



ASSESSING THE EFFECTIVENESS OF VARYING INTENSITIES OF PRETRIAL SUPERVISION

Full Findings from the
Pretrial Justice Collaborative

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TO IMPROVE SOCIAL POLICY

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OVERVIEW

Jurisdictions across the United States are implementing reforms to their pretrial systems to reduce the number of people who are held in pretrial detention—that is, who remain incarcerated in jail while they await the adjudication of their cases. As part of this effort, many jurisdictions are moving away from money bail as a primary means to encourage people to return for future court dates, and are instead implementing pretrial supervision, which requires clients to meet regularly with supervision staff members. Jurisdictions often attempt to match the intensity or frequency of supervision with a client’s assessed risk of failing to appear in court or being rearrested, for example by requiring more intensive supervision for clients who are assessed as being at a high risk. However, while different levels of pretrial supervision impose different burdens and costs on both jurisdictions and people awaiting the resolutions of their cases, there has been little systematic research into how they differ in their effectiveness in improving court appearance and arrest outcomes.

This report contributes new evidence in this area using retrospective data from cases initiated between January 2017 and June 2019 in two jurisdictions: one populous, urban metropolitan area in the western United States and a sparsely populated, rural county from the same region. The research team employed a regression discontinuity design, comparing the outcomes of people whose risk scores were just below and just above the cutoff for a level of supervision. They did so for four supervision levels: (1) no supervision, (2) low-intensity supervision that involved only check-ins with supervision staff members after court hearings, (3) medium-intensity supervision that also required one in-person meeting a month with a supervision staff member, and (4) high-intensity supervision that required three in-person meetings per month. The analysis uses a noninferiority approach, which tests whether the less intensive form of supervision is at least as effective as (that is, no worse than) the more intensive form.

The analysis found that:

- **Overall, lower-intensity supervision was as effective as higher-intensity supervision in helping clients to appear in court and avoid new arrests.** When comparing each level of supervision with the next level in intensity, assignment to less intensive supervision led to similar outcomes as assignment to more intensive supervision.
- **Risk scores were strongly correlated with rearrest rates and modestly correlated with court appearance rates.** Unsurprisingly, people with higher risk scores were more likely to be rearrested, and somewhat less likely to make scheduled court appearances. However, higher-intensity supervision did not mitigate this effect.

Overall, the analysis found no evidence that requiring people to meet more intensive pretrial supervision requirements improves outcomes. These findings suggest that policymakers should consider other strategies to encourage people to appear in court and avoid arrest, especially since supervision has costs, including monetary costs to jurisdictions and time and travel costs to clients. It is possible, for example, that strategies that involve service connections rather than supervision could be more effective. At the same time, the results indicate that more research on the use of pretrial supervision is needed. Because the regression discontinuity design of this study focuses on cases at particular risk levels—those near the cutoff risk scores that determine supervision intensity—it is possible that the results would differ for cases with other risk levels. For example, high-intensity supervision could have effects among very high-risk cases, a question that this analysis was not designed to address. Given that prior research suggests that both service and supervision resources are most effective when reserved for higher-risk and -need cases, studies focusing solely on outcomes among this group could be of great benefit to the field.

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The goals of PJC are to help eight participating jurisdictions across the country assess the performance of their pretrial release interventions—with a focus on court-appearance and arrest-avoidance outcomes—and to identify the least burdensome pretrial supervision interventions necessary to maintain positive outcomes. The research team is grateful to the PJC jurisdictions for their continued partnership in carrying out this research, and specifically the pretrial services departments and state agencies and county agencies that provided the data that made the analyses presented in this brief possible.

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The Authors

Jurisdictions across the United States are implementing reforms to their pretrial systems to reduce the number of people who are held in pretrial detention—that is, who remain incarcerated in jail while they await the adjudication of their cases. As part of this effort, many jurisdictions are moving away from money bail as a primary means to encourage people to return for future court dates, and are instead implementing pretrial supervision, which requires clients to meet regularly with supervision staff members. As part of pretrial supervision, clients can also be subject to drug or alcohol testing (sometimes called sobriety monitoring) and electronic (GPS) monitoring, and may be referred to other services. Jurisdictions often attempt to match the intensity or frequency of supervision with a client’s assessed risk of failing to appear in court or being rearrested, for example by requiring more intensive supervision for clients who are assessed as being at a high risk.¹ However, while different levels of pretrial supervision impose different burdens and costs on both jurisdictions and people awaiting the resolutions of their cases, there has been little systematic research into how they differ in their effectiveness in improving court appearance and arrest outcomes.

This report contributes new evidence on the effects of pretrial release with varying intensities of supervision, using retrospective data from cases initiated between January 2017 and June 2019 in two quite different jurisdictions: one populous, urban metropolitan area in the western United States (Site 1) and a sparsely populated, rural county from the same geographic region (Site 2). The research team employed a regression discontinuity design to compare the effectiveness of four supervision levels, ranging from release without supervision to high-intensity supervision. The analysis uses a noninferiority approach, which tests whether the less intensive form of supervision is at least as effective as (that is, no worse than) the more intensive form. Appendix A of this report provides more details about the analysis as well as additional tables and figures.

BACKGROUND AND POLICY CONTEXT

The pretrial period is the time between an initial arrest and that case’s disposition (when a person is found guilty or not guilty, or the case is dismissed). During this period, people may be ordered to be held in detention, have bail set (meaning that they may be released once they post the bail amount—often with other conditions, such as pretrial supervision), be released with nonfinancial conditions (which may include some form of supervision), or be released on their own recognizance with no conditions. Those who are released are given a date on which they are expected to return to court for the next hearing in their cases. Those who are released under supervision or with other special conditions (for example, drug testing

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1. In the context of this report, “assessed risk” refers to the use of a validated, actuarial tool that uses factors such as criminal history and community ties to estimate the probability of appearing in court and the probability of avoiding a new arrest during the pretrial period. Such tools and their accompanying, jurisdiction-specific decision matrices (which produce release-condition recommendations based on the results of the tool and local policies) are widely used (including in the jurisdictions studied here) to guide release conditions. As such, the results of pretrial assessment tools are used in this study’s methods.

or electronic monitoring) must meet all conditions and supervision requirements during the pretrial period or risk having bail set or being remanded to detention.² In most jurisdictions, these conditions of release are set in an effort to ensure that people return to court and are not arrested for new criminal activity during the pretrial period.

Pretrial supervision is a common practice across the United States. According to one survey of large jurisdictions, about 85 percent had pretrial services agencies or other agencies that were typically responsible for pretrial supervision (sometimes referred to as pretrial monitoring).³ Pretrial supervision involves pretrial services staff members keeping in contact with clients through periodic phone or in-person check-ins. In theory, pretrial supervision is designed to monitor clients' compliance with other pretrial conditions, such as electronic monitoring and drug testing, and to encourage them to make their court appearances and avoid new arrests.⁴ In some instances, pretrial services staff members will also refer clients to additional services, such as substance abuse or mental health care, housing support, or other community-based services, but the use of services is generally voluntary.

Pretrial supervision varies both across and within jurisdictions in its frequency (that is, how often clients are expected to check in with supervision staff members), in whether these check-ins take place in person or over the phone, and in whether other conditions, such as drug testing, are applied. Some jurisdictions employ multiple levels or intensities of supervision, to which clients are assigned according to the charges in their cases or to their assessed risk of failing to appear in court, of being rearrested, or both. The goal is to match the intensity of supervision for a given client to the risks and needs of that client. For example, clients who are assessed as being at high risk of failing to appear in court may be required to attend in-person check-ins with pretrial services staff members every week or every other week, while clients assessed as being at lower risk may only be required to check in monthly, by phone.

Although pretrial supervision practices vary, research on pretrial supervision has largely focused on whether the practice is generally effective relative to release with no supervision, the imposition of money bail, or both. This body of research suggests that relative to release without supervision, pretrial supervision can be effective in increasing rates of court appearance, especially among groups assessed as being at high risk of failing to appear.⁵ However, this research does not show strong evidence that pretrial supervision, relative to release without supervision, reduces new arrests during the pretrial period.⁶ There is

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2. As part of this study, MDRC also conducted an analysis examining the effects of special pretrial conditions. See Anderson, Valentine, and Holman (2023).
 3. Pretrial Justice Institute (2019).
 4. Advancing Pretrial Policy and Research (2020b).
 5. Austin, Krisberg, and Litsky (1985); Barno, Nevárez Martínez, and Williams (2020); Bechtel, Holsinger, Lowenkamp, and Warren (2017); Danner, VanNostrand, and Spruance (2015); Goldkamp and White (2006); Lowenkamp and VanNostrand (2013). See Advancing Pretrial Policy and Research (2020a) and Hatton and Smith (2020) for reviews of this body of research.
 6. See Advancing Pretrial Policy and Research (2020a) for a review of this body of research, as well as Bechtel, Holsinger, Lowenkamp, and Warren (2016); Danner, VanNostrand, and Spruance (2015); Goldkamp and White (2006); Lowenkamp and VanNostrand (2013).

evidence, however, that relative to money bail (which results in some people remaining in detention and therefore not being at risk of failing to appear in court or being rearrested), the option of pretrial supervision does not result in increases in arrests or failures to appear in court.⁷ In other words, the implementation of pretrial supervision can lead to more people being released during the pretrial period without leading to increases in arrests or failures to appear in court.

Existing research suggests that the effects of pretrial supervision do vary based on assessed risk of failing to appear in court and being rearrested while awaiting trial, with supervision being most effective at increasing court appearance rates among those who are assessed as being at higher risk,⁸ and being either ineffective, or in some cases detrimental, among those who are assessed as being at low risk.⁹ These findings are consistent with other research showing that the effects of criminal justice interventions vary both among people at different levels of assessed risk and among those with different levels of need in service areas such as drug treatment and employment services. People identified as having higher risk and greater needs tend to benefit more, while those identified as having lower risk and fewer needs may not benefit or may be negatively affected by such interventions.¹⁰

Despite this knowledge, very little is known about the relative effects of different intensities of pretrial supervision targeted by risk level.¹¹ Two relevant studies have been conducted. The first study compared the effects of different intensities of pretrial supervision by randomly assigning individuals who were placed on supervision to varying supervision conditions.¹² The study tested whether incrementally adding supervision components—including, among others, phone calls from pretrial services staff members before each court date, and in-person rather than phone check-ins before court dates—affected court appearance or arrest rates. The analysis did not find that these components had significant effects; however, the sample sizes in the study were too small for the study to have the power to detect such differences. The second study examined the relationship between supervision frequency (two or more meetings, one meeting, or less than one meeting per month) and “supervision failures,” including failures to appear in court, arrests, and violations of the terms of release.¹³ Clients across the risk spectrum who were supervised with greater frequency were *more* likely to fail. However, the study was designed only to identify correlations, so it is unclear whether the increased frequencies *caused* more failures.

The analysis presented in this report helps to address this gap in the field’s understanding of pretrial supervision by conducting a rigorous examination of the relative effects of varying intensities of supervision. This information is particularly important as more jurisdictions turn to pretrial supervision as an alternative to money bail and as those jurisdictions

7. Skemer, Redcross, and Bloom (2020).

8. Advancing Pretrial Policy and Research (2021b); Lowenkamp and VanNostrand (2013).

9. VanNostrand and Keebler (2009).

10. Lowenkamp, Latessa, and Holsinger (2006).

11. Advancing Pretrial Policy and Research (2020b).

12. Goldkamp and White (2006).

13. Lowder and Foudray (2021).

attempt to assign supervision intensity appropriately based on people’s assessed levels of risk. In making decisions about how broadly to apply pretrial supervision and how to set the intensity of requirements, jurisdictions must weigh the potential effects of increasing supervision intensity against the costs to both jurisdictions and to people awaiting trial, including time, travel, and the monetary costs resulting from having to take time off work to go to supervision check-ins. While jurisdictions’ monetary costs of pretrial supervision are a fraction of the costs of pretrial detention,¹⁴ they are still substantial: for example, annual pretrial services budgets can reach \$10 million in some jurisdictions.¹⁵

PRETRIAL SUPERVISION AT THE STUDY SITES

As mentioned above, the analysis presented here focuses on pretrial supervision in two locations: a populous, urban metropolitan area (Site 1) and a sparsely populated, rural county from the same geographic region (Site 2). The period under study is 2017 to 2019, relatively stable years before the destabilizing period of the COVID-19 pandemic began.¹⁶ Both sites used a risk-assessment tool that informed decisions about whether people who were awaiting trial would be assigned to pretrial supervision, and if so, at what level of intensity. The analysis examines the relative effectiveness of these varying intensities of supervision.

The risk-assessment process during the study period was similar at the two sites.¹⁷ Specifically, in cases of custodial arrest (that is, arrests in which the person was brought into custody for an initial court appearance), the sites used an actuarial risk-assessment tool to estimate the likelihood that an individual would fail to appear in court or experience a new arrest during the pretrial period. This tool produced a risk score that, along with the type of offense for each case, led to recommendations about the conditions of release that should be applied (for example, what type of bond should be applied and what level or intensity of release supervision was appropriate). At the initial appearance for each case, the risk scores and accompanying recommendations were provided to judges, who then ultimately made decisions about what release conditions to order. Once a person was released to supervision, the pretrial services staff assigned that person to the level of supervision intensity that was either imposed by the judge (Site 1) or dictated by the risk-assessment process (Site 2, where judges simply ordered supervision or not).

14. By some estimates, the costs to jurisdictions of pretrial release with supervision are about 10 percent or less of the costs of pretrial detention. See Pretrial Justice Institute (2017) for more information.

15. Justice Institute and National Center for State Courts (2018).

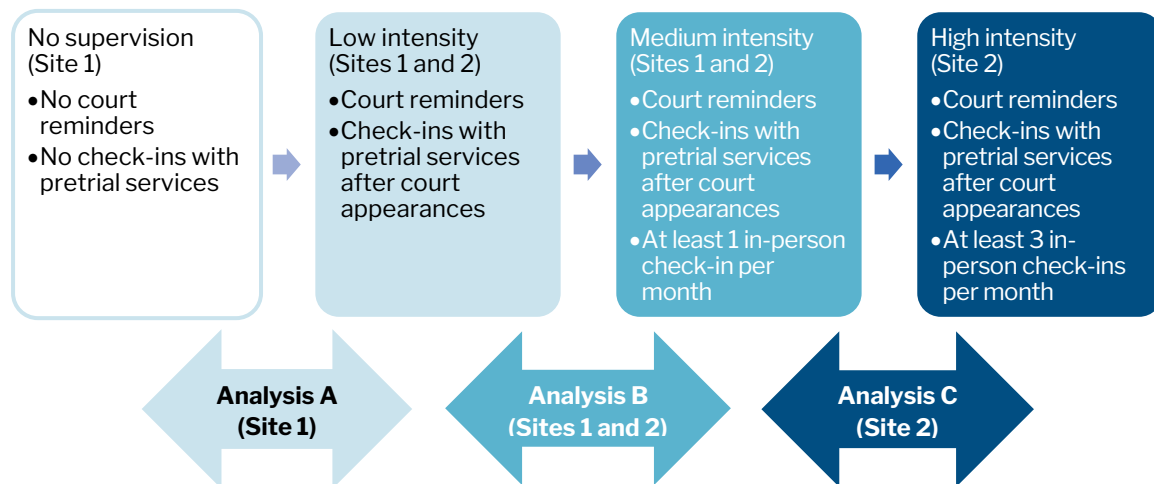
16. According to staff members at these two sites, beginning in March 2020, shutdowns and adjustments related to the COVID-19 pandemic affected supervision practices (for example, by forcing remote rather than in-person check-ins), court processes (for example, because in-person hearings had to be postponed or modified), and patterns of crime and policing.

17. The two sites continue to use a similar risk-assessment process as of the publication of this report, with small changes. Both have moved to revised versions of their risk-assessment tools and have made small modifications to the supervision matrix that determines recommendations for supervision levels based on people’s charges and risk scores.

Both jurisdictions employed a range of supervision levels that were designed to correspond with assessed risk. For the purposes of the study, the research team standardized the names of these levels across sites, and focused on four levels of supervision intensity: (1) no supervision (Site 1 only);¹⁸ (2) low-intensity supervision that involved check-ins with supervision staff members only after court appearances; (3) medium-intensity supervision that also required one in-person meeting per month with supervision staff members; and (4) high-intensity supervision that required three in-person meetings per month (Site 2 only).¹⁹

These supervision levels, along with their specific requirements, are shown in the boxes in Figure 1. Note that these levels of supervision are categorized here as being at low, medium, and high intensity relative to each other in this particular data set, which may not correspond with definitions of these categories within the jurisdictions or in other contexts.

FIGURE 1
Levels of Supervision Intensity



18. Although Site 2 did have a category for “no supervision,” in practice, a large portion of cases falling into that category were assigned to an alternative level of supervision that was less intensive than the level designated “low-intensity” for the purposes of the study, but that did involve some supervision. It was not possible to estimate the effects of “no supervision” at that site using the regression discontinuity design.

19. Using the same methods, the research team also compared releases that included electronic monitoring with releases that did not include electronic monitoring. See Appendix A.

DESIGN AND METHODS

To examine the relative effectiveness of these varying intensities of pretrial supervision in encouraging people to make their court appearances and avoid new arrests, the MDRC research team conducted a series of impact analyses using data on custodial cases initiated between January 2017 and June 2019 in the two jurisdictions.

The analyses use a regression discontinuity design, which is considered an especially strong method to estimate the effects of a program.²⁰ The method takes advantage of the fact that at these two sites, people who were awaiting trial received recommendations for different levels of supervision depending on whether they fell above or below specific “cutoff” scores on the pretrial risk-assessment tool.²¹ The analysis essentially compares outcomes for cases that fell just below and just above the cutoff for a given recommendation type, controlling for the underlying relationship between risk scores and the outcomes. If there is a difference, or “break,” in the mean outcome at the cutoff, the difference represents the effect of one form of supervision over another. This method, and a description of how to interpret the results of the analysis, are provided in Box 1.

The analysis compares the effects of the four levels of supervision shown in Figure 1. As the arrows in the figure indicate, three comparative analyses were conducted; in each, the research team compared outcomes at a given level of supervision intensity with outcomes at the next-highest level of supervision. The outcomes are the percentages of people who made all their court appearances during the pretrial period and who avoided new arrests in the six months after the original arrest that made the case eligible for the sample.²²

20. Somers, Zhu, Tepper Jacob, and Bloom (2013).

21. The specific cutoff scores varied between sites, by charge category (as defined by the jurisdictions), and by other specifically defined factors of the case. The analysis accounts for each of these sources of variation and standardizes the cutoff scores.

22. The six-month follow-up period for the arrest outcome was applied consistently across all cases, even those that were adjudicated in less than six months. The results presented here focus only on those cases in which the person was released at some point during the pretrial period, and therefore was at risk of either failing to appear in court or being rearrested. Because pretrial release could itself be affected by the difference in recommendations given to judges based on whether the risk score for a case was above or below the cutoff, the analysis examined the extent to which release could be a confounding factor in the analysis. Overall, though differences in release rates by risk did appear to affect pretrial outcomes, these differences did not appear to confound the relationship between supervision level and outcome. For a more extensive discussion and analysis of the issue of release, see Appendix A.

BOX 1

How to Interpret Regression Discontinuity Findings

The tables and figures shown in this brief present the estimated effects of one level of supervision intensity versus another, at the risk score cutoff relevant to each comparison. This box provides background about the regression discontinuity design to aid in the interpretation of these results.

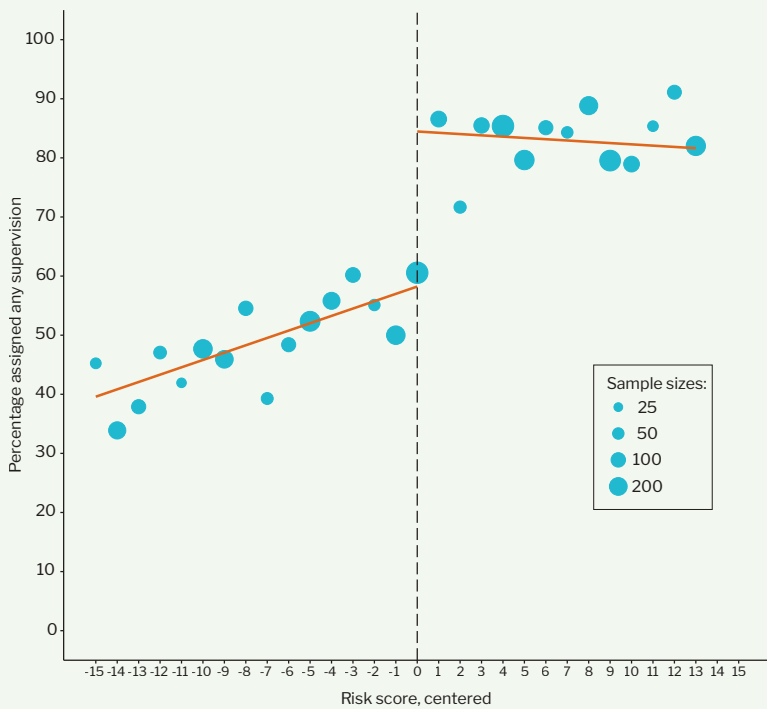
Two example graphs depicting the regression discontinuity analysis are shown below. The graphs plot the outcome by risk score, with the size of each point proportional to the sample size of cases at that risk score. The risk scores are centered such that a score of zero is the cutoff for the regression discontinuity design. In this case, individuals with risk scores of zero or less—the No Supervision Group—received recommendations of release with no supervision. Those with risk scores of more than zero—the Low-Intensity Group—received recommendations of being placed on low-intensity supervision. Lines are fit through the plotted points separately for the two groups. The Low-Intensity Group’s predicted outcome at a risk score of zero reflects the mean counterfactual outcome: what would have occurred if those with a risk score of zero had actually received recommendations of low-intensity supervision instead of no supervision. The difference between the two groups in the predicted outcome at a risk score of zero is the estimated effect of receiving a recommendation of no supervision rather than one of low-intensity supervision.

The first figure below plots the percentage of individuals who were assigned to supervision, by risk score. This plot illustrates the service difference between the two groups, with the No Supervision Group being significantly less likely to be assigned to supervision. This effect (about 25 percentage points) is visible both from the pattern of points in the graph and from the vertical distance between the No Supervision Group and Low-Intensity Group lines at a risk score of zero.

The second figure illustrates the analysis of the percentages of these same groups who avoided new arrests. The pattern is very clear, with a negative, linear relationship between risk level and arrest. That is, the lower people’s risk scores, the more likely they were to avoid being rearrested. The figure shows no discontinuity in arrest rates at the cutoff of zero, where the fitted lines match up very closely. That means that the service difference between the two groups did not result in an effect on the outcome of being rearrested.

(continued)

BOX 1 (continued)



RESULTS

This section presents results from the analysis, with a separate section for each of the three comparisons of supervision levels. Additional results, including supplemental tables and figures, are available in Appendix A.

The Effects of No Supervision Compared with Low-Intensity Supervision

This section presents the results of an analysis comparing the outcomes of people who received recommendations of being released without supervision (often referred to as being released on one's own recognizance, or ROR) with those of people who received recommendations of being released with low-intensity supervision. This analysis focuses on Site 1, because at Site 2, most of the cases that received recommendations of release without supervision were actually assigned low-intensity supervision. As described in more detail in Box 1, the groups in the analysis are defined by whether individuals fall above or below the cutoff in risk score that determined whether they received a recommendation of release without supervision (the No Supervision Group) or a recommendation of low-intensity supervision (the Low-Intensity Group). Because judges did not have to follow the recommendations that arose from the risk-assessment tool, the first step in the analysis is to examine whether the recommendation affected the actual level of supervision assigned; in other words, were those above the cutoff assigned more supervision? Without such an effect, there would be no difference in what the two groups received and therefore one could not expect there to be any effect on the outcomes of interest.

Table 1 shows that the service contrast between the No Supervision Group and the Low-Intensity Group was moderate, with both groups assigned a mix of supervision levels. A high percentage of cases (about 87 percent) in the Low-Intensity Group were assigned some form of supervision; most were assigned low-intensity supervision, but some were assigned to higher-intensity supervision. In the No Supervision Group, a lower but still substantial proportion of cases (about 59 percent) were assigned some form of supervision. Both groups

TABLE 1
Effects of Recommendations of No Supervision Versus Low-Intensity Supervision on Assignment to Supervision

Outcome (%)	No Supervision Group	Low-Intensity Group	Estimated Effect	P-Value
Assigned to supervision at any level	59.3	86.8	-27.5 ***	0.000
Assigned to low-intensity supervision	31.1	52.3	-21.2 ***	0.000

(continued)

TABLE 1 (continued)

SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

NOTES: The estimated mean outcome for the No Supervision Group represents the mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of no supervision), adjusted to control for site.

The mean outcome for the Low-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of low-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

also had many cases assigned to supervision levels that were of a higher intensity than their risk-based recommendations, with 28 percent of the No Supervision Group and 35 percent of the Low-Intensity Group being assigned more than low-intensity supervision. This test, then, partly assesses no supervision versus low-intensity supervision, but also assesses less intensive versus more intensive supervision more generally.

- **People in the No Supervision Group were as likely as those in the Low-Intensity Group to make all their court appearances and avoid being rearrested.**

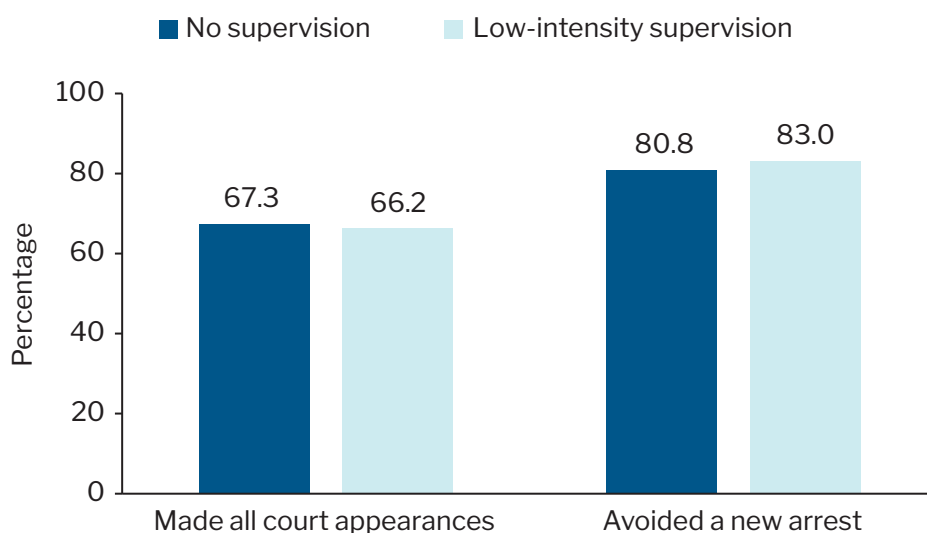
As Figure 2 shows, there was not a significant effect on either court appearance rates (with about two-thirds of both groups appearing for all court hearings), or rearrest rates (with over 80 percent of both groups avoiding arrest during the six-month follow-up period—81 percent of those in the No Supervision Group and 83 percent of those in the Low-Intensity Group). This result was somewhat surprising given that the Low-Intensity Group received court reminders and the No Supervision Group did not, and research has shown that court reminders typically increase court appearance rates.²³ It is possible that had the supervision matrix been followed more strictly, with the No Supervision Group largely not being ordered to supervision and the Low-Intensity Group largely being assigned to low-intensity supervision, the results would have looked different. However, the two groups were, on average, assigned substantially different intensities of supervision, suggesting that if higher-intensity supervision led to significant effects, that pattern would emerge in this analysis.

The Effects of Low-Intensity Compared with Medium-Intensity Supervision

In a pooled analysis using data from both sites, the research team compared the outcomes of people who received recommendations of being released with low-intensity supervision (the Low-Intensity Group) with those who received recommendations of being released with medium-intensity supervision (the Medium-Intensity Group). The Low-Intensity Group includes individuals with risk scores at or below the cutoff between the two recommenda-

23. Advancing Pretrial Policy and Research (2020a).

FIGURE 2
Effects of No Supervision Versus Low-Intensity Supervision



SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

NOTES: The estimated mean outcome for the No Supervision Group represents the mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of no supervision).

The mean outcome for the Low-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of low-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

tion levels, and the Medium-Intensity Group includes individuals with risk scores above that cutoff. Table 2 and Figure 3 show the results.

Again, it is important to assess whether the two groups were assigned to supervision at different levels. As the table shows, there were large differences between the two groups in assignment to supervision level. Those in the Low-Intensity Group were more likely to be assigned to low-intensity supervision than those in Medium-Intensity Group (36 percent compared with 1 percent). Likewise, those in the Medium-Intensity Group were much more likely to be assigned to medium-intensity supervision (80 percent) than were those in the Low-Intensity Group (36 percent).

TABLE 2
Effects of Low- Versus Medium-Intensity Supervision
Recommendations on Assignment to Supervision

Outcome (%)	Low-Intensity Group	Medium-Intensity Group	Estimated Effect	P-Value
Assigned to supervision at any level	75.9	84.8	-9.0 ***	0.000
Assigned to low-intensity supervision	35.8	0.9	34.9 ***	0.000
Assigned to medium-intensity supervision	35.7	79.7	-44.0 ***	0.000

SOURCE: MDRC calculations based on court and pretrial services data from each site.

NOTES: The estimated mean outcome for the Low-Intensity Group represents the mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of low-intensity supervision), adjusted to control for site.

The mean outcome for the Medium-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of medium-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

- **People in the Low-Intensity Group were as likely as those in the Medium-Intensity Group to make all their court appearances and avoid being rearrested.**

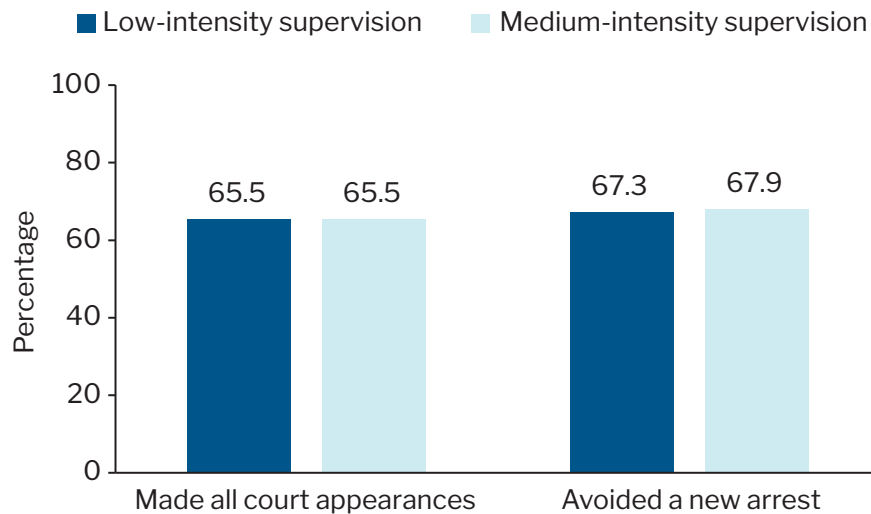
The results do not show significant differences between the Low- and Medium-Intensity Groups in either court appearance or rearrest rates. At the risk score cutoff between the groups, the court appearance rates were nearly identical, with about 66 percent of both groups making all court appearances. Similarly, about two-thirds of both groups avoided being rearrested during the six-month follow-up period.

The Effects of Medium-Intensity Compared with High-Intensity Supervision

This section compares the outcomes of people who received recommendations of medium-intensity supervision with those who received recommendations of high-intensity supervision (Site 2 only).²⁴ The Medium-Intensity Group includes individuals with risk scores at or below the cutoff between the two recommendation levels, and the High-Intensity Group includes those with risk scores above that cutoff.

24. High-intensity supervision, as defined here, only existed at Site 2, so this particular comparison could not be made for Site 1.

FIGURE 3
Effects of Low- Versus Medium-Intensity Supervision



SOURCE: MDRC calculations based on court and pretrial services data from each site.

NOTES: The estimated mean outcome for the Low-Intensity Group represents the mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of low-intensity supervision), adjusted to control for site.

The mean outcome for the Medium-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of medium-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

Table 3 shows there was a large difference between the two groups in assignment to supervision; more than 80 percent of each group was assigned to their recommended level of supervision. Assuming that check-ins did actually occur at the frequencies expected for each level of supervision, the contrast in assignments suggests that this analysis provides a strong test of the effects of medium-intensity versus high-intensity supervision.

- **People in the Medium-Intensity Group were as likely as those in the High-Intensity Group to make all their court appearances and avoid being rearrested.**

The results (see Figure 4) show no significant differences between the Medium-Intensity Group and the High-Intensity Group in either court appearance or rearrest rates. During the six-month follow-up period, about 60 percent of both groups made all court appearances and about 50 percent of both groups avoided being rearrested.

TABLE 3
Effects of Medium- Versus High-Intensity Supervision
Recommendations on Assignment to Supervision

Outcome (%)	Medium-Intensity Group	High-Intensity Group	Estimated Effect	P-Value
Assigned to supervision at any level	88.1	89.5	-1.6	0.641
Assigned to medium-intensity supervision	85.4	0.4	84.9 ***	0.000
Assigned to high-intensity supervision	0.4	83.1	-82.8 ***	0.000

SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

NOTES: The estimated mean outcome for the Medium-Intensity Group represents the mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of medium-intensity supervision).

The mean outcome for the High-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of high-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

POLICY IMPLICATIONS

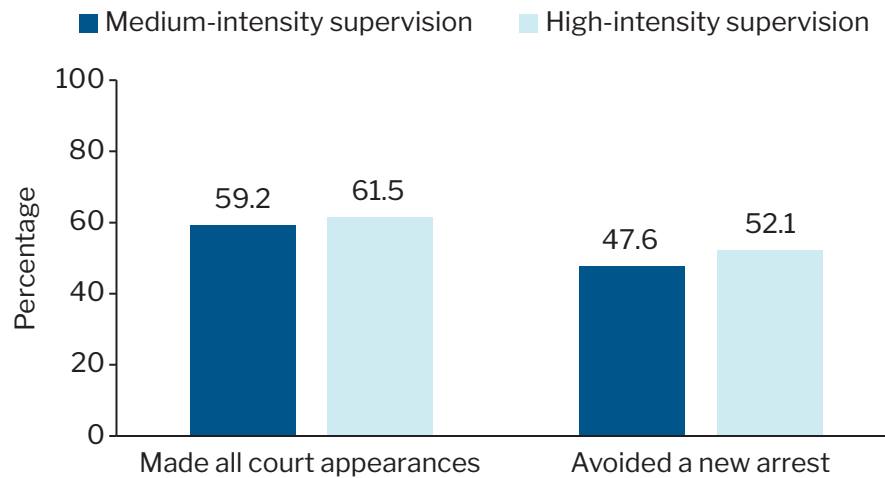
Overall, the analysis found no evidence that more intensive supervision requirements improve court appearance or arrest outcomes, even after controlling for individual risk. These findings suggest that policymakers should consider other strategies to encourage individuals to appear in court and avoid arrest, especially given the substantial costs of supervision to both jurisdictions and to people awaiting the adjudication of their cases. It is possible that jurisdictions could shift to a lower intensity of supervision across the board and allow more individuals to be released without supervision and expect to see similar court appearance and arrest outcomes. It is also possible that strategies that involve services rather than supervision could be more effective. One recent study of a supportive housing program for people with frequent police contact found that the program led to reduced police interactions and jail time.²⁵ Program costs were partially offset by reductions in the costs of operating other public services, including the jail, courts, and police.²⁶

Additionally, these findings make a critical contribution to the current debate on pretrial reform more generally, as they are among the first to rigorously assess the effects of pre-trial supervision. The findings suggest that the majority of released individuals at these two

25. Cunningham et al. (2021).

26. National Alliance to End Homelessness (2022); Gillespie, Hanson, Leopold, and Oneto (2021).

FIGURE 4
Effects of Medium- Versus High-Intensity Supervision



SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

NOTES: The estimated mean outcome for the Medium-Intensity Group represents the mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of medium-intensity supervision).

The mean outcome for the High-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of high-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

sites comply with the most typical conditions of release by avoiding being rearrested and making all court appearances. As expected, those on the lower end of the assessed-risk spectrum are particularly likely to avoid being rearrested and make all court appearances. More importantly, the analyses find that simply providing more intensive supervision does not increase the probability of compliance with pretrial conditions. This finding extends to a comparison of ROR versus other levels of supervision, raising important questions about whether the use of pretrial supervision has a “net-widening” effect, particularly since the courts in this analysis often ordered more intensive supervision when light or no supervision was recommended. (“Net-widening” refers to the concern that broader use of pretrial supervision might lead to more people being controlled by the justice system.)

Finally, the current study has limitations due to the nature of the methodology employed that indicates future research is needed on the use of pretrial supervision. Because the regression discontinuity analysis focuses on cases at particular risk levels—those near

the risk-score cutoffs that determine supervision intensity—it is possible that the results would differ for cases with other risk levels. For example, high-intensity supervision could have different effects among very high-risk cases with risk scores that are far above the cutoff. Existing research suggests that both service and supervision resources are most effective when reserved for higher-risk and higher-need cases, so studies focusing solely on outcomes among this group could be of great benefit to the field.²⁷

27. It is worth noting here that there are debates in both the academic and policy fields regarding the accuracy and fairness of actuarial assessment tools, particularly with respect to how these tools perform across racial and ethnic groups and whether they may inadvertently produce disparities in pretrial outcomes as a result of classification bias. For more information, please see Roberts Freeman, Hu, and Jannetta (2021).

APPENDIX

A

Technical Supplement

As part of the Pretrial Justice Collaborative (PJC) project, MDRC conducted “comparative effectiveness” analyses that focus on the use of pretrial supervision and other release conditions, and their effects on pretrial outcomes. This appendix provides additional details about the regression discontinuity analysis that was used to examine the comparative effectiveness of varying intensities of pretrial supervision. It describes the regression discontinuity approach, the analysis sample, technical details of the analysis, and results. The analysis was conducted using data from two of the PJC sites: a large, urban jurisdiction (Site 1) and a smaller, rural jurisdiction (Site 2) in the same geographic area. This appendix begins with an overview of the pretrial process at those sites and an overview of the research design, before describing the details of the sample, analysis, and results.

PRETRIAL SUPERVISION IN TWO JURISDICTIONS

This section describes pretrial supervision practices at Sites 1 and 2 from 2017 to 2019. The analysis focuses on this time period because it represents the relatively stable, “normal” conditions that existed before the destabilizing period of the COVID pandemic. According to staff members in the jurisdictions, beginning in March 2020, shutdowns and adjustments related to the COVID pandemic affected supervision practices (for example, by forcing remote rather than in-person check-ins), court processes (for example, because in-person hearings had to be postponed or modified), and patterns of crime and policing.

In cases of custodial arrest (that is, arrests in which people were brought into custody for initial court appearances), the two jurisdictions used an actuarial risk-assessment tool to estimate the likelihood that each person would fail to appear in court or experience a new arrest during the pretrial period. This tool produced a risk score that, along with the type of offense for each case, guided decisions about the conditions of release that should be applied: for example, whether the person should be released with supervision and, if so, what level or intensity of supervision was appropriate.

The risk score was calculated using a combination of data gathered from an interview and administrative data. The factors that contributed to the score included measures of stability, past mental or alcohol issues, criminal history information, and current court status (for example, other pending cases or warrants). The risk score ranged from 0 to 82, which the jurisdictions grouped into four categories of risk.

In addition to implementing the risk assessment, the jurisdictions each used a jurisdiction-specific decision matrix that incorporated the risk category and the severity of the current charge to result in a recommended level of supervision to be applied to each case. (An example matrix is shown below in the design section.) The risk scores and recommended supervision/release conditions from the matrix were provided to judges and pretrial services staff members to guide their decisions. At one of the two sites, judges who ordered supervision were also responsible for assigning a supervision level (and could concur with the recommendation or not); at the other site, judges ordered supervision, then the pretrial services staff applied the supervision level recommended by the decision matrix.

RESEARCH QUESTIONS

The analysis addresses two confirmatory research questions and six exploratory research questions (grouped into four sets of research questions).¹ The analysis uses a noninferiority approach, which tests whether the less restrictive form of supervision is as effective as the more restrictive form. In other words, are those with the less restrictive form of supervision as likely to appear in court and as likely to avoid new arrests as their counterparts with the more restrictive form of supervision?

Appendix Table A.1 shows the five different levels of supervision that were included in the analysis. As noted in the table, some levels of supervision were only used at one of the two sites. Note that the levels of supervision are categorized as being at low, medium, and high intensity relative to each other, which may not correspond with definitions of these categories within the jurisdictions or in other contexts.

Confirmatory Research Questions

1. Is low-intensity supervision as effective as medium-intensity supervision in...
 - a. supporting clients' appearance in court?
 - b. helping clients to avoid new arrests?

Exploratory Research Questions

2. Is no supervision as effective as low-intensity supervision in...
 - a. supporting clients' appearance in court?
 - b. helping clients to avoid new arrests?
3. Is medium-intensity supervision as effective as high-intensity supervision in...
 - a. supporting clients' appearance in court?
 - b. helping clients to avoid new arrests?

1. The confirmatory research questions are those that the research team can answer with a higher level of confidence as findings can be drawn from both jurisdictions, which use similar supervision categories relevant to those confirmatory research questions. The exploratory research questions in this study can be answered with a lower level of confidence, since findings can only be drawn from one of the two jurisdictions and should be interpreted with greater caution.

4. Is supervision without electronic monitoring as effective as supervision with electronic monitoring in...
 - a. supporting clients' appearance in court?
 - b. helping clients to avoid new arrests?

Because both Sites 1 and 2 had low-intensity and medium-intensity supervision, the analysis addressing that comparison was pooled between the sites. The analyses addressing the exploratory research questions, however, could only be conducted for one of the two sites.²

OVERVIEW OF THE REGRESSION DISCONTINUITY DESIGN

The regression discontinuity design (RDD) is relevant to situations in which eligibility for a given intervention is dependent on (or at least strongly affected by) scoring above or below a certain threshold, or cutoff, on a continuous or discrete ordinal variable (referred to as a “rating variable”). The analysis focuses on comparing the outcomes of individuals just above and just below that cutoff, as the individuals near the cutoff are expected to be very similar at the outset, but then provided with two different interventions. If there is no difference in the effects of the two interventions, one would expect to see that the outcome will be a continuous function of the rating variable through the cutoff. But if there is a “break” in outcomes at that point (for example, a jump in arrest rates from one side of the cutoff to the other), it would indicate that the intervention has an effect. The RDD is considered an especially strong quasi-experimental research design.³

Supervision Levels and Cutoffs at Sites 1 and 2

In order for an RDD to be a feasible design, eligibility for an intervention must be based on being above or below a set threshold (or cutoff) on a numeric rating variable. In this case, assignment to a given level of pretrial supervision was affected by the score on the risk assessment. The cutoffs were determined by the jurisdiction-specific decision matrix at each site. First, the cases were grouped into categories based on the severity of the current offense, then within each of these categories, the recommended level of supervision depended on the risk score. For example, for one offense category, people scoring 50 or below received recommendations of low-intensity supervision, while people scoring 51 or

-
2. Both sites did have categories recommending no supervision. However, at one of the sites, most of the individuals who fell into the no supervision category on the matrix were actually assigned to an additional category that corresponded with the other site's low-intensity supervision. This level was therefore categorized as low-intensity supervision.
 3. Somers, Zhu, Jacob, and Bloom (2013).

higher received recommendations of medium-intensity supervision. In another offense category, the cutoff between these two levels of supervision was 37. Appendix Table A.2 provides an example decision matrix.

In practice, there were four different release condition matrices across the two sites; only one decision matrix applied to each case.⁴ For each of the analyses, the sample could only include those charge types for which an increase in risk score could result in a shift from one level of supervision to another. For example, in the decision matrix shown in Appendix Table A.2, offense categories 1, 2, and 3 could be included in a comparison of low- versus medium-intensity supervision, but offense categories 4, 5, and 6 could not.

In order to combine the samples across the four release condition matrices, risk scores were centered so that the cutoff of interest in a particular analysis was zero. For example, for cases that fell into offense category 1 in Appendix Table A.2, the cutoff between low-intensity supervision and medium-intensity supervision was 50. In order to center that cutoff at 0, 50 was subtracted from the risk score for each case. For cases that fell into offense category 2, the cutoff for that comparison was 37, so 37 was subtracted from the risk score for each of those cases. By centering the risk scores around the cutoffs of interest and controlling for the original cutoff, the analysis could pool across groups for each research question.

SAMPLES FOR THE ANALYSES

In general, the analysis sample includes:

1. Cases initiated (those with arrest dates) between January 1, 2017, and June 30, 2019—a time period that allows six months of follow-up data for all cases before the COVID pandemic began
2. Custodial arrests (that is, not summonses or desk-appearance tickets, which are generally not subject to pretrial supervision)
3. Cases with a completed risk assessment, which includes most custodial cases
4. Cases with charges that do not always result in detention (excluding some murder charges, for example, because no one with those charges will be released while awaiting trial)
5. For some analyses (as described below), cases in which the person was released at some point within the pretrial period and within six months of arrest. Cases in which the individual was detained for the entire pretrial period or for the first six months after arrest (that is, the entire follow-up period) were never subject to pretrial supervision and

4. At one site, a decision matrix for enhanced supervision was used for cases with particular characteristics (for example, those in which a weapon was involved). At the other site, the decision matrix was revised during the study period, resulting in a second matrix.

had no opportunity to appear in court during the pretrial period. See below for a larger discussion of this decision.

Initial Samples

The data were processed and checked separately by site before being pooled for analysis where possible. For each site, the relevant cases were allocated to an initial sample for each comparison. As discussed below, it was important to first examine whether there were effects on pretrial release rates by recommended supervision level. Therefore, these initial samples include cases that were never released during the pretrial or follow-up period.

At Site 1, there were a total of 20,151 custodial felony and misdemeanor cases that were initiated between January 1, 2017, and June 30, 2019, and that had completed risk assessments.⁵ Each analysis could only include the cases that fell into the two relevant supervision levels (for example, only cases that received recommendations of low- or medium-intensity supervision could be included in that comparison). Therefore, each analysis could only include a subset of this larger sample (totaling 15,614 cases). These samples were as follows:⁶

- No supervision (3,328 cases) versus low-intensity supervision (2,283 cases)
- Low-intensity supervision (3,255 cases) versus medium-intensity supervision (3,586 cases)
- Medium-intensity supervision (4,065 cases) versus high-intensity supervision with electronic monitoring (EM, 3,193 cases)

At Site 2, there were 7,426 custodial cases that were initiated between January 1, 2017, and June 30, 2019; that had completed risk assessments; that were not immediately resolved; and that did not include charges that would automatically result in detention. The initial samples included in each analysis were as follows:

- Low-intensity supervision (2,145 cases) versus medium-intensity supervision (1,732 cases)
- Medium-intensity supervision (1,593 cases) versus high-intensity supervision (1,546 cases)

5. A small number of cases were resolved during the initial hearing because they were dismissed by the judge or because the person pled guilty to low-level charges. These cases were not included in the sample.

6. Note that some cases appeared in multiple analyses as they were included in the less intensive supervision category in one comparison, but the more intensive supervision category in the other. Therefore, the sample sizes for the comparison-specific samples add to more than the total number of cases included from each site.

Released Samples

Given that only those individuals who were released during the pretrial/follow-up period could experience the outcomes of interest, it makes intuitive sense to limit the sample to those who were released at some point during this period. However, if there were discontinuities in release rates at the risk-score cutoffs, that could present a problem, as release (and differences in the pools of people being released) could be a confounding factor influencing the effects at the cutoffs. That is, any effects that were estimated at the cutoffs could reflect differences in the pools of people released on either side of the cutoff rather than differences in the relative effects of different levels of supervision.

At Site 1, about 19 percent (2,955 of the 15,614) of cases in the initial sample were never released during the pretrial period in the six months after the initial arrests. Some individuals were detained without bail, while others had bail set but did not post it. Appendix Table A.3 shows release rates by the expected level of pretrial supervision (that is, the level of pretrial supervision that would be assigned based solely on the jurisdiction-specific decision matrix) for that site.

At Site 2, a larger proportion of cases—about 30 percent (1,749 of 5,762 cases)—were never released during the pretrial/follow-up period. Release rates by the expected level of pretrial supervision for that site are shown in Appendix Table A.4.

Not surprisingly, for both sites, the more intensive the pretrial supervision recommendation, the less likely the individual was to be released while awaiting trial. Judges' use of detention and money bail (as well as decisions about the amount of bail required) were likely to be correlated with level of risk as well as the recommended level of supervision. That is, judges would be more likely to release individuals who were assessed as being lower-risk, or to assign them to pretrial supervision and low bail amounts. While this relationship is clear, it is important to determine whether there were *discontinuities* in release rates at the cutoffs that could confound estimates of the effects of varying supervision levels. This question is addressed in the results section, below.

APPROACH TO THE ANALYSIS

The analysis presented in this report was approached both graphically and statistically. The RDD examines the outcomes of cases across a range of risk scores and estimates whether there is a discontinuity in outcomes at the risk score (or scores) that represents the cutoff that determined whether a case received a recommendation of a lower versus a higher level of supervision. In other words, did having a risk score that put a case just below recommendation for the higher level of supervision result in a different outcome, on average, than would be expected if that case fell just above that risk score?

The first step in each estimate was a graphical analysis that showed the average outcomes by risk. For each analysis, the risk scores were centered such that a score of 0 represented the cutoff. Those with scores of 0 or below received recommendations for the lower level of supervision (based on the decision matrix), while those with scores above 0 received recommendations for a higher level of supervision. The graphical approach, as shown in the results section below, provides a visual display of the estimated impact at the cutoff of 0.

The effect was then estimated using a statistical model that accounted for risk score, site, and the particular cutoff risk score for a given analysis group. The general model was specified as follows:

$$Y_{ij} = \alpha + \beta_1 H_{ij} + \beta_2 R_{ij} + \beta_3 R_{ij} H_{ij} + \beta_4 S_{ij} + \beta_5 R_{ij} S_{ij} + \beta_2 C_{ij} + \beta_3 C_{ij} H_{ij} + y_j + w_{ij}$$

where

Y_{ij} = the outcome for case i with risk score j ,

α = the expected mean outcome when all other covariates equal 0,

H_{ij} = one if case i with risk score j would be assigned to lower-intensity supervision (for example, low- versus medium-intensity supervision) based on the decision matrix and zero otherwise,

R_{ij} = the adjusted risk score for case i with risk score j , where risk scores were centered at the cutoff value,

S_{ij} = one if case i with risk score j was from Site 2 and zero otherwise (this term applied only to the pooled analysis),

C_{ij} = one if case i with risk score j was from an analysis group where the cutoff was a risk score of 37 (as opposed to 50), and zero otherwise (applied only to analyses that included multiple analysis groups, as described above),

y_j = random RDD specification errors that are distributed independently and identically across risk scores with a mean of zero, and

w_{ij} = random errors that are distributed independently and identically across people within risk scores with a mean of zero.

In this model, β_1 denotes the estimated effect of a higher level of supervision on the outcome for people with a risk score at the given cutoff.

This model accounts for site and for analysis group (which differed in where the cutoff fell in the decision matrix). The model includes interaction terms that allow the slope of the estimated outcomes to vary by research group (that is, below and above the cutoff), analysis

group, and site. Standard errors were clustered to account for multiple observations per person.

For each analysis, the risk scores that were included in the statistical analysis were limited to a bandwidth of risk scores on either side of the cutoff (for example, plus or minus 15 on either side) that optimizes the amount of information used while reducing bias in the estimates.⁷ Across all analyses, the optimal bandwidths ranged from 8 to 29, with most falling between 10 and 20. For consistency across the figures shown in this memo, mean outcomes and fitted regression lines are shown for risk scores plus or minus 15 points from the cutoff (about the average optimal bandwidth), but the risk scores used in the underlying regression model vary depending on the optimal bandwidth for that outcome.

IMPACT RESULTS

This section presents results from the analysis, divided into sections by research question. For each research question, the analysis estimates the effects of the supervision level recommendation on release, actual assignment to supervision levels (which represents the service contrast), and finally, on court appearance and arrest outcomes. The follow-up period for all outcomes is six months.

The Effects of Low-Intensity Compared with Medium-Intensity Supervision

This section presents the effects of low-intensity supervision (reminders and check-ins after court appearances) in comparison with medium-level supervision (reminders, check-ins after court appearances, and at least one in-person check-in per month). This analysis addresses the two confirmatory research questions listed above. The analysis pools the relevant samples from Sites 1 and 2.

Effects on Release Rates

Appendix Figure A.1 shows the proportion of cases released while awaiting trial by risk score (centered at the cutoff). The gray dots represent the proportion of cases at each risk score that were released, with the size of the dots indicating the size of the sample at that risk score. The dashed line indicates the cutoff, at and below which individuals received recommendations of being assigned to low-intensity supervision (the Low-Intensity Group), and above which individuals received recommendations of being assigned to medium-intensity supervision (the Medium-Intensity Group). The red lines represent the predicted probability of release based on the statistical model predicting release (see the detailed description above).

7. These bandwidths were calculated using the methods proposed by Imbens and Kalyanaraman (2012).

The graph shows that while most cases in these two groups were released, there was a small discontinuity at the cutoff (that is, there is a gap between the two red lines at the cutoff). This gap represents the estimated effect, which, as shown in Appendix Table A.5, is about 8 percentage points and is statistically significant. At the risk-score cutoff, being in the low-intensity group on the jurisdiction-specific decision matrix meant having a greater chance of being released (about 87 percent compared with about 79 percent).

This discontinuity in release rates may confound estimates of the effects of supervision levels at the cutoffs. That is, when estimating the effect of being assigned to low-intensity versus medium-intensity supervision, any estimated effect could stem, in part, from differences in the rates of release or in the types of individuals being released. Therefore, the rest of the analysis comparing these two supervision levels will examine effects both for the full sample of cases in these groups and among the released sample. Comparing the results for these two samples may provide a broader picture of the effects of differing levels of supervision, and what role differences in release rates might play.

Effects on the Receipt of Supervision (Service Contrast Across the Cutoff)

It is important to determine whether there was a service contrast across the cutoff. That is, were people who scored below the cutoff assigned substantially different types or amounts of supervision than they would have been if they received recommendations for a higher level of supervision? The larger the differences in the supervision assigned, the better the test of whether low-intensity supervision led to outcomes that were at least as good as those among cases assigned to medium-intensity supervision. The results are summarized in the bottom panel of Appendix Table A.5.

Appendix Figure A.2 shows the proportion of cases assigned low-intensity supervision by risk score (among the full sample, including those never released). As the figure shows, there is a large effect at the cutoff. As shown in Appendix Table A.5, this effect is 30 percentage points. While about 31 percent of the cases that received recommendations of low-intensity supervision were actually assigned it, almost no cases for which the recommended supervision level was medium-intensity were actually assigned to low-intensity supervision.

The results among the sample limited to those who were released while awaiting trial shows a similar pattern, except that the estimated effect is slightly larger, at 35 percentage points (see Appendix Table A.5). This result is not surprising given that the cases with no release would not have had pretrial supervision and would therefore have reduced the proportion of the full sample—and in particular, the proportion of the low-intensity supervision group—assigned to low-intensity supervision.

The recommended supervision level also had a significant effect on assignment to medium-intensity supervision. Appendix Figure A.3 shows the percentage of cases assigned to medium-intensity supervision, among the full sample. Although the figure does show that a substantial number of cases in the Low-Intensity Group were actually assigned to medium-intensity supervision, there is still a large discontinuity, estimated to be -32 percentage points. This pattern holds, but with a larger estimated effect, among the released sample.

The estimated effect on the proportion assigned to medium-intensity supervision among the released sample is -44 percentage points. (See Appendix Table A.5.) Note that the effects on the type of supervision assigned are much larger than the effects on release rates.

A separate analysis (not shown) indicates that the effects on supervision-level assignment were higher at Site 2. The estimated effect on assignment to low-intensity supervision at the cutoff was 39 percentage points at Site 2 and 29 percentage points at Site 1. The estimated effect on assignment to medium-intensity supervision at the cutoff was -58 percentage points at Site 2 and -19 percentage points at Site 1. These differences probably result from the fact that at Site 2, judges decided whether or not to order supervision, but the level was assigned by pretrial services staff members based on the jurisdiction-specific decision matrix. At Site 1, judges also made decisions about what level of supervision to order and did not always concur with the recommendations of the decision matrix.

As Appendix Table A.5 shows, the differences in assignment of supervision between the Low- and Medium-Intensity Groups were mainly in the *level* of supervision assigned, rather than in whether individuals were assigned any supervision at all. Among the full sample, there was not a significant effect on whether cases were assigned any level of pretrial supervision. In other words, falling into the Low-Intensity Group based on risk did not reduce the likelihood of a person being assigned to pretrial supervision—but it did affect the type of supervision assigned. Among the released sample, there was a small, significant effect of about -9 percentage points, meaning that, among those who were released, those in the Low-Intensity Group were more likely than those in the Medium-Intensity Group to be released without supervision.

Overall, those below the cutoff were substantially more likely to be assigned low-intensity supervision, and those above the cutoff were substantially more likely to be assigned medium-intensity supervision. This finding suggests that effects on outcomes at the cutoff are likely to be largely caused by differences in supervision levels (though perhaps influenced by the discontinuity in release rates).

Effects on Outcomes

The analysis shows that the Low-Intensity and Medium-Intensity Groups did, in fact, experience assignment to different intensities of supervision. The following two sections examine whether these differences translated into effects on outcomes. Appendix Table A.6 summarizes the results.

Effects on Making All Court Appearances

Appendix Figure A.4 shows the proportion of cases, among the full sample, in which people made all required court appearances in the six months after arrest (or until their cases were adjudicated, whichever came first).

The rates of court appearance were fairly flat across risk scores—that is, risk level was not strongly related to court appearance rates for this slice of the risk score distribution. At the

cutoff there was a difference of -3 percentage points that is not statistically significant (see Appendix Table A.6).

The difference in estimated means shrinks to nonexistent among the released sample, as shown in Appendix Figure A.5. The rates of court appearance at the cutoff among those who were released (and therefore were at risk of missing a court appearance), were nearly identical at about 66 percent.

The released sample results, in combination with those among the full sample, suggest that the slightly lower court appearance rate among the lower-risk cases in the full sample was due to higher release rates rather than to differences in supervision levels. These results suggest that being assigned a less intensive version of pretrial supervision (court reminders and check-ins after court appearances) was as effective in encouraging court appearance, for those near the cutoff, as being assigned a more intensive form of supervision that required regular check-ins with supervision staff members (in addition to the court reminders and check-ins after court appearances).

Effects on Avoiding Arrest

Appendix Figure A.6 shows the proportion of cases in which the individual avoided having any new arrests during the six months of the follow-up period. The pattern is very clear, with a negative, linear relationship between risk level and arrest. That is, the lower their risk scores, the more likely people were to avoid being rearrested.

As the figure shows, there is no discontinuity in arrest rates at the cutoff (the estimated difference of -1 percentage point, shown in Appendix Table A.6, is not statistically significant). In other words, those in the Low-Intensity Group, who were assigned, on average, lower-intensity supervision, were no more likely to be arrested than would be expected had they in fact been in the Medium-Intensity Group. The pattern is strikingly similar among those released (see Appendix Figure A.7). These results indicate that low-intensity supervision was as effective as medium-intensity supervision in helping clients to avoid arrest.

The Effects of Release with No Supervision Compared with Low-Intensity Supervision

This section presents the results of an analysis addressing the first two of the exploratory research questions, describing the effects of no supervision compared with low-intensity supervision. This analysis was possible for Site 1 only.

Effects on Release Rates

Appendix Figure A.8 shows release rates among those in the No Supervision Group compared with those in the Low-Intensity Supervision Group, by risk score. As the figure shows, high percentages of both groups were released, which is not surprising given that these groups represent the lowest-risk groups at the site. As shown in Appendix Table A.7, nearly all people in both groups were released while awaiting trial. The figure (and underlying analysis) also

shows that there was no significant difference at the cutoff in the rates of release. That is, there was no discontinuity in release rates for these two groups. Given this result, the rest of the analysis in this section presents results among the released sample only. An analysis showed that these results were not substantially different among the full sample.

Effects on Assignment to Supervision (Service Contrast)

Appendix Figure A.9 shows the percentage of cases, by risk score, that were assigned any form of supervision. The figure shows a significant effect at the cutoff of -28 percentage points (see Appendix Table A.7). A high percentage of cases in the Low-Intensity Group were assigned to some supervision, while a lower, though substantial, proportion of cases in the No Supervision Group were also assigned to supervision.

For both groups, at the cutoff, about half of those who were assigned to supervision were assigned to low-intensity supervision, and the other half were actually assigned to a higher level of supervision. These results suggest that while there is a significant contrast in supervision between these two groups, this contrast was more complicated than simply no supervision versus low-intensity supervision. Overall, though, members of the No Supervision Group were less likely to be assigned to supervision and were assigned lower-intensity supervision, on average, than members of the Low-Intensity Group.

Effects on Outcomes

The following two sections examine whether a recommendation of no supervision led to different outcomes than a recommendation of low-intensity supervision. The results are summarized in Appendix Table A.8.

Effects on Making All Court Appearances

Among both the released sample and the full sample, the results show no significant effects on court appearance rates. In other words, at the cutoff between groups, people who received recommendations of release without supervision were as likely to appear in court as people who received recommendations of low-intensity supervision (see Appendix Figure A.10).

Effects on Avoiding Arrest

Similarly, as shown in Appendix Figure A.11, the analysis did not find any significant effect on rearrest rates.

Overall, these results suggest that release without supervision was as effective as release with low-intensity supervision in encouraging people to make all their court appearances and avoid being rearrested.

Effects of Medium-Intensity Compared with High-Intensity Supervision

This section examines the third set of research questions addressed by this analysis: Is medium-intensity supervision as effective as high-intensity supervision in encouraging

people to make their court appearances and avoid arrest? As noted above, this question can only be addressed with the sample from Site 2.

Effects on Release Rates

Appendix Figure A.12 shows that there is a discontinuity in release rates at the supervision-level cutoff, with those in the Medium-Intensity Group being 14 percentage points more likely to be released (at the cutoff) than those in the High-Intensity Group. As shown in Appendix Table A.9, this difference is statistically significant. To provide a fuller picture of the results, the rest of the analysis in this section will present results both among the full sample of cases in the Medium- and High-Intensity Groups and among the cases in which people were released while awaiting trial.

Effects on Assignment to Supervision (Service Contrast)

As Appendix Figure A.13 shows, the Medium-Intensity Group was indeed much more likely to be assigned to medium-intensity supervision than the High-Intensity Group. The estimated effect at the cutoff is 63 percentage points. Among those in the High-Intensity Group, almost no one was assigned medium-intensity supervision, probably because the assignment of supervision level was determined by the pretrial services staff using the jurisdiction-specific decision matrix. At Site 2, judges did not make decisions about supervision levels.

This effect is even larger among those who were released, with about 85 percent of released Medium-Intensity Group cases at the cutoff assigned to medium-intensity supervision, compared with an estimate among High-Intensity Group cases of nearly zero. These results are summarized in Appendix Table A.9.

The difference in assignment to high-intensity supervision was also large and corresponded with the expected levels in the decision matrix. As shown in Appendix Figure A.14 and Appendix Table A.9, among the full sample, those in the Medium-Intensity Group were 48 percentage points less likely (at the cutoff) to be assigned high-intensity supervision than the High-Intensity Group cases. Almost no one in the Medium-Intensity Group was actually assigned high-intensity supervision.

This effect was larger among those who were released, at an estimated -83 percentage points. Overall, these results show that there was a large contrast between the two groups in the level of supervision assigned, both among the full sample and among the released sample. These large differences in supervision mean that the analysis is well suited to detect effects on outcomes at the cutoff that are the result of differences in supervision levels.

Effects on Outcomes

Effects on Making All Court Appearances

Appendix Figure A.15 shows court appearance rates (making all required court dates) by risk score among the full sample of cases. (As a reminder, the full sample includes cases in which the person was never released while awaiting trial.) The results show a statistically significant effect of -10 percentage points on the proportion who made all court appearances. That is,

at the risk-score cutoff, those in the Medium-Intensity Group were 10 percentage points less likely to make all court appearances than those in the counterfactual High-Intensity Group.

However, as shown in Appendix Figure A.16 and in Appendix Table A.10, the same analysis among those who were released suggests that this difference in court appearance rates is entirely the result of differences in release rates between those groups, rather than the differences in the intensity of supervision. In other words, those in the Medium-Intensity Group were more likely to be released and were therefore more at risk of missing a court appearance; when the analysis is limited to those who were released, supervision intensity shows no significant effect on court appearance rates.

Effects on Avoiding Arrest

Appendix Figure A.17 shows percentages of people who avoided arrest among the full sample, by risk score. It is clear that those with lower risk scores were more likely to avoid arrest; meanwhile, the analysis shows no significant effect of supervision level on the likelihood of avoiding arrest. Among the released sample, the results are similar. As shown in Appendix Table A.10, the estimated difference between the Medium- and High-Intensity Group at the cutoff of -5 percentage points is not significant.

Overall, the results suggest that while there was a large service contrast between the Medium-Intensity and High-Intensity Groups, medium-intensity supervision was as effective as high-intensity supervision in encouraging people to make all their court appearances and avoid arrest.

Effects of Medium-Intensity Supervision Compared with Supervision with Electronic Monitoring

The final set of research questions ask whether medium-intensity supervision without electronic monitoring (EM) is as effective as supervision that includes EM.⁸ In this case, EM is defined as the use of an electronic GPS ankle device to monitor a person's movement and location.

This analysis includes Site 1 only, where individuals scoring above certain risk thresholds received recommendations of supervision with EM.⁹ It was expected that the use of EM would be limited mainly to cases with risk-assessment scores above those thresholds. This analysis examines whether the use of EM corresponded with this assumption and, if so, whether EM had effects on making all court appearances and avoiding arrest.

8. In a separate analysis as part of the PJC study, MDRC examined the effects of electronic monitoring across two sites using a different methodology—propensity score matching. See Anderson, Valentine, and Holman (2023).

9. The site's definition of EM also included electronic sobriety monitors. This analysis is limited to GPS monitors.

Effects on Release Rates

As with all analyses described in this document, the first step is to examine whether the risk score affected the likelihood of pretrial release. As Appendix Figure A.18 shows, there was such an effect (see also Appendix Table A.11). At the risk score cutoff for EM, those who received recommendations of medium-intensity supervision (the Medium-Intensity Group) were estimated to be 12 percentage points more likely to be released than the equivalent people who received recommendations of electronic monitoring (the EM Group). As in previous sections, this section therefore reports on results for both the full sample and the released sample.

Effects on Assignment to EM (Service Contrast)

Appendix Figure A.19 shows the percentages of people who were assigned to EM (measured separately from whether individuals were assigned to supervision with EM),¹⁰ by risk score. The figure shows that overall, about 10 percent of people in these groups were assigned to EM (fewer than 20 percent among those released). There is also little difference in rates of EM across the risk scores, and indeed, there is not a significant effect on assignment to EM for the full sample. Among the released sample, there is a significant effect, with the those in the Medium-Intensity Group estimated to be about 5 percentage points less likely than those in the EM Group to be assigned to EM. Appendix Figure A.20 shows this effect.

This difference in assignment to EM is small, at only 5 percentage points among the released sample. It appears that judges did not rely heavily on the jurisdiction-specific decision matrix recommendations when making decisions about whether to order EM. In general, they did not order EM often. With such a small service contrast, the effect of EM would have to be very large to produce a statistically significant difference in the outcomes of interest. This sample does not, therefore, appear to provide a good test of the effects of EM.

Effects on Outcomes

Effects on outcomes are shown in Appendix Table A.12. There were no significant effects of EM on making all court appearances among the full sample or among the released sample. The analysis of avoidance of arrest shows a similar pattern, with no significant effects for either the full sample or the released sample.

These results are not surprising, since the two groups were actually assigned supervision and EM at very similar rates.

10. At this site, there was a specific level of supervision that was designed to include EM. However, in practice, judges ordered EM separately from ordering supervision. The results here focus on receipt of EM whether or not it was attached to supervision. Appendix Table A.11 provides both sets of results.

APPENDIX TABLE A.1
Supervision Requirements by Level

Level	Requirements	Sites
No supervision	No court reminders, no check-ins with pretrial services	1
Low-intensity	Court reminders, phone or in-person check-ins with pretrial services after court appearances	1 and 2
Medium-intensity	Court reminders, in-person check-ins with pretrial services after court appearances, at least one in-person check-in per month	1 and 2
High-intensity	Court reminders, in-person check-ins with pretrial services after court appearances, at least three in-person check-ins per month	2
High-intensity with electronic monitoring (EM)	Court reminders, in-person check-ins with pretrial services after court appearances, one to four in-person check-ins per month, electronic GPS monitoring or electronic sobriety monitoring	1

APPENDIX TABLE A.2
Example Supervision Matrix: Supervision-Level Recommendations by Offense Category and Risk Score

Offense Category	Risk Scores 0-17	Risk Scores 18-37	Risk Scores 38-50	Risk Scores 51-82
1	No supervision	No supervision	Low-intensity	Medium-intensity
2	No supervision	No supervision	Low-intensity	Medium-intensity
3	Low-intensity	Low-intensity	Medium-intensity	Medium-intensity
4	Medium-intensity	Medium-intensity	Medium-intensity	Medium-intensity
5	Medium-intensity	Medium-intensity	Medium-intensity	High-intensity with EM
6	Medium-intensity	Medium-intensity	High-intensity with EM	High-intensity with EM

APPENDIX TABLE A.3
Site 1 Release Rates by Expected Supervision Level

Expected Supervision Level	Number Released	Total Number in Category	Percentage Released
None	3,286	3,328	98.7
Low-intensity	3,045	3,255	93.5
Medium-intensity	4,547	5,838	77.9
High-intensity with EM	1,781	3,193	55.8

SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

APPENDIX TABLE A.4
Site 2 Release Rates by Expected Supervision Level

Expected Supervision Level	Number Released	Total Number in Category	Percentage Released
Low-intensity	1,748	2,145	81.5
Medium-intensity	1,476	2,071	71.3
High-intensity	789	1,546	51

SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

APPENDIX TABLE A.5
Effects on Release Rates and Supervision Assignments,
Low- Versus Medium-Intensity Supervision

Outcome (%)	Low-Intensity Group	Medium-Intensity Group	Estimated Effect	P-Value
Release				
Released while awaiting trial	86.6	78.8	7.8 ^{***}	0.000
Supervision assignment				
Assigned to supervision at any level	65.4	68.4	-3.0	0.160
Among those released	75.9	84.8	-9.0 ^{***}	0.000
Assigned to low-intensity supervision	30.9	0.7	30.2 ^{***}	0.000
Among those released	35.8	0.9	34.9 ^{***}	0.000
Assigned to medium-intensity supervision	30.9	62.8	-31.9 ^{***}	0.000
Among those released	35.7	79.7	-44.0 ^{***}	0.000

SOURCE: MDRC calculations based on court and pretrial services data from each site.

NOTES: The estimated mean outcome for the Low-Intensity Group represents the regression-adjusted mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of low-intensity supervision).

The mean outcome for the Medium-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of medium-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

APPENDIX TABLE A.6
**Effects on Making All Court Appearances and Avoiding Arrest,
 Low- Versus Medium-Intensity Supervision**

Outcome (%)	Low-Intensity Group	Medium-Intensity Group	Estimated Effect	P-Value
Made all court appearances ^a	68.8	71.5	-2.6	0.018
Among those released	65.5	65.5	0.0	0.983
Avoided a new arrest ^b	65.8	67.2	-1.4	0.440
Among those released	67.3	67.9	-0.6	0.766

SOURCE: MDRC calculations based on court and pretrial services data from each site.

NOTES: The estimated mean outcome for the Low-Intensity Group represents the regression-adjusted mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of low-intensity supervision).

The mean outcome for the Medium-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of medium-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

^aThe follow-up period for the court-appearance outcome is the six months after arrest or the time until the adjudication of the case, whichever was less.

^bThe follow-up period for the new-arrest outcome is the six months after the initial arrest, whether or not the case was adjudicated sooner.

APPENDIX TABLE A.7
**Effects on Release Rates and Supervision Assignments,
 No Supervision Versus Low-Intensity Supervision**

Outcome (%)	No Supervision Group	Low-Intensity Group	Estimated Effect	P-Value
Release				
Released while awaiting trial	98.1	96.8	1.3	0.196
Supervision assignment				
Assigned to supervision at any level	58.2	84.5	-26.2***	0.000
Among those released	59.3	86.8	-27.5***	0.000
Assigned to low-intensity supervision	30.5	50.6	-20.1***	0.000
Among those released	31.1	52.3	-21.2***	0.000

SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

NOTES: The estimated mean outcome for the No Supervision Group represents the regression-adjusted mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of release without supervision).

The mean outcome for the Low-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of low-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

APPENDIX TABLE A.8
**Effects on Making All Court Appearances and Avoiding Arrest,
 No Supervision Versus Low-Intensity Supervision**

Outcome (%)	No Supervision Group	Low-Intensity Group	Estimated Effect	P-Value
Made all court appearances ^a	67.7	66.9	0.8	0.788
Among those released	67.3	66.2	1.0	0.736
Avoided a new arrest ^b	80.8	83.0	-2.2	0.332
Among those released	80.8	83.0	-2.4	0.341

SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

NOTES: The estimated mean outcome for the No Supervision Group represents the regression-adjusted mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of release without supervision).

The mean outcome for the Low-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of low-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

^aThe follow-up period for the court-appearance outcome is the six months after arrest or the time until the adjudication of the case, whichever was less.

^bThe follow-up period for the new-arrest outcome is the six months after the initial arrest, whether or not the case was adjudicated sooner.

APPENDIX TABLE A.9
Effects on Release Rates and Supervision Assignments,
Medium- Versus High-Intensity Supervision

Outcome (%)	Medium-Intensity Group	High-Intensity Group	Estimated Effect	P-Value
Release				
Released while awaiting trial	70.9	56.5	14.4 ^{***}	0.000
Supervision assignment				
Assigned to supervision at any level	62.4	52.4	10.0 [*]	0.010
Among those released	88.1	89.5	-1.6	0.641
Assigned to medium-intensity supervision	63.7	0.5	63.2 ^{***}	0.000
Among those released	85.4	0.4	84.9 ^{***}	0.000
Assigned to high-intensity supervision	0.3	47.8	-47.5 ^{***}	0.000
Among those released	0.4	83.1	-82.8 ^{***}	0.000

SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

NOTES: The estimated mean outcome for the Medium-Intensity Group represents the regression-adjusted mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of medium-intensity supervision).

The mean outcome for the High-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of high-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

APPENDIX TABLE A.10
**Effects on Making All Court Appearances and Avoiding Arrest,
 Medium- Versus High-Intensity Supervision**

Outcome (%)	Medium-Intensity Group	High-Intensity Group	Estimated Effect	P-Value
Made all court appearances ^a	68.4	78.0	-9.5 ***	0.001
Among those released	59.2	61.5	-2.3	0.574
Avoided a new arrest ^b	47.3	48.8	-1.5	0.623
Among those released	47.6	52.1	-4.5	0.250

SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

NOTES: The estimated mean outcome for the Medium-Intensity Group represents the regression-adjusted mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of medium-intensity supervision).

The mean outcome for the High-Intensity Group is what is estimated to have occurred if those at the cutoff instead received recommendations of high-intensity supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

^aThe follow-up period for the court-appearance outcome is the six months after arrest or the time until the adjudication of the case, whichever was less.

^bThe follow-up period for the new-arrest outcome is the six months after the initial arrest, whether or not the case was adjudicated sooner.

APPENDIX TABLE A.11
Effects on Release Rates and Supervision Assignments, Medium-Intensity Supervision Versus Supervision with Electronic Monitoring

Outcome (%)	Medium-Intensity Group	Electronic Monitoring Group	Estimated Effect	P-Value
Release				
Released while awaiting trial	67.5	55.4	12.1 ^{***}	0.000
Supervision assignment				
Ordered to EM	9.6	10.7	-1.1	0.492
Among those released	13.7	18.8	-5.1 [*]	0.037
Assigned to EM-level supervision	6.7	7.1	-0.3	0.810
Among those released	9.6	12.5	-2.9	0.160
Assigned to medium-intensity supervision	43.9	32.3	11.6 ^{***}	0.000
Among those released	65.2	58.5	6.6 [*]	0.024

SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

NOTES: The estimated mean outcome for the Medium-Intensity Group represents the regression-adjusted mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of medium-intensity supervision).

The mean outcome for the Electronic Monitoring Group is what is estimated to have occurred if those at the cutoff instead received recommendations of EM-level supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

APPENDIX TABLE A.12
**Effects on Making All Court Appearances and Avoiding Arrest,
 Medium-Intensity Supervision Versus Supervision
 with Electronic Monitoring**

Outcome (%)	Medium-Intensity Group	Electronic Monitoring Group	Estimated Effect	P-Value
Made all court appearances ^a	80.4	83.9	-3.4	0.056
Among those released	73.0	73.5	-0.4	0.871
Avoided a new arrest ^b	68.0	70.8	-2.9	0.183
Among those released	65.2	64.1	1.1	0.688

SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

NOTES: The estimated mean outcome for the Medium-Intensity Group represents the regression-adjusted mean outcome for cases at the risk score cutoff (the highest risk score that received a recommendation of medium-intensity supervision).

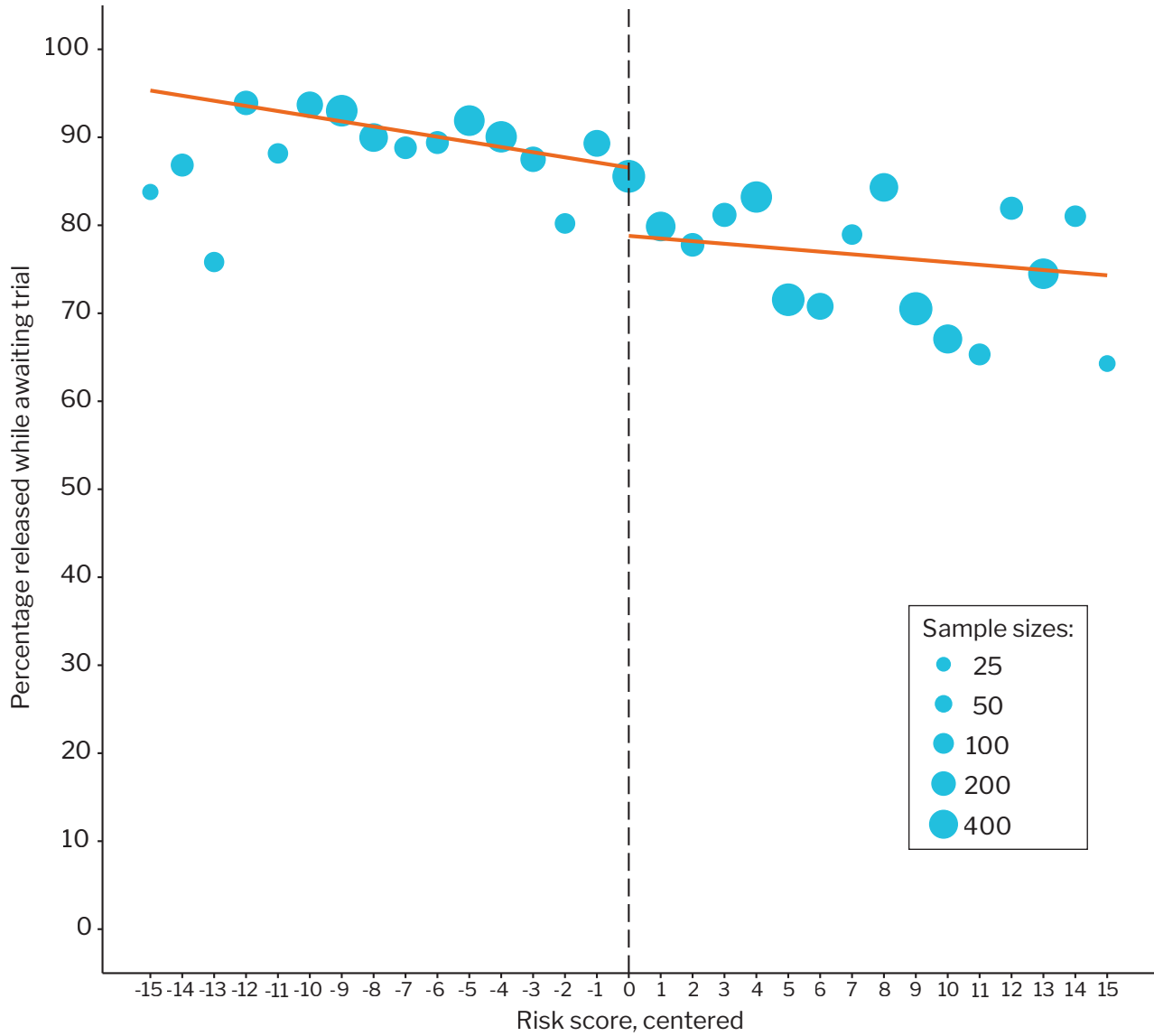
The mean outcome for the Electronic Monitoring Group is what is estimated to have occurred if those at the cutoff instead received recommendations of EM-level supervision.

Statistical significance levels are indicated as follows: *** = 0.1 percent; ** = 1 percent; * = 5 percent.

^aThe follow-up period for the court-appearance outcome is the six months after arrest or the time until the adjudication of the case, whichever was less.

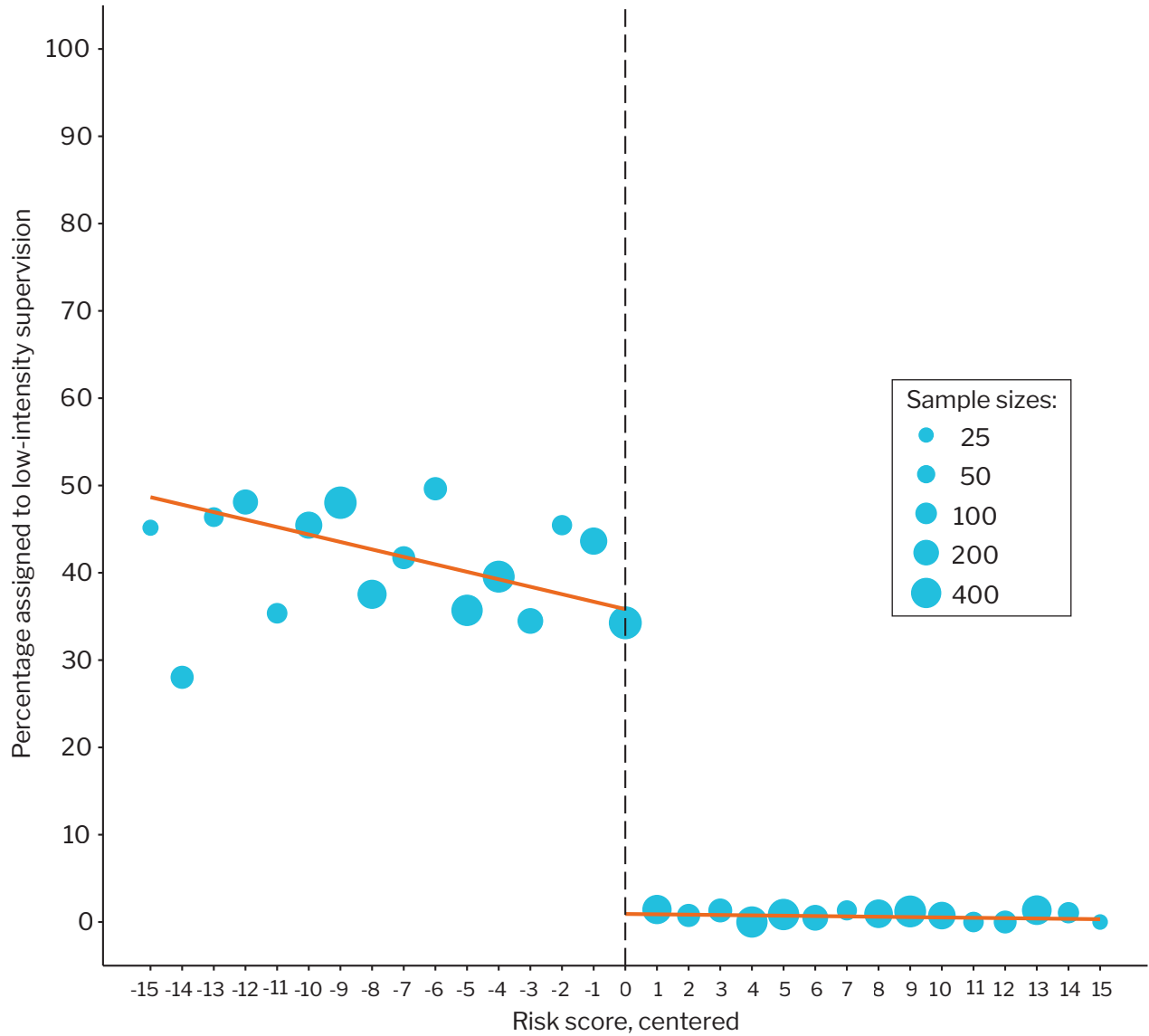
^bThe follow-up period for the new-arrest outcome is the six months after the initial arrest, whether or not the case was adjudicated sooner.

APPENDIX FIGURE A.1
Percentages Released While Awaiting Trial: Low-Intensity Group
Versus Medium-Intensity Group



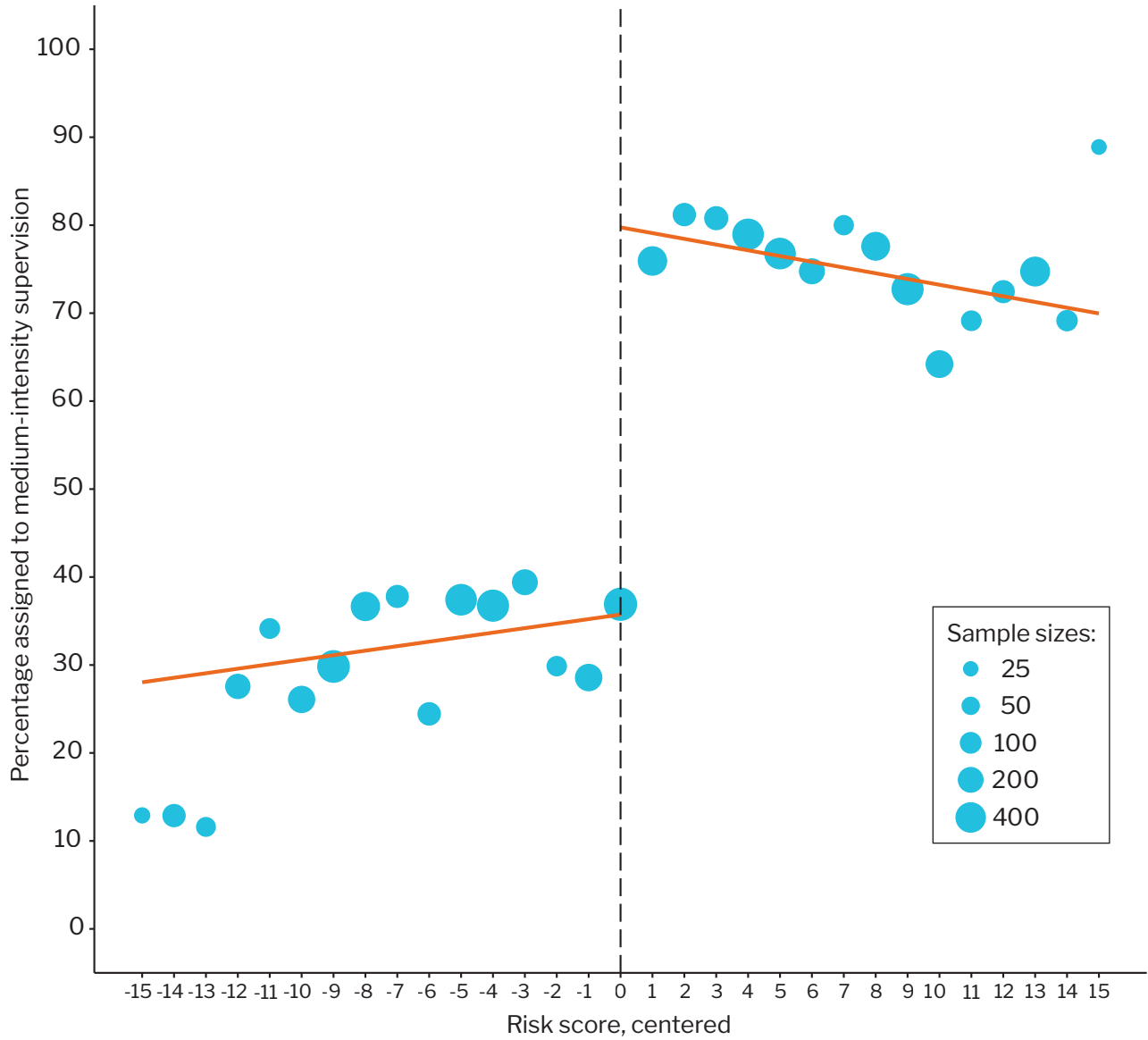
SOURCE: MDRC calculations based on court and pretrial services data from each site.

APPENDIX FIGURE A.2
Assignment to Low-Intensity Supervision: Low-Intensity Group
Versus Medium-Intensity Group



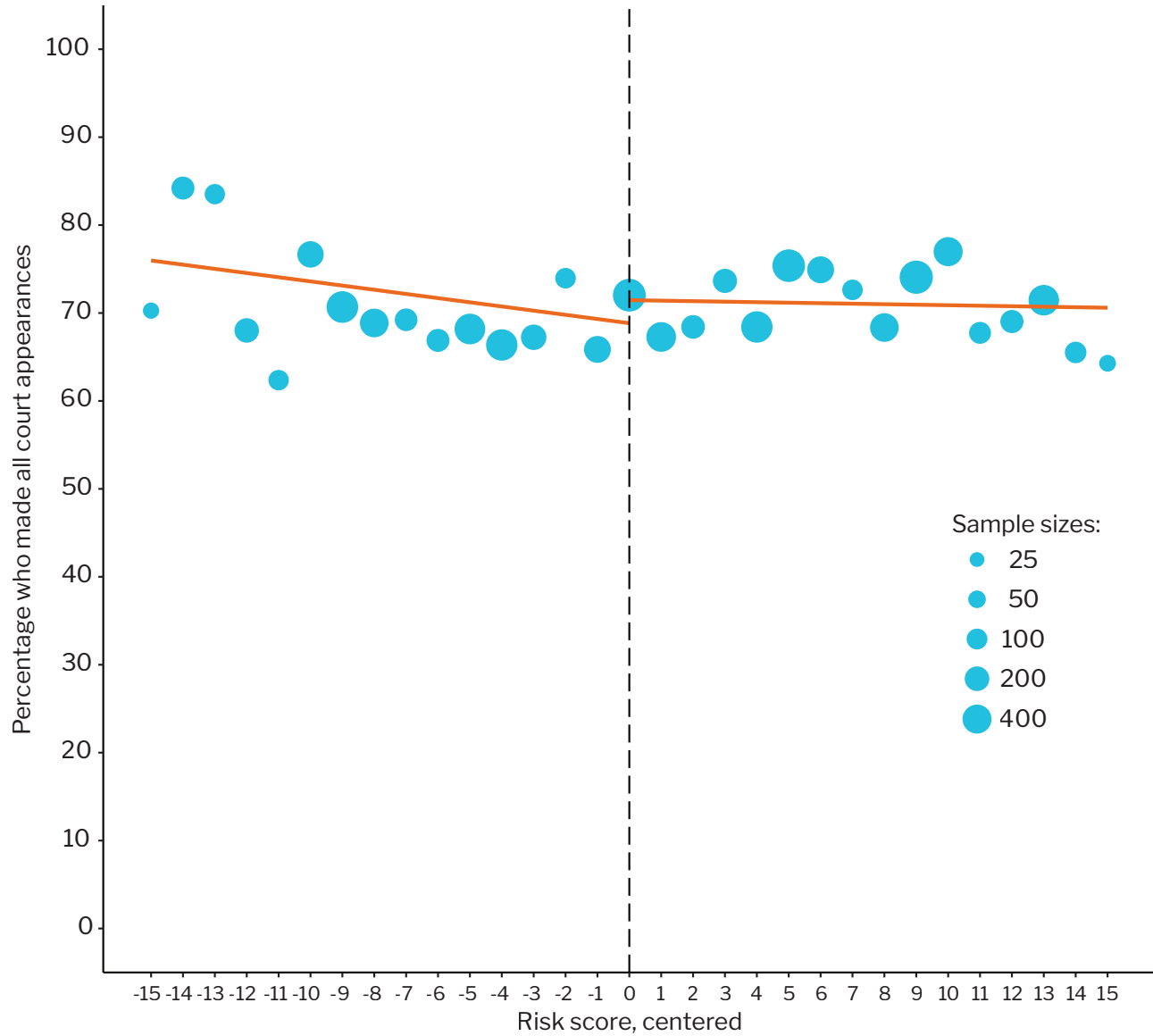
SOURCE: MDRC calculations based on court and pretrial services data from each site.

APPENDIX FIGURE A.3
Assignment to Medium-Intensity Supervision: Low-Intensity Group
Versus Medium-Intensity Group



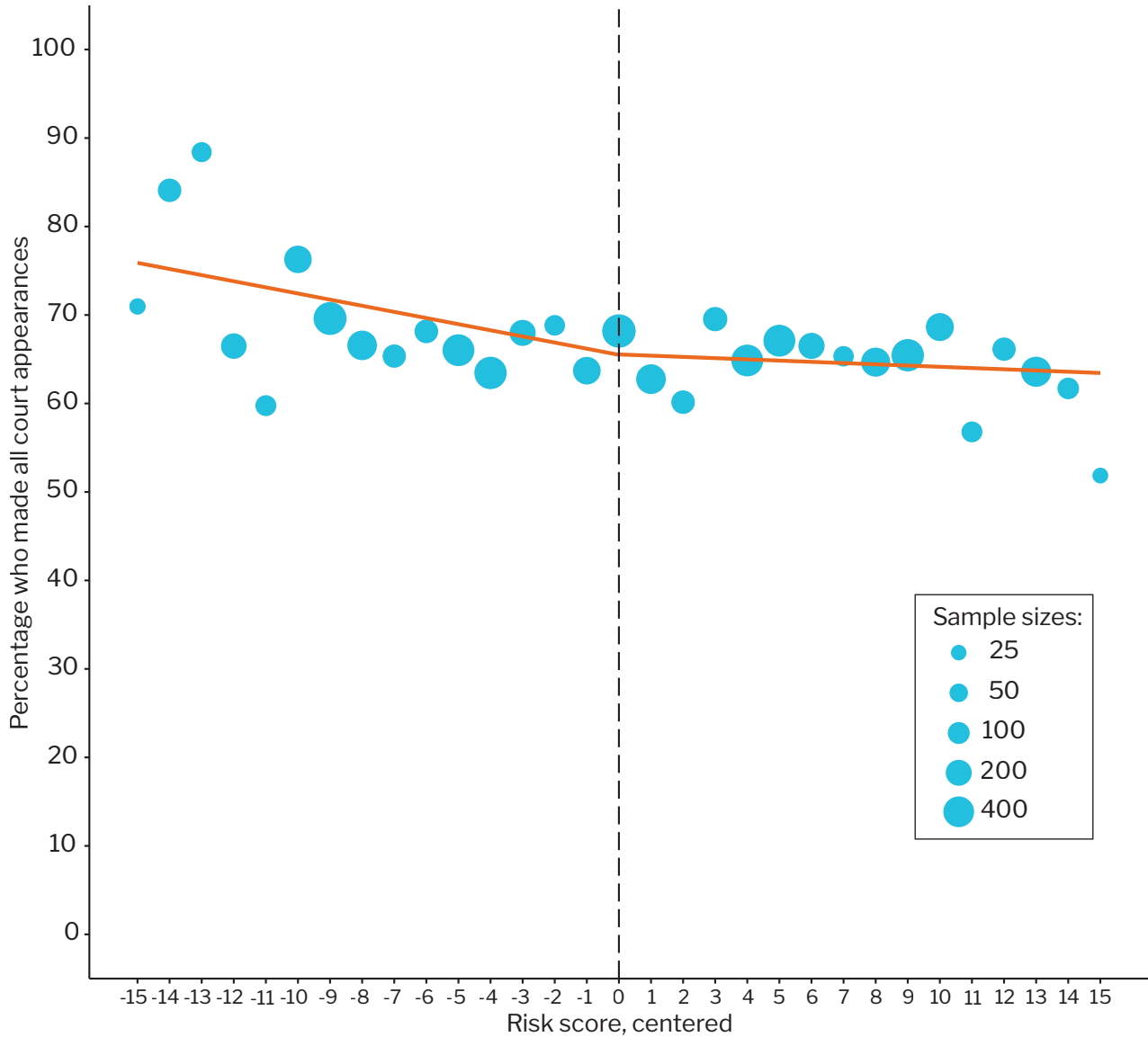
SOURCE: MDRC calculations based on court and pretrial services data from each site.

APPENDIX FIGURE A.4
Making All Court Appearances: Low-Intensity Group
Versus Medium-Intensity Group



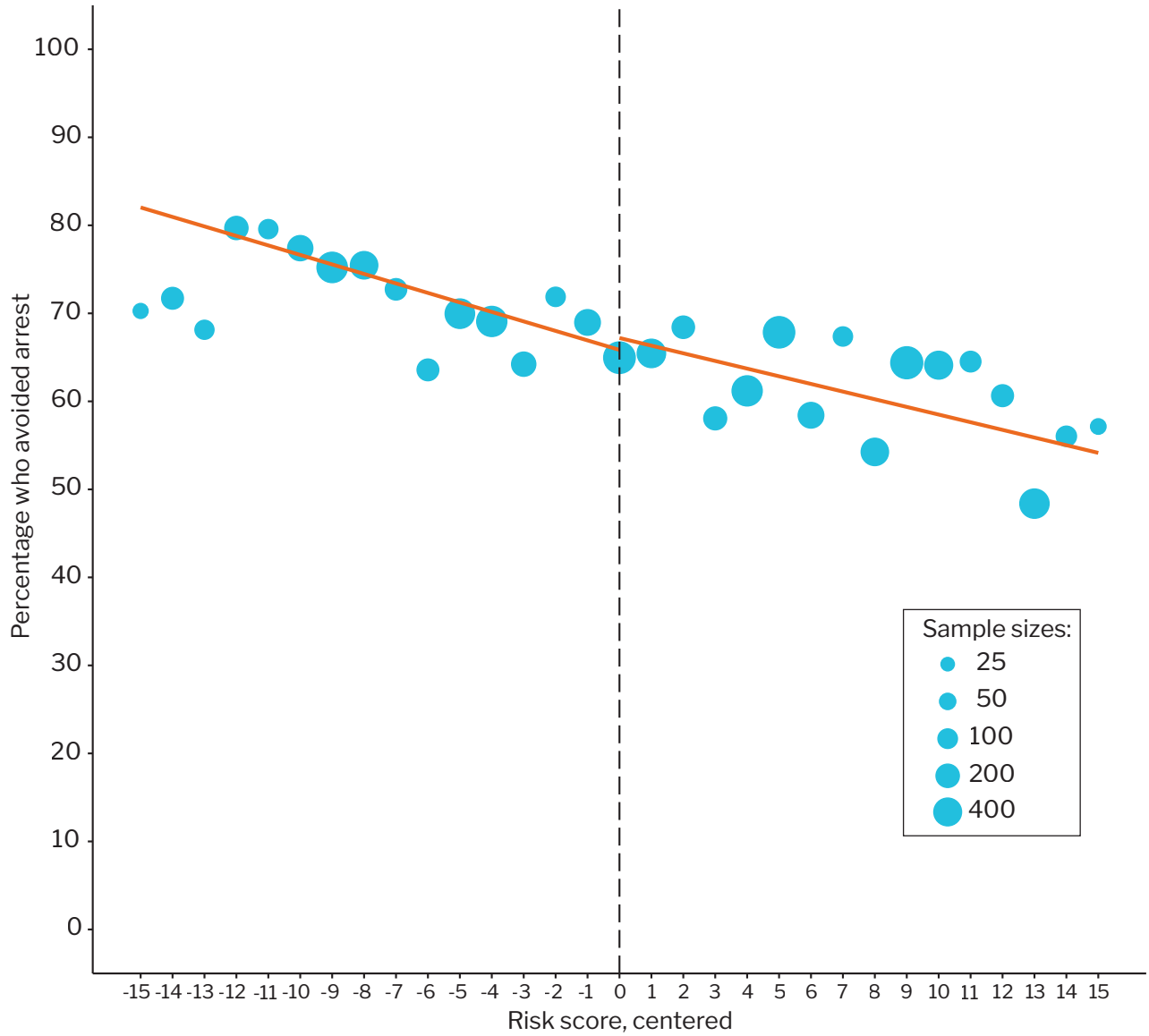
SOURCE: MDRC calculations based on court and pretrial services data from each site.

APPENDIX FIGURE A.5
Making All Court Appearances, Among Those Released:
Low-Intensity Group Versus Medium-Intensity Group



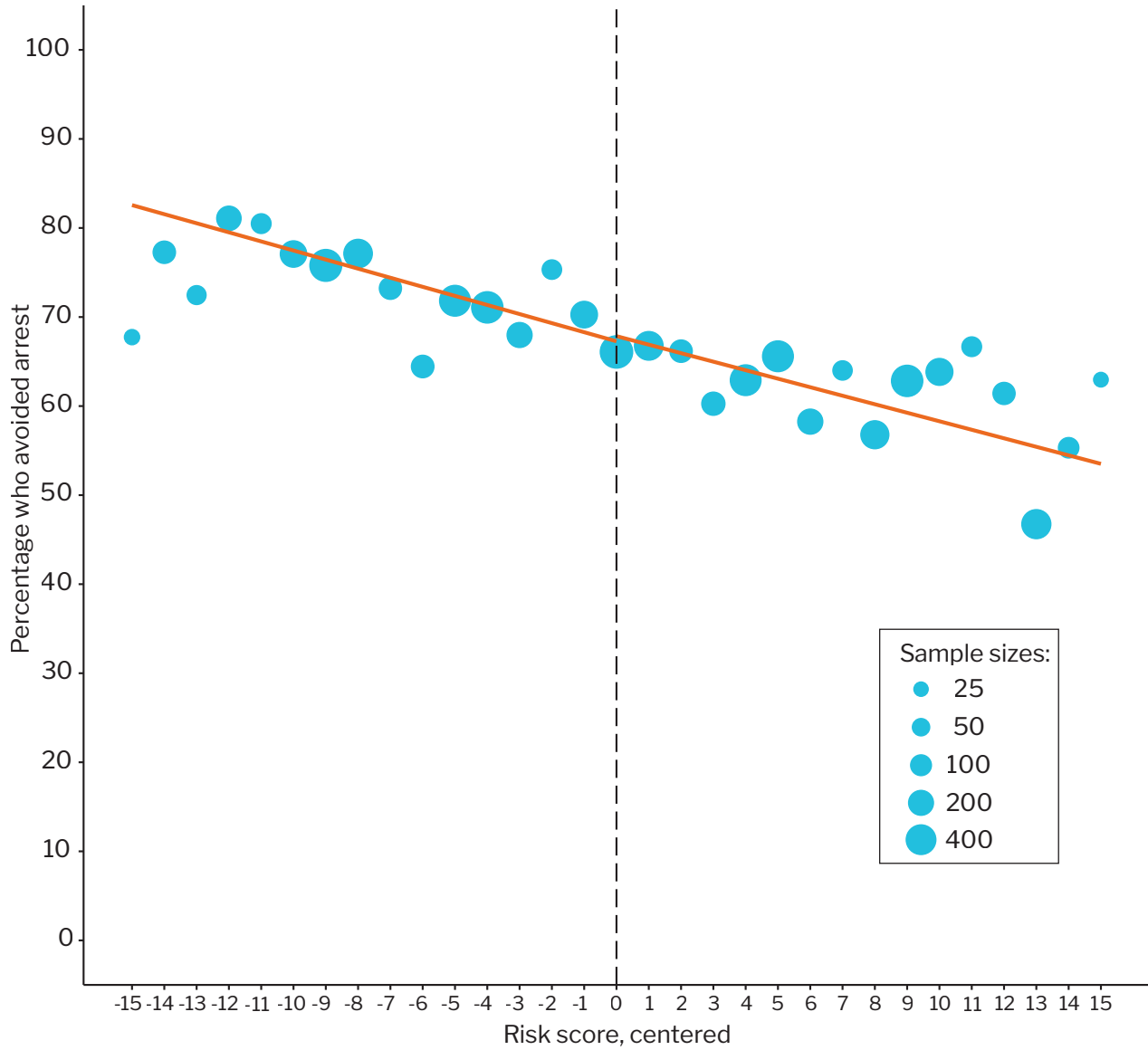
SOURCE: MDRC calculations based on court and pretrial services data from each site.

APPENDIX FIGURE A.6
Avoiding Arrest: Low-Intensity Group Versus Medium-Intensity Group



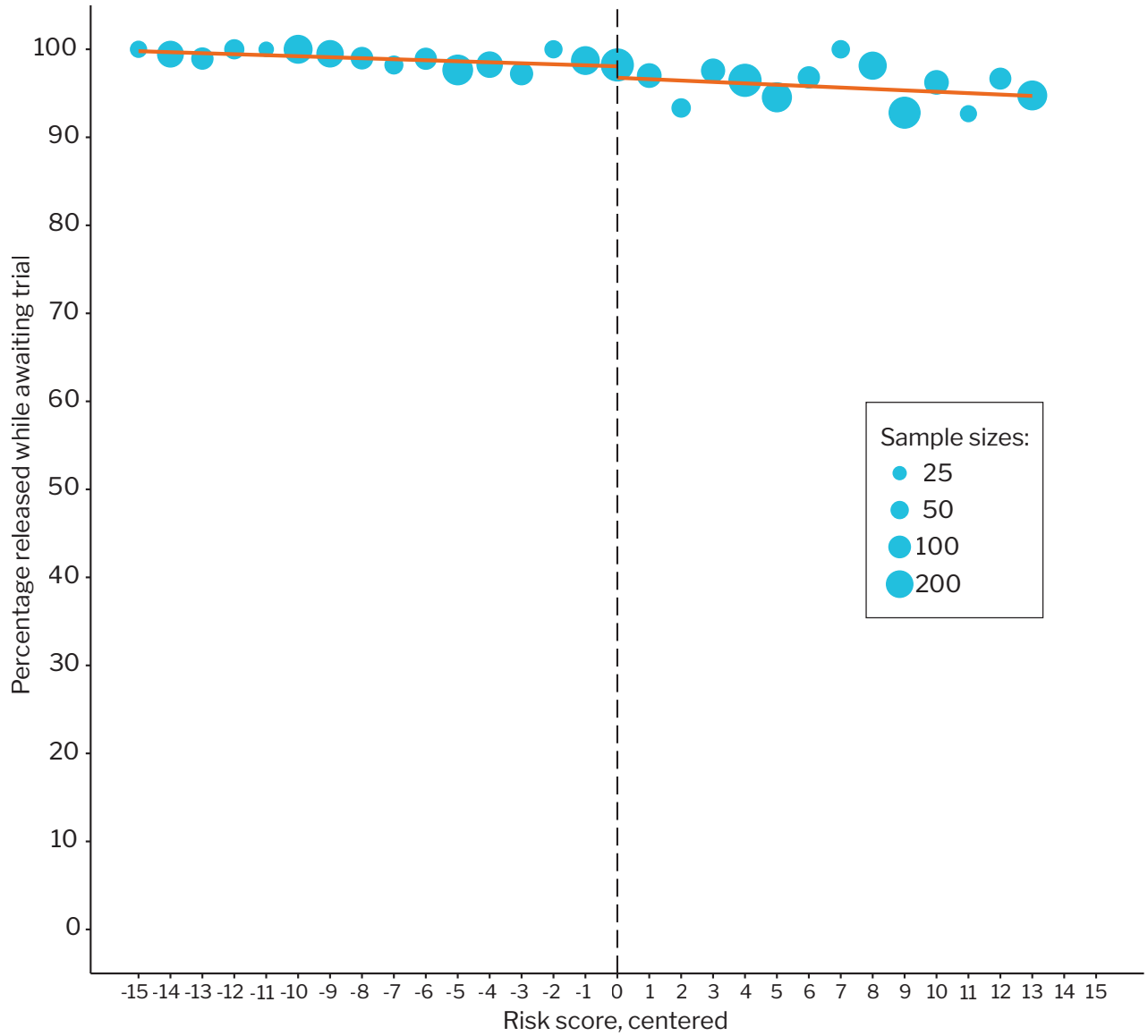
SOURCE: MDRC calculations based on court and pretrial services data from each site.

APPENDIX FIGURE A.7
Avoiding Arrest, Among Those Released: Low-Intensity Group
Versus Medium-Intensity Group



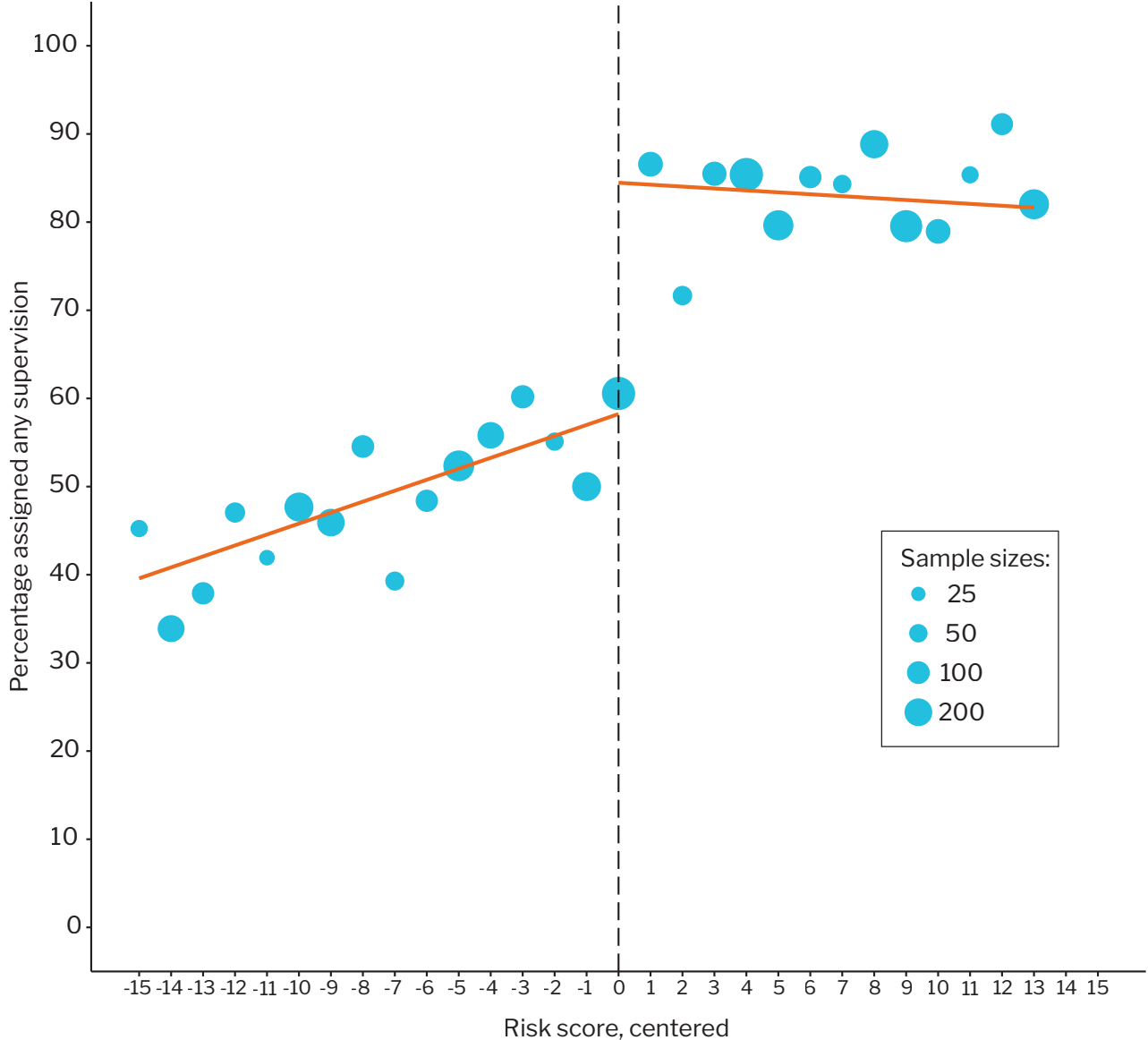
SOURCE: MDRC calculations based on court and pretrial services data from each site.

APPENDIX FIGURE A.8
Percentages Released While Awaiting Trial: No Supervision Group
Versus Low-Intensity Group



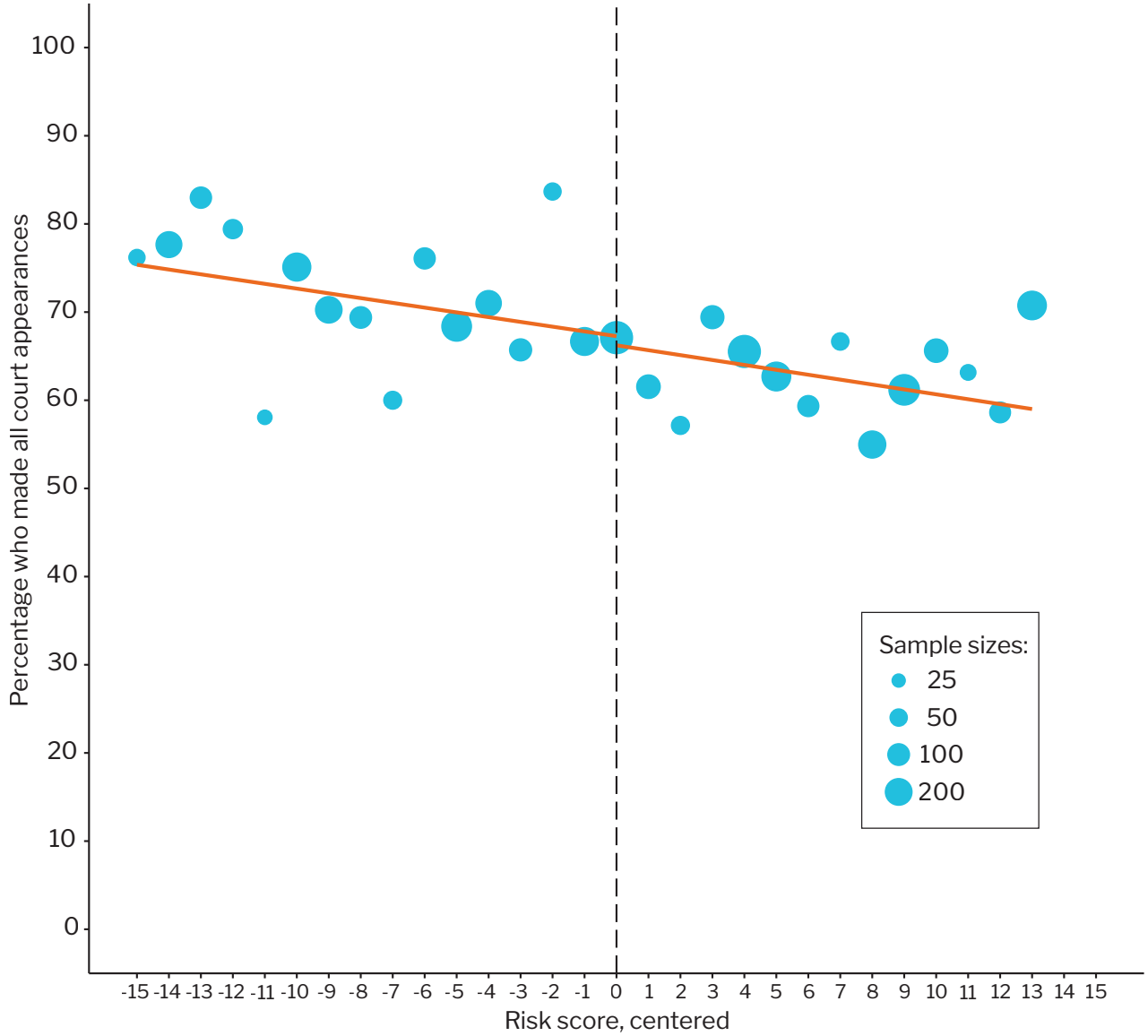
SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

APPENDIX FIGURE A.9
Assignment to Any Pretrial Supervision: No Supervision Group
Versus Low-Intensity Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

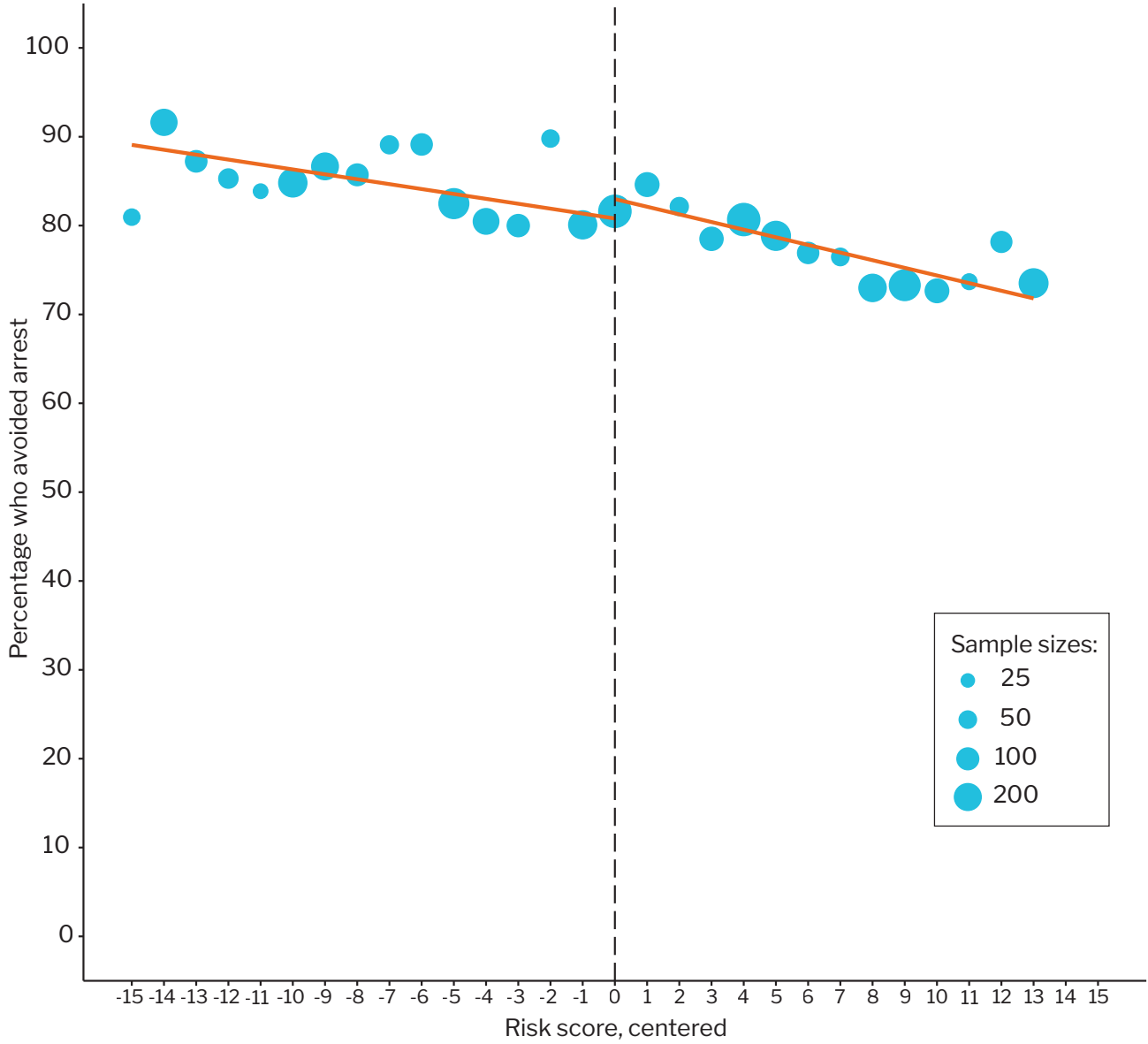
APPENDIX FIGURE A.10
Making All Court Appearances, Among Those Released:
No Supervision Group Versus Low-Intensity Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

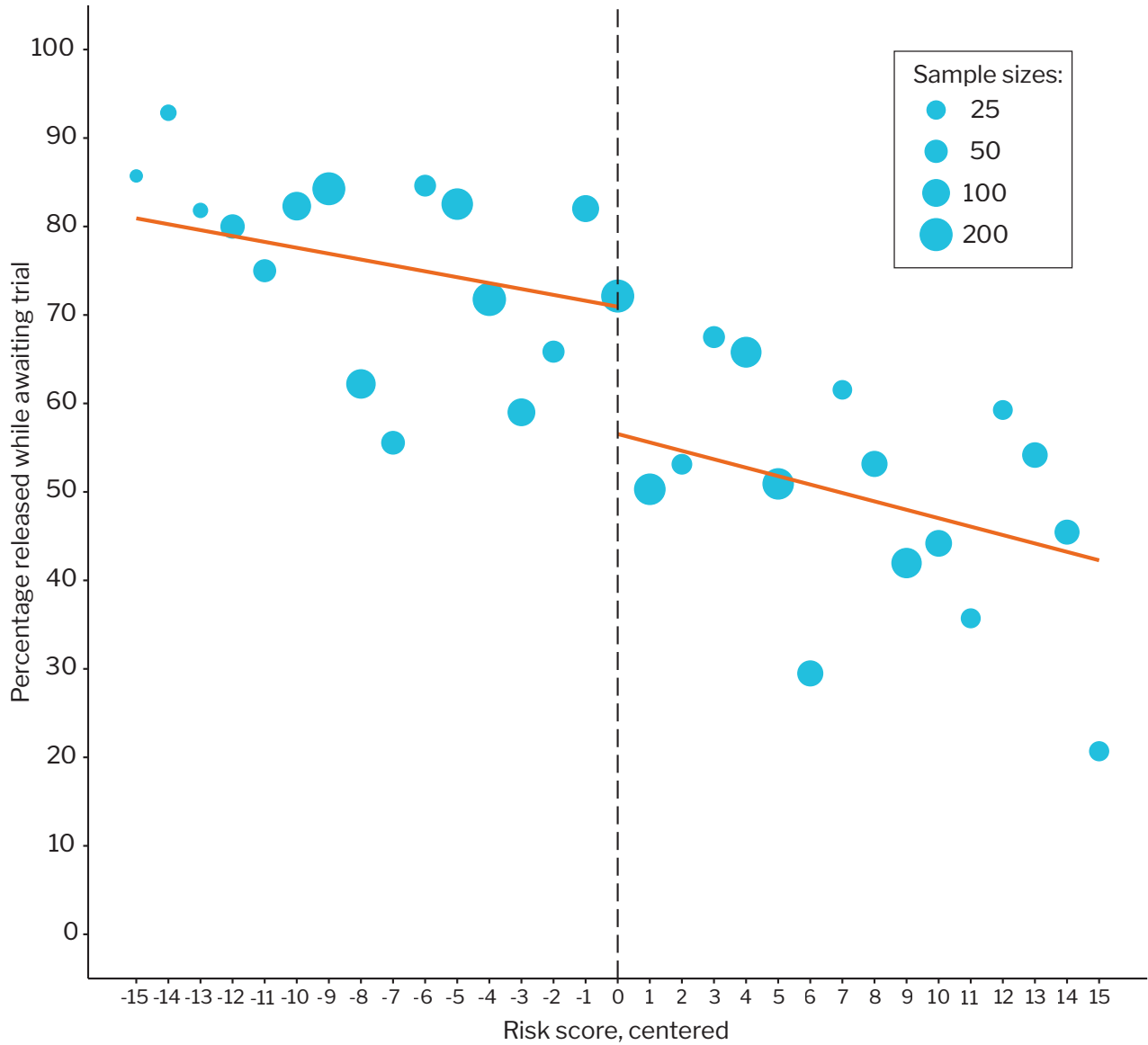
APPENDIX FIGURE A.11

Avoiding Arrest, Among Those Released: No Supervision Group Versus Low-Intensity Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

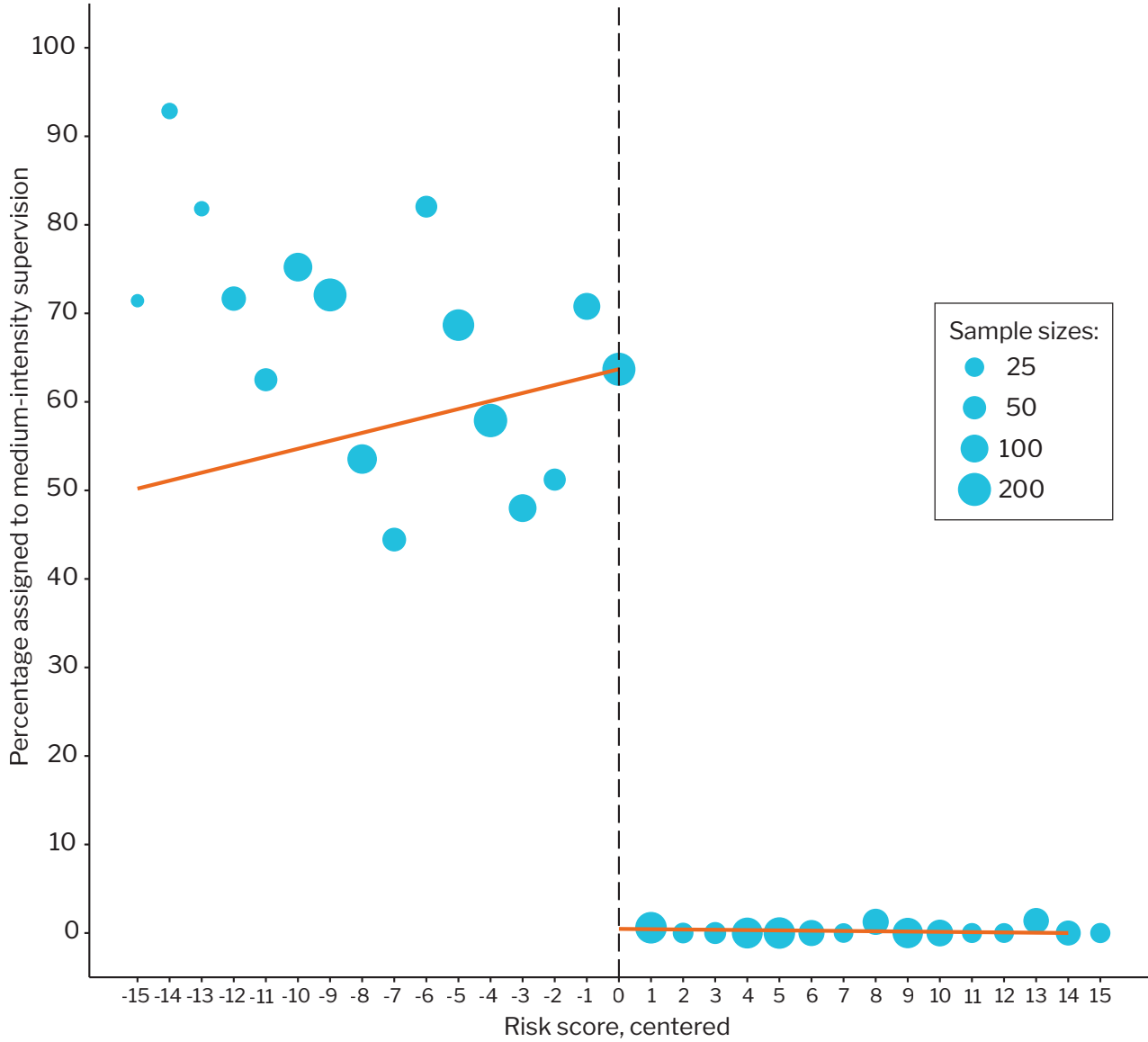
APPENDIX FIGURE A.12
Percentages Released While Awaiting Trial: Medium-Intensity Group
Versus High-Intensity Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

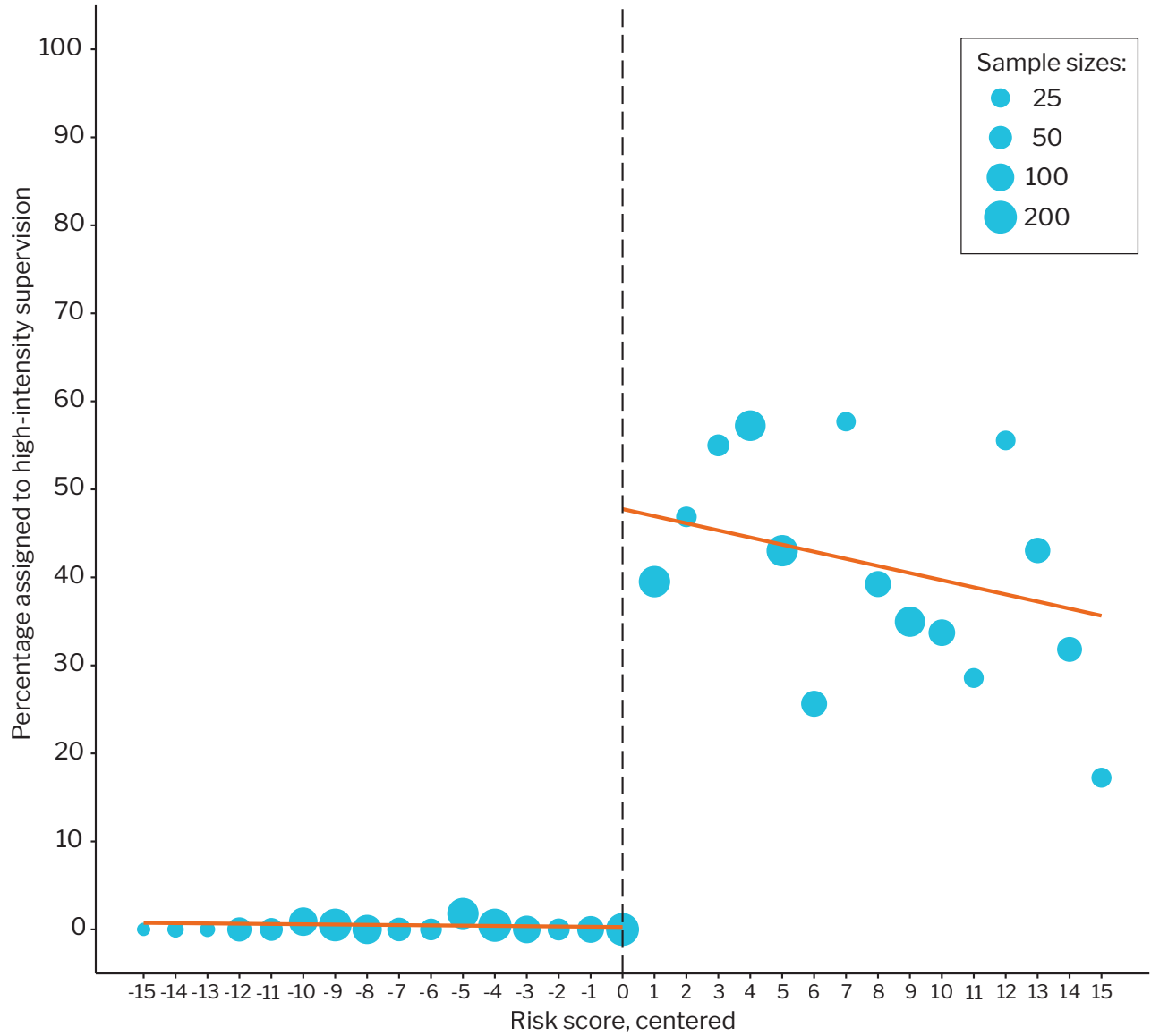
APPENDIX FIGURE A.13

Assignment to Medium-Intensity Supervision: Medium-Intensity Group Versus High-Intensity Group



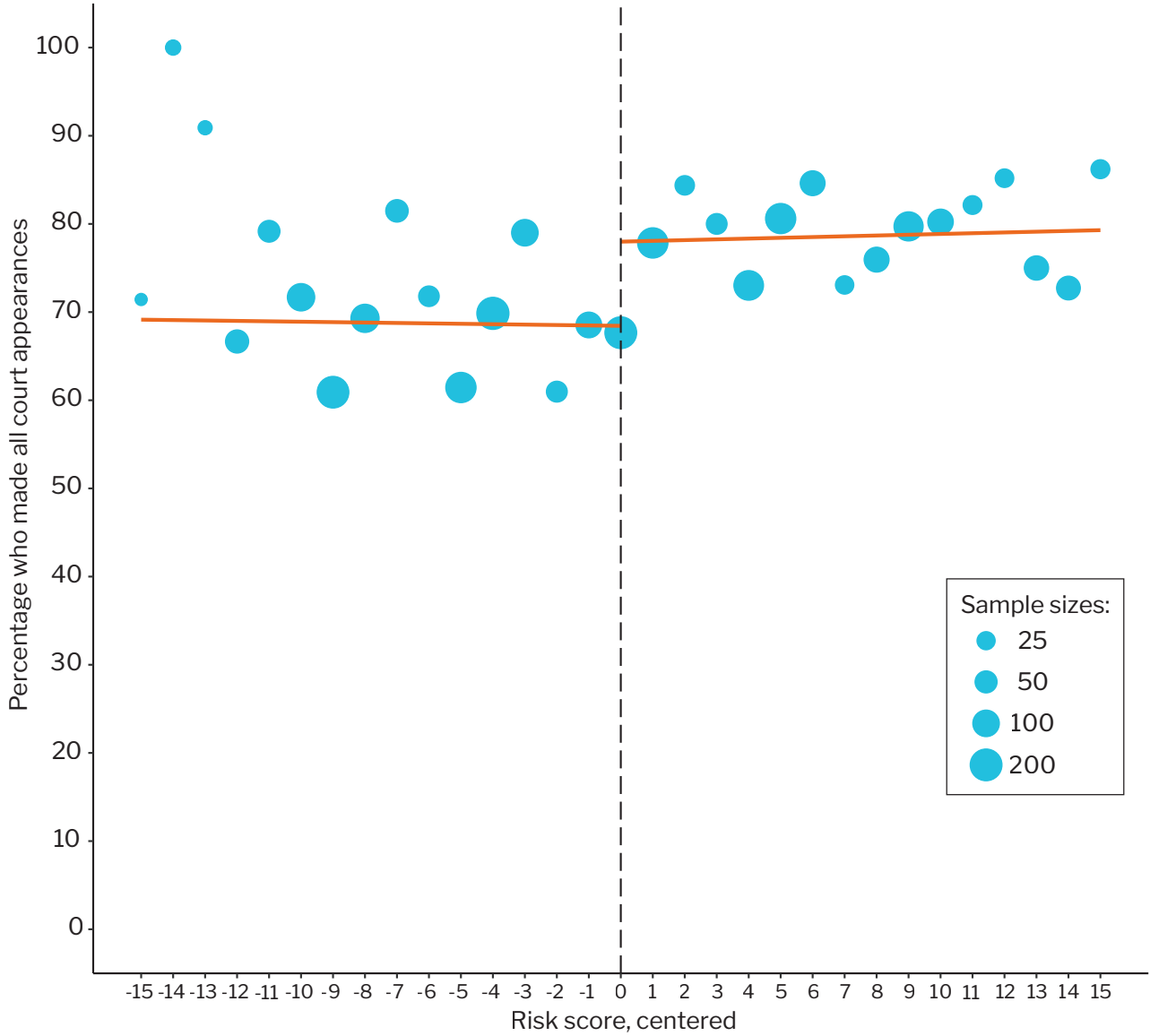
SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

APPENDIX FIGURE A.14
Assignment to High-Intensity Supervision: Medium-Intensity Group
Versus High-Intensity Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

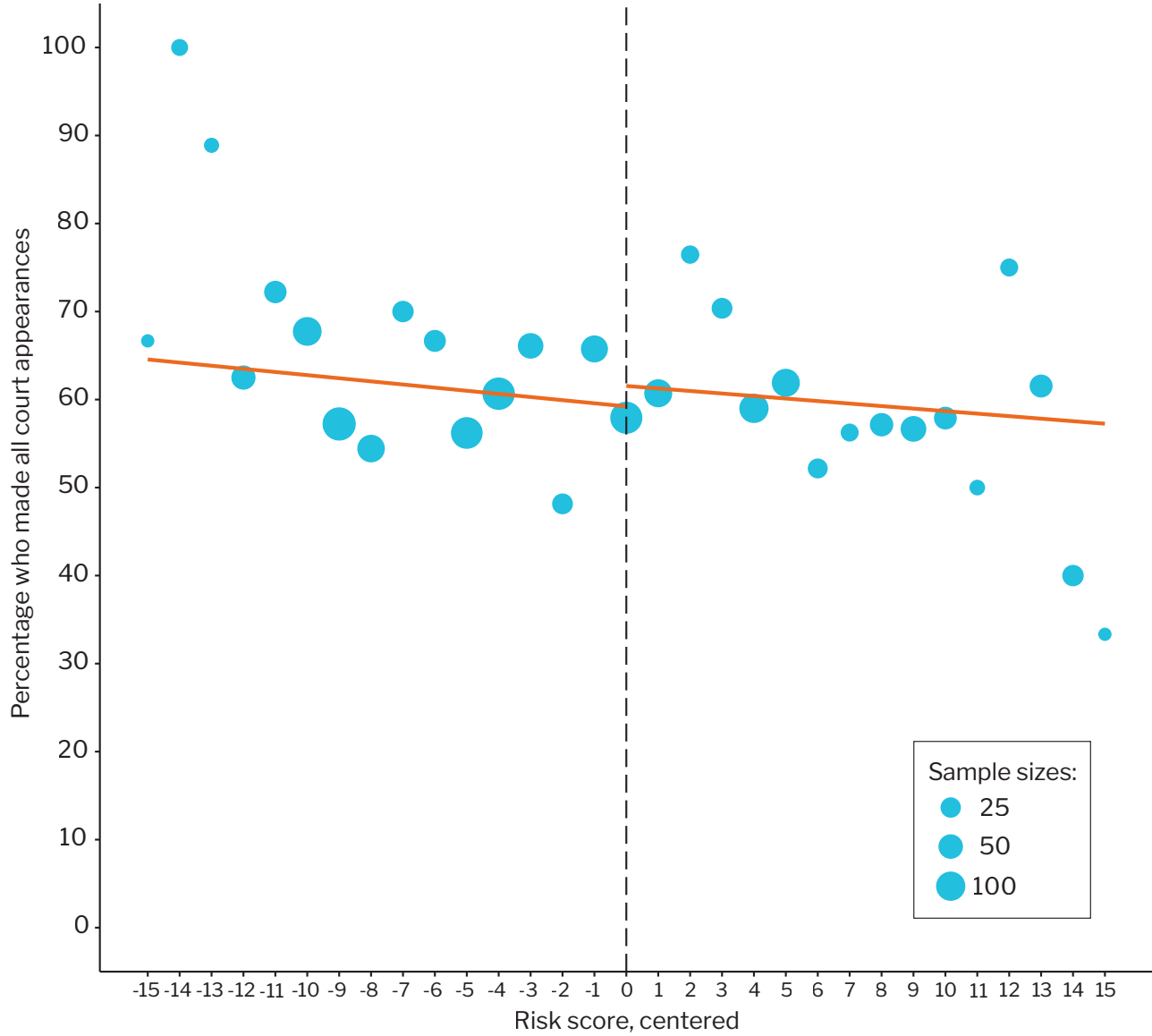
APPENDIX FIGURE A.15
Making All Court Appearances: Medium-Intensity Group
Versus High-Intensity Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

APPENDIX FIGURE A.16

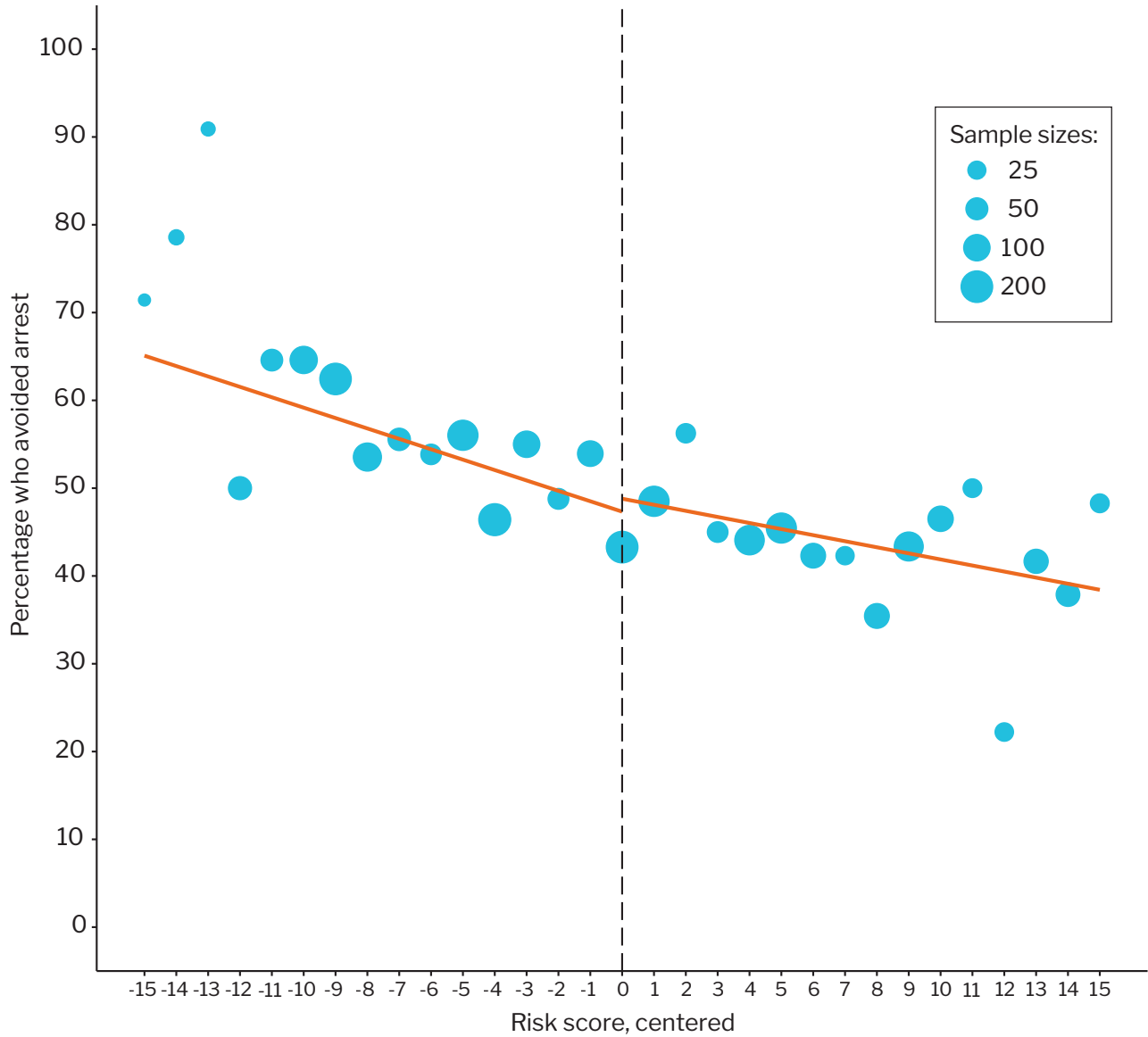
**Making All Court Appearances, Among Those Released:
Medium-Intensity Group Versus High-Intensity Group**



SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

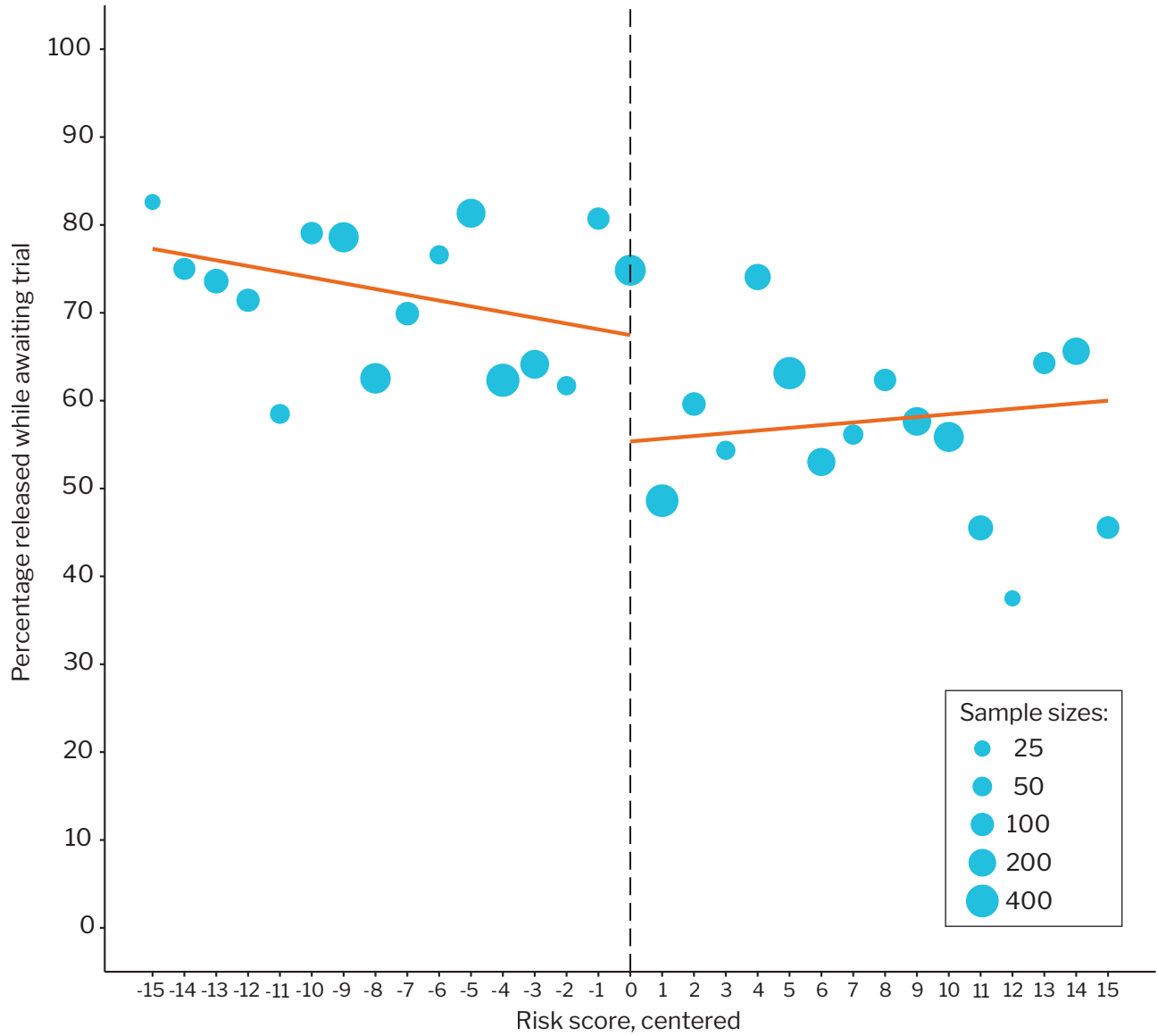
APPENDIX FIGURE A.17

Avoiding Arrest: Medium-Intensity Group Versus High-Intensity Group



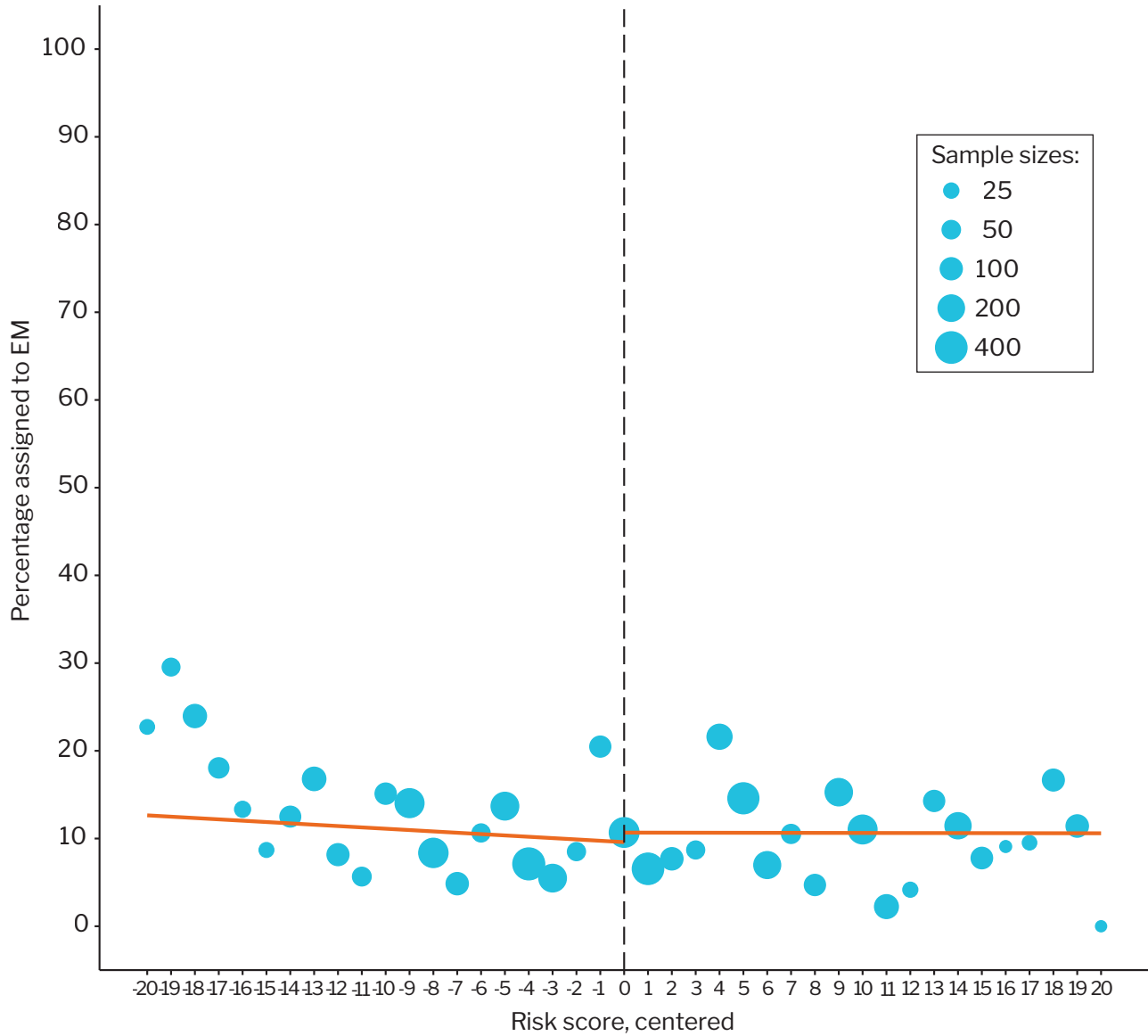
SOURCE: MDRC calculations based on court and pretrial services data from Site 2.

APPENDIX FIGURE A.18
Percentages Released While Awaiting Trial:
Medium-Intensity Group Versus EM Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

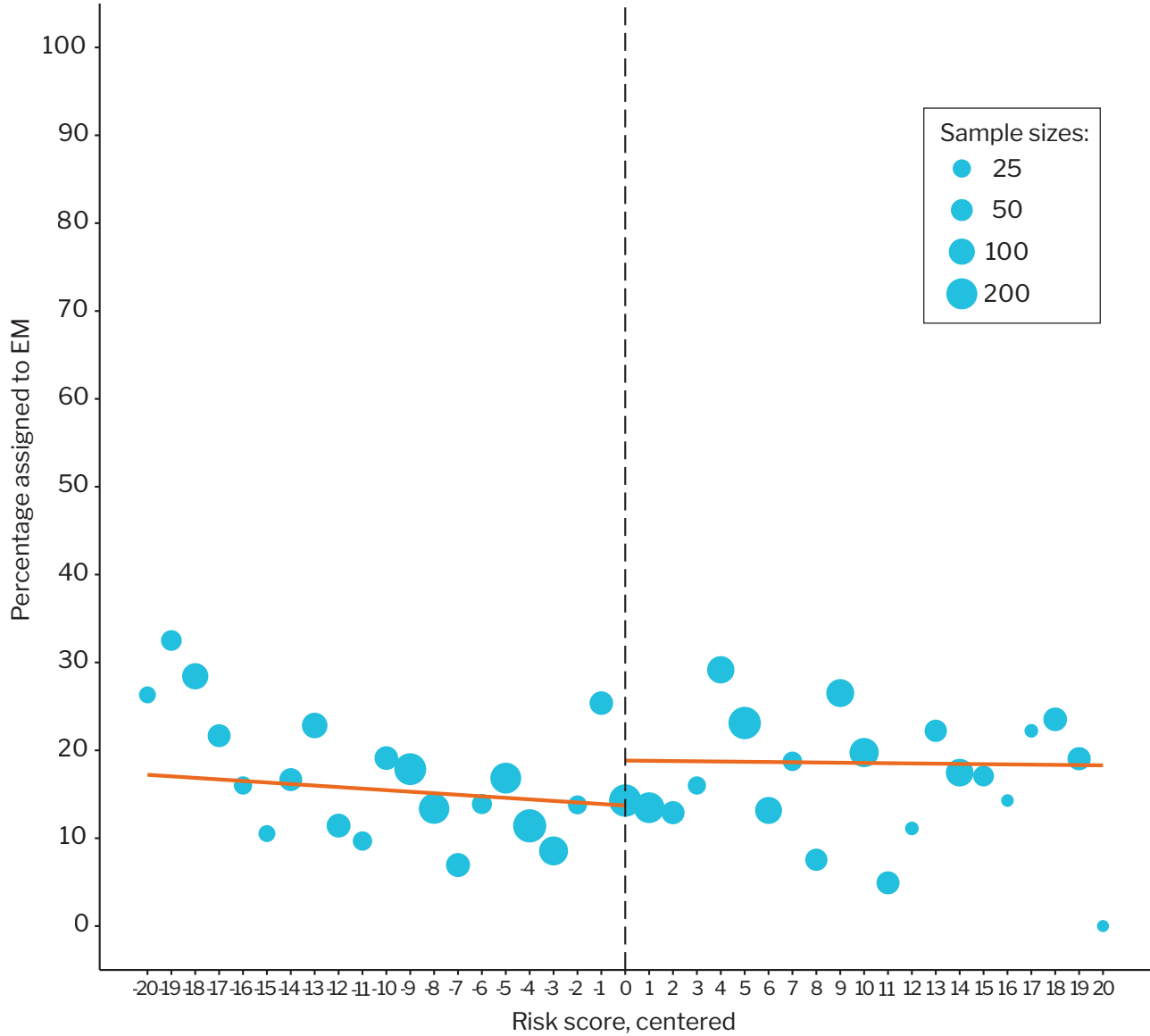
APPENDIX FIGURE A.19
Assignment to Electronic Monitoring:
Medium-Intensity Group Versus EM Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

APPENDIX FIGURE A.20

Assignment to Electronic Monitoring, Among Those Released: Medium-Intensity Group Versus EM Group



SOURCE: MDRC calculations based on court and pretrial services data from Site 1.

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ABOUT MDRC

MDRC, a nonprofit, nonpartisan social and education policy research organization, is committed to finding solutions to some of the most difficult problems facing the nation. We aim to reduce poverty and bolster economic mobility; improve early child development, public education, and pathways from high school to college completion and careers; and reduce inequities in the criminal justice system. Our partners include public agencies and school systems, nonprofit and community-based organizations, private philanthropies, and others who are creating opportunity for individuals, families, and communities.

Founded in 1974, MDRC builds and applies evidence about changes in policy and practice that can improve the well-being of people who are economically disadvantaged. In service of this goal, we work alongside our programmatic partners and the people they serve to identify and design more effective and equitable approaches. We work with them to strengthen the impact of those approaches. And we work with them to evaluate policies or practices using the highest research standards. Our staff members have an unusual combination of research and organizational experience, with expertise in the latest qualitative and quantitative research methods, data science, behavioral science, culturally responsive practices, and collaborative design and program improvement processes. To disseminate what we learn, we actively engage with policymakers, practitioners, public and private funders, and others to apply the best evidence available to the decisions they are making.

MDRC works in almost every state and all the nation's largest cities, with offices in New York City; Oakland, California; Washington, DC; and Los Angeles.