



Data Collection Technical Assistance Brief

OCTOBER 2016 • NUMBER 1

Angela Valdovinos D'Angelo, Jacqueline Crowley, Lauren Maul, and Debra Strong

Offering Data Collection Incentives to Adults at Risk for Substance Use Disorder

Incentives can attract participants to a study or keep them in it, but what kind of incentives—and in what amounts—should be offered? This decision should ultimately be made by a program's staff, evaluators, and other key stakeholders after reviewing the relevant research and weighing what they consider appropriate for their own program, participants, and community.

At a time of rising concern about substance use dependence among adults—and the co-occurring potential for child maltreatment—researchers, policymakers, and practitioners are increasingly looking for studies on the effectiveness of substance use disorder treatment, family-strengthening efforts, and similar evidence-based programs. But these types of studies require researchers to collect data from adults who have or are at risk of substance use disorder, which can be challenging.

Program staff and evaluators may be concerned about the effectiveness and the risks of providing cash or other incentives to these adults in exchange for their completion of data collection activities. For example, the literature mentions ethical concerns with providing large incentives to adults with substance use dependence or disorder, even suggesting cash incentives could trigger a relapse of drug use (Fry and Dwyer 2001; Koocher 1991; Rosenheck 1997; Shaner et al. 1995). And regardless of the population, large incentives could be viewed as coercive—a way to entice participants into data collection they may not normally have taken part in (Dickert and Grady 1999; Macklin 1981; McGee 1997).¹

Although these ethical concerns should be considered, rigorous studies show that they may not be justified. As part of a randomized controlled trial, Festinger et al. (2005, 2008) found that neither the type (cash versus a gift card) nor the amount (\$70, \$100, \$130, or \$160) of follow-up incentives to adults in outpatient substance use disorder treatment programs increased the likeli-

hood of new drug use or feelings of coercion. In fact, providing incentives may make data collection more cost efficient because it reduces the time and effort needed to find participants for follow-up data collection (Festinger et al. 2008).

Incentives can attract participants to a study or keep them in it, but what kind of incentives—and in what amounts—should be offered? This decision should ultimately be made by a program's staff, evaluators, and other key stakeholders after reviewing the relevant research and weighing what they consider appropriate for their own program, participants, and community. For evaluations that plan to use incentives, the remainder of this brief offers tips to consider when selecting incentives.

1. What types of incentives are used in federal surveys of this population?

One of the largest federal surveys on drug use is the National Survey on Drug Use and Health (NSDUH). Conducted for the Substance Abuse and Mental Health Services Administration, the NSDUH collects data about illegal drug, alcohol, and tobacco use; mental disorders, co-occurring substance use and mental disorders; and treatment for substance use and mental health problems (Center for Behavioral Health Statistics and Quality 2015). Researchers conducted an

MATHEMATICA
Policy Research



RPC

Regional Partnership Grants
and Cross-Site Evaluation

¹Institutional review boards are typically concerned with reviewing incentive amounts to ensure they are not coercive and will review research studies and keep this focus in mind to protect human subjects. For more information on protecting human research subjects, see <http://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46/index.html>.

The Regional Partnerships Grant (RPG) program supports partnerships between child welfare agencies, substance use disorder treatment providers, and other systems to address the needs of children who are in, or at risk of, out-of-home placement due to a parent's or caretaker's substance use disorder. The grant maker is the Children's Bureau within the Administration on Children, Youth, and Families; Administration for Children and Families; U.S. Department of Health and Human Services.

The legislation that funds the partnerships requires the agencies to collect and report on a set of performance measures. It also requires partners to evaluate their programs and participate in a national cross-site evaluation (Administration for Children and Families 2012, 2014). To fulfill these requirements—and to support their own program services—partnerships collect data from the adults in their programs. For example, outreach staff might administer assessments to prospective participants, or evaluators might collect baseline and follow-up data using a variety of instruments (U.S. Department of Health and Human Services 2016; Strong et al. 2014).

Depending on each partnership's program and combination of services, participants may be in substance use disorder treatment, may have recently completed treatment, or may be at risk of substance use disorder when data are collected. Partners and their evaluators may therefore be concerned about the best way to collect high quality data from adults who are facing numerous challenges.

incentives experiment for NSDUH, testing the effectiveness of cash incentives of \$0 to \$40. They ultimately selected a \$30 incentive to strike a balance between achieving a high response rate to the survey and minimizing the costs of locating nonresponsive participants.

A review of incentive amounts and experiments for other large federal surveys—such as the National Survey of Family Growth (NSFG) and the National Health and Nutrition Examination Survey (NHANES)—shows a wide range of incentives offered, depending on the duration and invasiveness of the data collection (To 2015). NSFG staff offered \$40 for one survey, for example, whereas NHANES staff offered \$125 for a more invasive data collection, including surveys, a diary of dietary information, and physical examinations.

2. Can incentives increase participation in data collection?

A wealth of evidence supports the use of incentives to engage participants in data collection, whether at the onset of a study or at follow-up. Incentives can aid data collection in several ways:

- Raising response rates (the number of people who agree to be surveyed, screened, or assessed) and increasing retention (the number of people who participate in follow-up data collection) (Kulka et al. 2005; Singer and Ye 2013; Trussell and Lavrakas 2004).
- Lowering the cost and effort (for example, the data collectors' time and labor) required to complete a survey (Beebe et al. 2005; Kennet et al. 2005).

- Validating participants' contribution to the study by showing appreciation for their time (CDC 2010).

3. What types of incentives are best?

When choosing incentives, it is important to consider the needs of the participants and what would be appealing to them. Individuals might respond particularly well to cash incentives or to gift cards for local grocery stores. Families might want developmentally appropriate toys for babies or toddlers, or gift cards to stores that sell supplies for young children.

Depending on the study population, program staff and evaluation teams may want to consider whether financial or material incentives are best. Financial incentives include cash, prepaid gift cards (such as from Visa or MasterCard), or gift cards to local stores or retailers. Material incentives include books, CDs, toys for children, supplies for infants, or other nonmonetary rewards (Centers for Disease Control and Prevention 2010).

Research suggests that participants prefer cash to other incentives and that substance-using adults greatly prefer cash (Festinger et al. 2005; Reilly et al. 2000). Festinger and colleagues (2008) found that higher payments and cash were associated with better follow-up attendance in programs, reduced efforts to locate participants for data collection, and greater participant satisfaction with the study. Cash is also thought by participants to have higher value than gift cards or vouchers of the same value (Rosado et al. 2005).

Depending on the study population, program staff and evaluation teams may want to consider whether financial or material incentives are best.

Gift cards, including prepaid gift cards, can be a good option if the study team cannot or would rather not offer cash. The following tips should be kept in mind when selecting a card:

- The card should be from a store the respondent is likely to visit. Walmart, Target, and grocery store gift cards are popular, but the participants should have access to these retailers; the number of locations and proximity to respondents will vary by geographic region.
- Researchers offering gift cards for smaller amounts (\$5 or \$10) should consider places where this would go far (such as Starbucks, Dunkin' Donuts, Subway, or McDonald's).
- Prepaid gift cards from Visa or MasterCard are becoming increasingly popular due to their flexibility, similarity to cash, and simplicity to track. But they have some limitations (described in the box below).

Visa or MasterCard gift cards are prepaid, nonreloadable cards that can be used anywhere Visa or MasterCard is accepted, including in retail stores and online. These cards cannot be cancelled or returned after issuance and they do expire, so they should only be bought in the quantities needed for a certain time period. Prepaid gift cards that are not used within a certain period will incur charges that reduce the value of the card. For example, usually within one year after issuance, a card will automatically incur a service fee counted against the value of the card. There is also an initial loading fee of \$1.00 to \$1.50 per card, which adds to the costs budgeted by the study for incentives.

4. What incentive amounts are appropriate?

Determining an appropriate incentive amount is difficult and will vary depending on the topic, time commitment, and invasiveness of the study. Below are some options to consider:

- Using a “wage-payment model.” This is the offer of a cash incentive equal to the amount of pay the participant could earn in the time devoted to the study. The premise of this model is that participating in research requires little skill but does require time, effort, and some low risks

(Dickert and Grady 1999), similar to a low-skill job. Usually, the more invasive the topic and the longer the time commitment, the greater the incentive offered (Dutton et al. 2003).

- Consulting federal surveys of similar populations. The NSDUH, described earlier, may be a particularly useful guide for setting incentive amounts for people affected by substance use disorder (Center for Behavioral Health Statistics and Quality 2015).
- Examining the research. In collecting data from disadvantaged populations and adult welfare recipients, Singer and Kulka (2002) found that an effective range for incentives was \$20 to \$30. More recent studies support this finding, citing \$20 to \$40 as an effective range (Goldenberg et al. 2009).

5. Is there an optimal time to offer incentives?

Most incentives are “promised”—that is, they’re provided after the data collection is complete. But prepaid or “early response” incentives may increase response rates and participation in data collection. Prepaid incentives are typically small payments made before the survey or interview is completed. Researchers will often include \$1 to \$5 with a survey to entice respondents to complete it.

Early response incentives are larger for people who complete a data collection activity before a set deadline. The incentives are reduced for people who complete the data collection activity later. Study staff should be sure to let participants know about the early response incentive and the deadline for earning the larger incentive amount.

Some evidence suggests an early response bonus may have some advantages over prepaid incentives:

- LeClere and colleagues (2012) found that people who were offered an early response bonus were more likely to respond than those who were not offered any incentive or those who were offered a pre-paid incentive. Participants in the “early response” category also responded more quickly (and thus were less costly to follow up with) than other participants.
- Coopersmith and colleagues (2014) found that early response incentives yielded both higher response rates and faster responses to a web survey when compared with a pre-paid incentive or a promised incentive with no bonus.

Determining an appropriate incentive amount is difficult and will vary depending on the topic, time commitment, and invasiveness of the study.

For studies that require collecting information from the same people several times, “graduated” or “buddy” incentives can help researchers retain study participants.

- Dutton and colleagues (2003) found that graduated cash incentives help retain participants in a study and tend to be equally effective for all socioeconomic and racial/ethnic groups. Over two years, Dutton’s team conducted six one-hour interviews and gave participants \$30 for the first interview, \$40 for the second, \$50 for the third, and so on—with a \$50 bonus for completing all six interviews. Graduated incentives are common in longitudinal studies.
- Hall and colleagues (2003) suggest that an effective strategy, particularly for adults with substance use disorder, is to provide incentives to “buddies” who can help locate the person in the study for follow-up as needed. These incentives or rewards are only given to the buddy when the participant is located or in touch with the study team.

What is the difference between data collection incentives and contingency management?

Contingency management (CM), or a motivational incentive, is distinct from incentives used for routine data collection. CM involves giving clients with substance use disorder, who may be in treatment, tangible rewards to reinforce positive behaviors, such as abstinence from drugs or alcohol. Studies of CM show that incentive-based interventions help clients stay in treatment and keep them from using drugs (National Institute on Drug Abuse 2000). Thus, CM is used more commonly as an intervention in itself, rather than to engage or thank participants for their time in a study. For more information, see National Institute on Drug Abuse (2000); Budney et al. (2006); and Peirce et al. (2006).

REFERENCES

- Administration for Children and Families. “Regional Partnership Grants to Increase the Well-Being of, and to Improve the Permanency Outcomes for, Children Affected by Substance Abuse.” Washington, DC: U.S. Department of Health and Human Services, 2012. Available at <http://www.acf.hhs.gov/grants/open/foa/view/HHS-2012-ACF-ACYF-CU-0321/pdf>. Accessed August 8, 2012. (Copies of announcements from the Children’s Bureau for closed discretionary grant opportunities are available upon request. Please contact info@childwelfare.gov.)
- Administration for Children and Families. “Two-Year Extension—Regional Partnership Grants to Increase the Well-Being of, and to Improve the Permanency Outcomes for, Children Affected by Substance Abuse.” Washington, DC: U.S. Department of Health and Human Services, 2012. Available at http://www.acf.hhs.gov/grants/open/foa/files/HHS-2012-ACF-ACYF-CU-0550_0.htm. Accessed November 26, 2013. (Copies of announcements from the Children’s Bureau for closed discretionary grant opportunities are available upon request. Please contact info@childwelfare.gov.)
- Administration for Children and Families. “Regional Partnership Grants to Increase the Well-Being of, and to Improve the Permanency Outcomes for, Children Affected by Substance Abuse.” Funding Opportunity Announcement HHS-2014-ACF-ACYF-CU-0809, 2014.
- Beebe, T.J., M.E. Davern, D.D. McAlpine, K.T. Call, and T.H. Rockwood. “Increasing Response Rates in a Survey of Medicaid Enrollees: The Effect of a Prepaid Monetary Incentive and Mixed Modes (Mail and Telephone).” *Medical Care*, vol. 43, no. 4, 2005, pp. 411–414.
- Budney, A.J., B.A. Moore, H.L. Rocha, and S.T. Higgins. “Clinical Trial of Abstinence-Based Vouchers and Cognitive Behavioral Therapy for Cannabis Dependence.” *Journal of Consulting and Clinical Psychology*, vol. 74, no. 2, 2006, pp. 307–316.
- Center for Behavioral Health Statistics and Quality. “Behavioral Health Trends in the United States: Results from the 2014 National Survey on Drug Use and Health.” 2015. Available at <http://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf>. Accessed September 6, 2016.
- Centers for Disease Control and Prevention. “Evaluation Briefs: Using Incentives to Boost Response Rates.” July 2010. Available at <https://www.cdc.gov/healthyyouth/evaluation/pdf/brief22.pdf>. Accessed September 6, 2016.
- Coopersmith, J., L.K. Vogel, T. Bruursema, and K. Feeney. “Effects of Incentive Amount and Type on Web Survey Response Rates.” 2014. Available at http://www.amstat.org/sections/srms/proceedings/y2014/Files/400288_500797.pdf. Accessed September 6, 2016.
- Dickert, N., and C. Grady. “What’s the Price of a Research Subject? Approaches to Payment for Research Participation.” *New England Journal of Medicine*, vol. 341, 1999, pp. 198–203.
- Dutton, M.A., A. Holtzworth-Munroe, E. Jouriles, R. McDonald, S. Krishnan, J. McFarlane,

- and C. Sullivan. "Recruitment and Retention in Intimate Partner Violence Research." Rockville, MD: National Criminal Justice Reference Service, September 5, 2003.
- Festinger, D.S., D.B. Marlowe, J.R. Croft, K.L. Dugosh, N.K. Mastro, P.A. Lee, D.S. DeMatteo, and N.S. Patapis. "Do Research Payments Precipitate Drug Use or Coerce Participation?" *Drug and Alcohol Dependence*, vol. 78, no. 3, 2005, pp. 275–281.
- Festinger, D.S., D.B. Marlowe, K.L. Dugosh, J.R. Croft, and P.L. Arabia. "Higher Magnitude Cash Payments Improve Research Follow-Up Rates Without Increasing Drug Use or Perceived Coercion." *Drug and Alcohol Dependence*, vol. 96, 2008, pp. 128–135.
- Fry, C., and R. Dwyer. "For Love or Money? An Exploratory Study of Why Injecting Drug Users Participate in Research." *Addiction*, vol. 96, 2001, pp. 1319–1325.
- Goldenberg, Karen L., David McGrath, and Lucilla Tan. "The Effects of Incentives on the Consumer Expenditure Interview Survey." 2009. Available at <http://www.bls.gov/osmr/pdf/st090100.pdf>. Accessed September 6, 2016.
- Hall, E.A., R. Zuniga, J. Cartier, M.D. Anglin, B. Danila, R. Ryan, and K. Mantius. "Staying in Touch: A Fieldwork Manual of Tracking Procedures for Locating Substance Abusers in Follow-Up Studies." 2nd edition. Los Angeles, CA: UCLA Integrated Substance Abuse Programs, 2003.
- Kennet, J., J. Gfroerer, K.R. Bowman, P.C. Martin, and D.B. Cunningham. "Introduction of an Incentive and Its Effects on Response Rates and Costs in NSDUH." In *Evaluating and Improving Methods Used in the National Survey on Drug Abuse*, edited by J. Kennet and J. Gfroerer. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2005.
- Koocher, G.P. "Questionable Methods in Alcoholism Research." *Journal of Consulting and Clinical Psychology*, vol. 59, 1991, pp. 249–255.
- Kulka, R.A., J. Eyerman, and M.E. McNeeley. "The Use of Monetary Incentives in Federal Surveys on Substance Use and Abuse." *Journal of Economic & Social Measurement*, vol. 30, no. 2/3, 2005, pp. 233–249.
- LeClere, F., S. Plumme, J. Vanicek, A. Amaya, and K. Carris. "Household Early Bird Incentives: Leveraging Family Influence to Improve Household Response Rates." Presented at the American Statistical Association Joint Statistical Meetings, Section on Survey Research, San Diego, CA, 2012.
- Macklin, R. "On Paying Money to Research Subjects: 'Due' and 'Undue' Inducements." *IRB: Ethics & Human Research*, vol. 3, 1981, pp. 1–6.
- McGee, G. "Subject to Payment?" *Journal of the American Medical Association*, vol. 278, 1997, pp. 199–200.
- National Institute on Drug Abuse. *Principles of Drug Addiction Treatment: A Research-Based Guide*. Bethesda, MD: National Institute on Drug Abuse, National Institutes of Health, 2000.
- Peirce, J.M., N.M. Petry, M.L. Stitzer, J. Blaine, E. Kellogg, L. Silva-Vazquez, K.C. Kirby, C. Royer-Malvestuto, A. Cohen, M.L. Copersino, K. Kolodner, and R. Li. "Effects of Lower-Cost Incentives on Stimulant Abstinence in Methadone Maintenance Treatment: A National Drug Abuse Treatment Clinical Trials Network Study." *Archives of General Psychiatry*, vol. 63, no. 2, 2006, pp. 201–208.
- Reilly, M.P., J.M. Roll, and K.K. Downey. "Impulsivity and Voucher Versus Money Preference in Polydrug-Dependent Participants Enrolled in a CM-Based Substance Abuse Treatment Program." *Journal of Substance Abuse Treatment*, vol. 19, 2000, pp. 253–257.
- Rosenheck, R. "Disability Payments and Chemical Dependence: Conflicting Values and Uncertain Effects." *Psychiatric Services*, vol. 48, 1997, pp. 789–791.
- Rosado, J., S.C. Sigmon, H.E. Jones, M.L. Stitzer. "Cash Value of Voucher Reinforcers in Pregnant Drug-Dependent Women." *Experimental and Clinical Psychopharmacology*, 2005, pp. 13:41–47.
- Shaner, A, T.A. Eckman, L.J. Roberts, J.N. Wilkins, D.E. Tucker, J.W. Tsuang, and J. Mintz. "Disability Income, Cocaine Use, and Repeated Hospitalization Among Schizophrenic Cocaine Abusers: A Government-Sponsored Revolving Door." *New England Journal of Medicine*, vol. 333, 1995, pp. 777–783.
- Singer, E., and C. Ye. "The Use and Effects of Incentives in Surveys." *The ANNALS of the American Academy of Political and Social Science*, vol. 645, no. 1, 2013, pp. 112–141.
- Singer, E., and R.A. Kulka. "Paying Respondents for Survey Participation." In *Studies of Welfare Populations: Data Collection and Research Issues*, edited by Michele Ver Ploeg, Robert A. Moffitt, and Constance F. Citro. Washington, DC: National Academies Press, 2002.
- Strong, D.A., D. Paulsell, R. Cole, S.A. Avellar, A.V. D'Angelo, J. Henke, and R.E. Keith. "Regional Partnership Grant Program Cross-Site Evaluation Design Report." Washington, DC: Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services, 2014.
- To, N. "Review of Federal Survey Program Experiences with Incentives." 2015. Available at http://stats.bls.gov/cex/research_papers/pdf/Review-of-Incentive-Experiences-Report.pdf. Accessed September 6, 2016.
- Trussell, N., and P.J. Lavrakas. "The Influence of Incremental Increases in Token Cash Incentives on Mail Survey Response: Is There an Optimal Amount?" *Public Opinion Quarterly*, vol. 68, no. 3, 2004, pp. 349–367.
- U.S. Department of Health and Human Services. "2012 and 2014 Regional Partnership Grants to Increase the Well-Being of and to Improve the Permanency Outcomes for Children Affected by Substance Abuse: Third Report to Congress." Washington, DC: U.S. Department of Health and Human Services, 2016.