your results, in some form, in any terms” (cited in Royse et al., 2000, p. 3). Studies questioning the effectiveness of social work began to appear in the 1950s and 1960s. Fischer (1973) critically reviews casework effectiveness, and Reid (2002) observed that social workers since the 1980s have evaluated a number of practice methods.

While efficiency and cost-effectiveness have always been important concerns among agency administrators and funders (Weil, Karls & Associates, 1995), the concern for accountability has not usually extended to program costs, at least not among direct-service practitioners. As a result, there are far more studies of program outputs and outcomes than of program costs (Tolley & Rowland, 1995), for at least two reasons. First, techniques for cost accounting are more familiar to economists, businesspeople, and government bureaucrats than to social workers (Royse et al., 1996). Second, it is usually easier to quantify costs—at least costs of service provision—than to quantify benefits. Because cost measurements are quantitative, they seem objective and thus tend to carry disproportionate argumentative weight when compared to benefits, which usually cannot be quantified. On the one hand, ignoring costs can be a stratagem to perpetuate inefficient services that benefit favored groups (either clients or service providers) (Pritchett, 2002). On the other hand, measuring costs can also be mistakenly used to discontinue high-cost (but high-quality) services in favor of low-cost (but low-quality) services (Tolley & Rowland, 1995).

The appropriate response to the possibility of abusing cost measurement is to educate the users of social-work evaluations about the proper use of cost data. Because funds and other resources (time, personnel, facilities, and so forth) are limited, social-work administrators and direct-practice social workers are forced to make choices and tradeoffs. Time spent with one client is time that cannot be spent with another client. The choice to provide one type of service is also the choice not to provide some other type of service. To best serve clients, it behooves social workers to make sure that they provide the best intervention. But how can they know which intervention is best? Can the same results be achieved at a lower cost? Is there a more affordable alternative?

Cost-effectiveness analysis is one way to evaluate and compare different interventions. It compares outputs (e.g., hours spent advising clients on techniques for saving money) or outcomes (e.g., increased saving) with costs (e.g., the salary of the social worker providing advice on how to save). The resulting measures of program effectiveness provide an additional input to help decision-makers weigh program outcomes against program costs.

Unlike cost-benefit analysis, cost-effectiveness analysis does not pretend to quantify the value of outcomes as benefits (Gittinger, 1982). Rather, cost-effectiveness analysis simply measures outputs or outcomes and then compares them to costs. In the example of a saving program, cost-effectiveness analysis would measure changes in saving, but benefit-cost analysis would try to place a (dollar) value on the change in well-being caused by the changes in saving.

Of course, it is exceedingly difficult to place a dollar value on changes in well-being. Furthermore, most social-science professionals (including economists and social workers) explicitly state that the goal of their profession is to improve the overall well-being of society, with a greater weight on improved well-being for the poor than for the non-poor. Usually, cost-

benefit analysis sidesteps both these issues by acting as if the only benefits are those that are monetary and that all changes in well-being have the same worth, regardless of whether the poor or non-poor benefit. While this is hardly a harmless assumption for economic interventions, it is even more of a stretch for many—if not most—social-work interventions, precisely because they target the poor and precisely because their outcomes are often non-quantifiable. After all, what is the dollar value of freedom from abuse, or improved self-esteem, or renewed hope?

Inability to measure does not imply inability to compare; indeed, because different interventions compete for limited resources, subjective comparisons are inevitable. The issue is not that judgments are subjective—there is no avoiding that—but rather that the comparisons are often implicit, making them difficult to scrutinize or improve. Different assumptions or different cost-measurement techniques could lead to different conclusions (Posavac & Carey, 1997). The goal of cost-effectiveness analysis is to make comparisons more explicit, assumptions more open, and approximations more transparent. This makes the evaluation more open to critique and improvement, identifying both aspects that can be quantified and aspects that require subjective judgments (Posavac & Carey, 1997; Schreiner, 2002a).

This paper presents a cost-effectiveness analysis of Individual Development Accounts. IDAs are a new policy idea that provide matches for savings by the poor if withdrawn for home ownership, post-secondary education, or small-business ownership (Sherraden, 1988, 1991). Most IDA programs are run out of community organizations whose staff members (who may be social workers) provide financial counseling and support.

This paper uses a new, simple framework for cost-effectiveness analysis. Each of the seven aspects in the framework—cost of service provision, cost to clients of use, benefits to clients, society's valuation of net benefits to clients, number of services provided, number of

clients, and time of provision—highlight a key dimension of evaluation. The framework was derived from standard cost-benefit frameworks (Drummond & Jefferson, 1996; Garber & Phelps, 1997; Plotnick & Deppman, 1999) and was originally applied to microfinance interventions (Navajas et al., 2000; Schreiner, 2002c). By making these seven aspects of cost-effectiveness explicit, the framework helps evaluators support their judgments about the trade-offs among the various aspects and provides a benchmark for constructive discussion.

This paper measures the cost of IDAs at the Community Action Program of Tulsa County with the new framework. Between October 1998 and June 2001, the cost of providing one month of IDA services—excluding matches—for one participant was about \$64 (Schreiner, 2002b).

#### Individual Development Accounts and a New Framework for Cost-effectiveness

This section describes Individual Development Accounts and presents the new seven-aspect cost-effectiveness framework.

##### *Individual Development Accounts*

IDAs are subsidized savings accounts. Unlike other subsidized savings accounts such as Individual Retirement Accounts (IRAs) or 401(k) plans, IDAs are targeted to the poor, provide subsidies through matches rather than through tax breaks, and require participants to attend financial education. IDA participants accrue matches as they save for purposes that build assets that improve long-term well-being. The three fundamental matched uses are home ownership, post-secondary education, and small-business ownership. In principle, IDAs can be opened at birth and can remain open for a lifetime.

To date, most IDA programs are run out of small, non-profit community organizations with a mix of public and private funders. Because of funding constraints, the time frame for

deposits and matched withdrawals is usually limited to two to five years. Accounts are kept with regulated and insured banks or credit unions. Participants always have the freedom to make unmatched withdrawals for non-matched uses. Nearly all IDA programs require some classes in financial education, and most programs also provide social support and financial counseling.

### *IDAs and Social Work*

Sherraden (1991) proposed IDAs as a concrete application of his theory of asset-based development (Sherraden, 1988). The “economic” view of well-being focuses less on assets and ownership and more on income and consumption. From this economic perspective, more consumption means greater well-being. From a social-work perspective, however, well-being derives not only from consumption but also from feelings, thoughts, and the capability of people to do and to be what they have reason to want (Sen, 1999). While income consumed represents used-up capability, income saved and accumulated in assets represents on-going capability.

Compared to the consumption-based view of well-being, the asset-based view of well-being suggests different policies and different social-work interventions. For example, the consumption-based view leads to policies (such as food stamps for the poor or Social Security for the aged) that subsidize consumption. In contrast, the asset-based view leads to policies (such as tax breaks for retirement saving or Individual Development Accounts) that subsidize assets.

Of course, policies that support consumption are an essential part of the social safety net, and connecting people to these policies is one of the central roles of social work. But income-support policies stop too soon, providing only subsistence without going the next step to support development. Social policy should not merely help people get by; it should help them to thrive, to grow, to realize their dreams, and to participate as citizens. While the United States has a wide array of asset-building policies, they tend to benefit mostly for the non-poor who already own

assets. Policies that support consumption, in contrast, provide help for the poor only on the condition that they own few assets. In this way, public policy fails to help the poor to build assets, and in some cases may even be a barrier to asset accumulation. Because IDAs are a policy that aims to help poor people build assets, and because social work plays a central role in connecting poor people to policies designed to improve their well-being, social work will likely play a central role in IDAs.

### *IDAs at CAPTC*

The American Dream Demonstration (ADD) is the largest demonstration of IDAs in the United States. Of the 14 IDA programs in ADD, the largest was hosted by the Community Action Project of Tulsa County. (CAPTC ran two IDA programs in ADD; this paper deals only with the larger one.) CAPTC's larger program had 471 participants.

IDA participants at CAPTC had to take 12 hours of general financial education, 2 of them prior to opening an account. They also had to take asset-specific education prior to matched withdrawals: 5 hours for home ownership, 2 hours for post-secondary education, 16 hours for small-business ownership, and 2 hours for retirement.

CAPTC matched home purchase at a rate 2:1, and it matched all other uses at 1:1. After opening an IDA, participants could save up to \$750 a year for up to three years. Thus, participants who made matched withdrawals for home purchase could accumulate up to \$6,750, while others could accumulate up to \$4,500.

Schreiner et al. (2001) and Schreiner, Clancy, and Sherraden (2002) provide additional details on IDAs in ADD and at CAPTC. The figures discussed below on outputs, outcomes, and costs at CAPTC come from these two sources or from Schreiner (2000, 2002b).

### *Seven Aspects of Cost-effectiveness*



The new framework used here to measure the cost of the provision of IDAs uses seven aspects to simplify traditional cost-benefit frameworks and to highlight their key assumptions. *Cost of service provision.* Evaluation should count both benefits and costs. What matters is not whether benefits are positive—they almost always are—but rather whether benefits exceed costs, and whether benefits net of costs are greater than in alternative interventions. Unfortunately, evaluations often focus on outputs and outcomes (and often mistakenly equate them with benefits) without even trying to measure costs. Yet, both costs and benefits are essential parts of the equation, and costs are simpler and less expensive to measure. Furthermore, knowledge of costs—even without knowledge of benefits—can inform policy choices (Devarajan, Squire, & Suthiwart-Narueput, 1997). Of course, there are strong political/advocacy reasons to ignore costs (Pritchett, 2002). While cost measurement may not help to promote a specific intervention, it should help to improve the well-being of society as a whole by ensuring—even if benefits cannot be quantified—that costs are considered.

The first aspect of the new framework for cost-effectiveness analysis is the cost of service provision. Cost measurement at non-profit organizations can be tricky, as many costs do not show up in the accounts because they are subsidized or covered by in-kind grants. The approach here draws on frameworks for measuring social costs at non-profits first developed for the field of microfinance (Holtmann & Mommartz, 1996; Schreiner & Yaron, 2001).

At CAPTC, the costs of service provision (excluding matches) were categorized as:

- Expenses (mostly salaries) charged to the IDA program in CAPTC's accounts
- Grants in-kind of time by volunteer members of an IDA advisory committee
- Grants in-kind of time by VISTA volunteers who were partly paid by the government

- Expenses incurred to serve IDA participants but charged in CAPTC's accounts to other departments in CAPTC (usually for asset-specific financial education)
- Extraordinary expenses absorbed by the Bank of Oklahoma for holding the IDAs:
  - Designing a new type of savings account
  - Waiving monthly maintenance charges on low-balance accounts
- In-kind grants from other private donors who taught financial-education classes, designed publicity campaigns, and donated billboard space
- In-kind grants in the form of public-service announcements
- In-kind grants from state and local governments for classroom space and for the referral of potential participants

While this list of the costs of service provision is far from complete, it is nevertheless unusually long for an evaluation. For the CAPTC IDA program from October 1998 through the end of June 2001, these costs (excluding matches) were estimated at about \$595,366.

Of course, this is not the last word. It assumes, for example, that in-kind grants from private entities (as from public entities) should be counted. Also, some evaluators might object to counting the opportunity cost of the time of volunteers, in part because the benefits the volunteers receive from their participation—like all benefits—are ignored. Furthermore, this cost figure includes some one-time “start-up” costs. Finally, some staff time at CAPTC was spent advocating for IDAs on the state and national levels and transferring lessons learned at CAPTC to the nascent IDA field as a whole. For policy decisions for more “typical” IDAs programs, these costs should be ignored, but, in this analysis, it was not possible to separate them out.

In the end, this estimate of costs has two strengths. First, it simply exists; the evaluation does not ignore costs and thus does not implicitly assume that costs are zero. Second, the

assumptions and judgments behind the estimate are explicit and thus amenable to discussion (as in the previous paragraph) and improvement.

*Cost to clients.* The second aspect of the framework is cost to clients. Although not often acknowledged, clients bear costs when they use services. These are mostly transaction costs, that is, the opportunity cost of the time spent using the service, attending meetings, filling out paperwork, and so forth. There may also be monetary costs, such as account-maintenance fees or bus fares to travel to required classes.

Even evaluations that do measure the costs of service provision tend to ignore the costs to clients of participation, making interventions appear less costly than they are (Barnett, 2000). Furthermore, for some clients, costs of participation are so high that they preclude participation. Because non-participants do not participate, they do not incur these “barrier” costs, so these costs are rarely considered in evaluations, but of course their existence affects the benefits that the program can confer. Finally, from the perspective of evaluation, what matters are social costs, that is, costs of provision plus costs to clients. There is little social value in simply shifting costs from providers to clients.

For IDAs at CAPTC, the cost to clients is assumed—as in nearly all other evaluations—to be zero. Clearly, this is incorrect, but at least it is explicit. For example, it ignores the cost to clients of saving (postponing consumption), and it ignores the value of their time spent in financial-education classes.

*Benefits to clients.* Benefits to clients are the third aspect of the seven-aspect framework. These benefits are the change in well-being with the intervention versus without it. Changes in well-being, of course, are nearly impossible to measure; a given change in outcomes may affect the well-being of different clients differently, and there are no simple, standard units by which to

measure well-being. (Like most frameworks, this seven-aspect framework ignores possible benefits to program staff or to others who are not direct clients.)

In practice, most evaluations use changes in outcomes or outputs as proxy measures of changes in well-being. In the case of IDAs at CAPTC as of June 30, 2001, this paper considers one measure of output and one measure of outcomes:

- Months of participation (9,336)
- Net IDA deposits (\$271,090)

The evaluation here explicitly assumes that all changes in outcomes affect all clients' well-being in the same way. Furthermore, it assumes that these outcomes—in particular, net deposits—would not have happened in the absence of IDAs and thus were “caused” by the IDA program. Most importantly, it explicitly ignores a key tenet of the asset-based development theory on which IDAs are based (Sherraden, 1991): that saving and owning may improve well-being simply by inspiring hope and a stronger orientation towards the future. Hope, of course, is difficult to measure and even more difficult to value, but it is still a valuable outcome.

Regardless of the quantitative results, the evaluation of IDAs as a whole will likely hinge on subjective judgments about the qualitative outcomes of IDAs. There is no paint-by-numbers way to do this, but a good framework will mark off the areas that are measured and the areas that are not, focusing discussion on methods (for what is measured) and on subjective judgments (for what is not measured).

*Weight of net benefits to clients.* The difference between costs to clients and benefits to clients is net benefits to clients. Social-science professionals such as economists and social workers—if not society as a whole—weigh a given net benefit differently, depending on who gets it (Deaton, 1997). For example, greater weights are assigned to a given increase in well-being for a child, a

woman, or a racial/ethnic minority than for an adult, a male, or a Caucasian.

The evaluation of IDAs here—like almost all evaluations—does not attempt to quantify this preference for the poor. Instead, it assumes that all net benefits have the same weight, regardless of to whom they accrue. But the assumption is explicit, and that matters. After all, IDAs—were they to become a large, government-funded policy—are a bit like Robin Hood; they take from the rich (in taxes) and give to the poor (in matches). This might seem like a zero-sum transfer (less administrative costs) unless one weighs a dollar of cost to the rich less than a dollar of benefit to the poor.

*Number of clients.* The fifth aspect is the number of clients served. This matters because of budget constraints; usually, the number of people who could benefit from a given social-work intervention far exceeds the resources earmarked for that intervention. Thus, holding all else constant, interventions that reach more clients are preferred to those that reach fewer clients.

The IDA program at CAPTC served 471 participants. Compared to other IDA programs to date, this is a huge program; compared to the number of people who might benefit from IDAs, it is a drop of water in an Olympic swimming pool.

*Number of services.* All else constant, multiple-service interventions are preferred to single-service interventions. This is so not only because more is preferred to less but also because there are often economies of scope in service provision. For example, once the client is in the office to take a class on financial education, the marginal cost of also providing social support through peer meetings with other savers is low. Although most social-work interventions involve a bundle of related services, evaluations typically focus on just one service in isolation.

In IDAs, participation engenders not only access to saving opportunities and to matches but also to financial education and to support from peers and program staff. For some

participants, access to a fee-free bank account encourages saving in a bank, perhaps for the first time. For others, classes on how to make a budget expose them to new ways to cut spending and to increase saving. For still others, the extra boost from the match makes the extreme effort required to save worthwhile.

The analysis here ignores that IDAs are a bundle of services, singling out only “net deposits”. Furthermore, it looks at “participation” as an output that encompasses and summarizes the use of all other services. Neither approach is ideal, but at least the assumptions about which services are relevant are stated explicitly. (For examples of cost-effectiveness analyses that “unbundle” services, see Anderson et al., 1998 and French et al., 2000.)

*Time of provision.* The seventh and final aspect of the framework is time. The time frame of provision matters because social work cares about helping people both now and in the future. Programs that do a lot of good but that burn up quickly help people now at the expense of people not helped in the future. Furthermore, some of the most important benefits—especially of IDAs—are subtle, indirect, and long-term and so may become evident only after several years of participation or even only after participation has ended.

Time also matters because programs vary in duration. For example, early childhood intervention programs may be provided on half-day, full-day, part-year, or full-year bases. To make fair comparisons across programs or program sites, evaluations must account for these time variations, for example by estimating cost per participant-hour or per participant-month.

*Summary of the seven-aspect framework.* The framework described here encompasses costs of provision, costs to clients, benefits to clients, the weight of net benefits to clients, numbers of clients, services provided, and time of provision. The framework aims to help evaluators make their assumptions explicit. For example, its use would reduce the possibility of forgetting to

measure costs or forgetting to measure not only the costs of service provision but also the costs to clients of service use. It highlights that benefits may be worth more to the poor than to the non-poor. It also makes explicit the idea that—all else constant—a larger program enhances social well-being more than a smaller program, that multiple services are better than a single service, and that longer programs are better than shorter ones.

As the next section shows, the framework also help make clear trade-offs between the seven aspects. In real life, all else is not constant, so increasing the numbers of clients served (or the number of services, or the time frame of service provision) means increased costs of provision. A low-cost program may stretch a given budget over a longer time frame, but it may also engender lower benefits per client and higher costs of use. Choices among different programs and different designs inevitably entail judgments about these trade-offs; the framework can help improve these choices by making the trade-offs more explicit.

### The Cost-Effectiveness of Individual Development Accounts

This section expresses the seven-aspect framework as explicitly as possible (that is, as a mathematical formula) and then applies it to IDAs in CAPTC. The point is not that cost-effectiveness can be broken down to simple arithmetic but rather that the elements of the formula can help to make assumptions explicit.

#### *A Formula for Cost-effectiveness*

This paper derives the cost-effectiveness criterion from the more general benefit-cost criterion. The purpose of cost-benefit analysis is to measure the net social benefits of an intervention. Cost-effectiveness analysis is cost-benefit analysis, without quantifying the value of changes in well-being. The formula below combines the seven aspects of cost-effectiveness:

- $t$  Index of years (from 1 to  $T$ ) of time of provision of services
- $s_t$  Index of number of services (from 1 to  $S_t$ ) provided in year  $t$
- $n_{ts}$  Index of number of clients (from 1 to  $N_{ts}$ ) with service  $s_t$  in year  $t$
- $b_{tsn}$  Benefit to client  $n_{st}$  of service  $s_t$  in year  $t$
- $c_{tsn}$  Cost to client  $n_{st}$  of service  $s_t$  in year  $t$
- $W_{tsn} (b_{tsn}-c_{tsn})$  Weight of net benefits to client  $n_{st}$  from service  $s_t$  in year  $t$
- $C_{tsn}$  Cost of provision for service  $s_t$  to client  $n_{st}$  in year  $t$

The formula combining the seven aspects to produce net social benefits is:

$$Netsocialbenefits = \sum_{t=1}^T \sum_{s=1}^{S_t} \sum_{n=1}^{N_{st}} (C_{tsn} - W_{tsn} (b_{tsn} - c_{tsn})). \quad (1)$$

In cost-effectiveness analysis, outcomes (or outputs)  $o_{tsn}$  stand in for benefits  $b_{tsn}$ , so the weight of net benefits to clients  $W_{tsn}(b_{tsn}-c_{tsn})$  becomes  $W_{tsn}(o_{tsn}-c_{tsn})$ . If it is assumed that all outcomes carry the same weight regardless of to whom they accrue, then the weight of net benefits to clients  $W_{tsn}(o_{tsn}-c_{tsn})$  is equivalent to  $o_{tsn}-c_{tsn}$ .

If costs of provision  $C_{tsn}$  and costs to clients  $c_{tsn}$  are opportunity costs (that is, net benefits in alternative interventions), then an intervention is worthwhile if net social benefits exceed zero, in which case equation (1) can be rewritten as:

$$\sum_{t=1}^T \sum_{s=1}^{S_t} \sum_{n=1}^{N_{st}} o_{tsn} > \sum_{t=1}^T \sum_{s=1}^{S_t} \sum_{n=1}^{N_{st}} (C_{tsn} + c_{tsn}). \quad (2)$$

Dividing both sides by the left-hand side gives the cost-effectiveness criterion:

$$1 > \frac{\sum_{t=1}^T \sum_{s=1}^{S_t} \sum_{n=1}^{N_{st}} (C_{tsn} + c_{tsn})}{\sum_{t=1}^T \sum_{s=1}^{S_t} \sum_{n=1}^{N_{st}} o_{tsn}}. \quad (3)$$



This says that an intervention is cost-effective if the unit cost of its outcomes is less than one (1). Of course, this expression requires that outcomes be in the same units as costs.

Often in practice—as for IDAs here—costs are in flows of dollars but outcomes are in different units (such as months of participation or accumulated net deposits). At this point, the best cost-effectiveness analysis can do is provide unit costs for a given outcome (the right-hand side of equation 3). These unit costs can then be compared—subjectively and qualitatively—with the unit costs of alternative interventions with the same outcomes or with the unit costs of different outcomes in alternative interventions.

Commonly, an evaluation will consider only one outcome, will assume zero costs to clients and to society, will ignore the length of provision and the numbers of clients, and will consider only one service. In this case, equation 3 reduces to:

$$1 > \frac{0}{o}. \quad (4)$$

If there are any outcomes at all, then this equation holds, and it may therefore explain much of the sanguine bias in many evaluations. The seven-aspect framework forces evaluators to explicitly acknowledge that their positive judgment of the worth of an intervention rests on the assumptions listed just above. In this way, the new framework not only discourages such naively sanguine evaluations but also makes those that are done easier to detect and discuss.

#### *Unit Costs for IDAs*

The measurement of unit costs for IDAs at CAPTC assumes the following:

- Time of provision  $t$  is 33 months (October 1998 to June 2001)
- CAPTC provided one service  $s_t$  (the bundle of IDA services) in each month
- The number of clients served with IDAs  $s_t$  in each month  $n_{ts}$  is measured
- Benefits  $b_{tsn}$  to client  $n_{st}$  of IDA services  $s_t$  in month  $t$  are not measured. Instead, two outcomes/outputs  $o_{tsn}$  are measured as of June 30, 2001:
  - Months of participation (9,336 participant-months)

- Dollars of net deposits (\$271,090)
- Costs  $c_{tsn}$  to client  $n_{st}$  of service  $s_t$  in year  $t$  are assumed to be zero
- Because outcomes are measured instead of benefits and because outcomes are weighted equally for all people,  $o_{tsn} - c_{tsn}$  replaces weighted net benefits  $W_{tsn}(b_{tsn} - c_{tsn})$  to client  $n_{st}$  from service  $s_t$  in month  $t$
- The cost of provision of IDAs at CAPTC for 33 months is measured as \$595,366

Given this, cost per participant-month (equation 3) is about \$64 ( $\$595,366 \div 9,336$ ). The cost per dollar of net deposits is about \$2.20 ( $\$595,366 \div 271,090$ ). Of course, these figures come from a sample of 1, so they may or may not be close to “typical” costs.

The difficult question, of course, is whether these costs are “high” or “low” and how they compare to alternate ways of achieving the same outcomes or alternate ways of achieving the same improvements in well-being.

#### *Discussion and Implications for Social-Work Practice*

The measurement of unit costs of IDAs at CAPTC with the new seven-aspect framework rests on several key assumptions.

First, there are both costs of provision and costs to clients. For IDAs at CAPTC, costs of provision were measured, but costs to clients were assumed to be zero. In this sense, the figure of \$64 per participant-month is too low.

Second, it was assumed that benefits that accrue to IDA participants are worth the same as benefits (or costs) that accrue to anyone else. But IDA participants at CAPTC were poor, so their benefits probably should receive extra weight. For example, 77% of participants were women, 55% were non-Caucasian, and 36% had received public assistance at or before enrollment (Schreiner, Clancy, & Sherraden, 2002). Average income was at 131% of the poverty

line. The unit-cost measures here ignore that IDAs benefit poor people, so the unit-cost figure of \$64 per participant-month is too high.

Third, the time frame ends as of June 30, 2001. In reality, CAPTC's IDA program lasted through 2003. Of course, benefits to participation may accrue even after that, as participants make matched withdrawals and perhaps realize some of their hopes. In this sense, the unit-cost figure of \$64 per participant-month is too high.

Fourth, IDAs are a bundle of services, each with its own benefits (and costs). For example, lessons learned in budgeting classes may have value beyond their effects on IDA deposits. Likewise, staff support may be key in helping keep some participants on track. Of course, financial education and staff support are labor-intensive and expensive, so unbundling these services from the provision of matched savings might reduce the cost of IDAs. Also, if the unit cost of IDAs seems high (or low), it may help to remember that IDAs are more than simply matched savings accounts. These considerations matter because these cost measurements have already prompted intense debate about the future of IDAs.

Fifth, the beneficiaries are assumed to be the participants, but in fact all people in the households of participants benefit (and bear costs). In in-depth interviews, IDA participants in ADD stressed that they see their saving in IDAs as a way both to set a good example for children and to build a tangible legacy (Sherraden et al., 2003). In this sense, the assumed number of "participants" is too low, so the unit-cost figure is too high.

Sherraden (2000) points out a number of subjective elements in the cost measurement for IDAs at CAPTC. First, costs vary by site, so the costs may not be typical. Second, costs vary through time, and IDA costs are likely to fall as programs learn how to be more efficient, as programs grow and take advantage of economies of scale, and as infrastructure develops to

support IDAs. Third, the cost figures at CAPTC include some costs that few studies include (such as the opportunity cost of volunteer time and other non-cash costs). Fourth, IDAs are a bundle of services, and little is yet known about which elements are effective or indeed whether any element would be effective outside of the bundle. Fifth, IDA benefits may extend beyond mere participation and asset accumulations to include psychology, social interactions, and human capital. After all, IDAs aim for development of the highest sort, that is, to improve people's capability to do and to be what they have reason to want. Sixth, development takes time and is often indirect and diffuse. The cost study looks only at the first 33 months of IDAs at CAPTC. Most likely, most benefits are yet to come. Seventh and finally, the costs of IDAs should be compared to costs of other social-service interventions.

How do IDAs stack up against other financial-capital and human-capital programs? Ng (2002) finds that IDAs cost more per participant than 401(k) plans, possibly because IDAs have fewer participants over which to spread fixed costs. Costs for IDAs are in the same range as some human-capital programs (such as Women, Infants, and Children) but are much less than for other programs such as Head Start. Ng's main conclusion is that it is extremely difficult to make cost/outcome comparisons across different types of programs.

In practice, measuring costs at CAPTC has helped the IDA field to take a step back and ask whether a dollar of net deposits (excluding matches) is worth \$2.20 of administrative costs. In broad terms, the responses have involved:

- Identifying IDA benefits along several aspects highlighted in the new framework so as to show that the costs incurred produce more than just net deposits:
  - Benefits from financial education and staff counseling
  - Benefits through time

- Benefits to household members and even to communities
- Improving IDA services (such as financial education) to increase benefits
- Identifying costs that should not have been counted
- Finding innovative ways to reduce costs

In particular, the last response involves thinking about several aspects of IDAs highlighted in the new framework. In particular, the dominant IDA model to date is a small (few clients) non-profit community-service program funded by private grants or specific government grants (short time of provision). Services are intensive (multiple services) and targeted to poor, working people (greater weight on net benefits to clients). This model involves greater costs per client, but it also offers greater benefits per client.

An alternative model (one that does not exclude the current model when funds are available) would work via a few large, for-profit programs housed in banks and investment companies (many clients), with permanent federal funds for matches (long time of provision). It would provide fewer services (minimal staff support and financial education) to massive numbers of clients. More people who are less-poor would benefit (less weight on net benefits to clients). Costs per-participant would be lower, but benefits per-participant would also be lower.

Perhaps the most important lesson of this cost-measurement exercise is that knowledge of costs changes everything. The benchmark shifts, making opportunity costs more difficult to ignore and strengthening incentives to innovate.

For social work in particular, cost measurement raises the bar, and this makes careful consideration of the reasons for an intervention more important than ever. Providing social-work services—in the case of IDAs, social support, counseling, and financial education—incur monetary costs that are fairly simple to measure directly from program budgets. The benefits of

these social services, however, are often intangible and nearly impossible to quantify in dollar terms. For example, social workers in IDA programs help participants to increase their knowledge of how to save, remind them to make monthly deposits, and help them find ways to pay down their debts. As a consequence, participants may save more, and they may feel better about themselves and about their ability to save. Among other things, this encourages participants to participate more deeply in their citizenship (Moore, 2002). These benefits are real and important; they are also difficult to quantify.

In this sense, cost measurement places IDAs (and asset-based development policy in general) at a disadvantage vis-à-vis consumption-based policy. Support for income and consumption provides tangible benefits in the here-and-now; in contrast, support for saving and assets has intangible benefits which accrue over time. Because policy-makers tend to focus on what is measured and to discount is not measured, cost measurement for IDAs—and for many social-work interventions—is risky for IDA advocates and IDA employees.

The proper response is not to sweep costs under the rug. Rather, social workers should strive to improve the discussion of cost-effectiveness so that knowledge and understanding can overcome tendencies to ignore the unquantified. Greater knowledge can only improve social well-being. The use of the seven-aspect framework described in this paper is a good first step because it helps make explicit the inevitable assumptions about the important dimensions of cost-effectiveness analysis.

Of course, cost-effectiveness analysis may also help identify the most worthwhile social services. After all, IDAs—or asset-based development policy—may not be the best use of the limited resources that are earmarked to help the poor. The reality of budget constraints means that efficiency matters in social-work interventions just as in all other interventions. Better cost-

effectiveness analysis may lead to some policies being replaced or to some adjustments to IDA design, but this is as it should be, as long as it improves the well-being of the poor.

### Conclusion

Cost-effectiveness analysis is a tool to help allocate scarce resources among different social-work interventions for the greater good of all. Of course, cost-effectiveness analysis is not a panacea, and using it well is much more than a matter of avoiding arithmetic mistakes. Furthermore, cost-effectiveness is not the only basis for policy decisions; other considerations include political and bureaucratic considerations, ethics, and morality (Plotnick & Deppman, 1999). Of course, without cost-effectiveness data, these other considerations become the sole basis for decisions (Swisher, 2001; Tolley & Rowland, 1995). Hence, the value of cost-effectiveness is as a framework that helps social-work evaluators to cover all the bases and to make inevitably subjective judgments as explicit as possible. Cost-effectiveness analysis does not purge subjectivity from evaluation—nothing can—but it does highlight the most fruitful places for further discussion and critique.

To facilitate the use of cost-effectiveness analysis in social work practice, this paper has used a new seven-aspect framework that is meant to set the stage for reasoned, constructive discussion by pointing out which aspects are measured and which are judged. Often—as for IDAs here—the results are disconcerting, and interventions or approaches may need adjustment or replacement. This is as it should be. Cost-effectiveness analysis is not a means of advocating for interventions already believed to be worthwhile; rather, it is a tool for finding out whether interventions are indeed worthwhile. After all, the goal of social-work practice is not to use specific interventions but rather to improve social well-being.



The framework also highlights the often-overlooked fact that much of evaluation is inevitably subjective. Just because it cost \$64 to provide one month of IDA services to one participant at CAPTC does not mean that IDAs (or even this service-intensive approach to IDAs) is not worthwhile. Evaluators should resist the strong—but misguided—temptation to let cost-effectiveness analysis “do the hard work”. Measures of cost-effectiveness must be compared with evaluations of other interventions—hopefully using similar frameworks—and even then people must use their judgment to decide what to do with the cost-effectiveness information and then stand ready to discuss and disagree.

The analysis presented here has already sparked of healthy discussion (Sherraden, 2000). With costs at this level, budget constraints—even with funding from the federal government—will not likely allow IDAs to advance from their current stage onward to Sherraden’s (1991) original vision of a permanent, universal policy in which all Americans always have an IDA, with higher match rates for the poor. To date, a large share of IDA costs are the salaries of the staff members who provide social services to IDA participants. On the opposite end of the spectrum, banks and investment houses currently provide low-cost, bare-bones saving services to the non-poor through IRAs and 401(k) plans. Unless IDA programs can find ways to provide their current services less expensively, or unless IDAs can pare services down to those that not only have high social returns but that also are recognized as such (even if the benefits are intangible and unquantified), the dominant IDA model may switch from one in which many small, short-term, non-profit community programs with time-limited funding provide a few participants with a wide array of intensive social services to a model in which a few large, for-profit, permanent, national programs with sustainable funding provide massive numbers of IDA clients with fewer services.

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