



Denver Housing to Health Project Housing Stability Payment Outcomes

Report to the H2H Governance Committee

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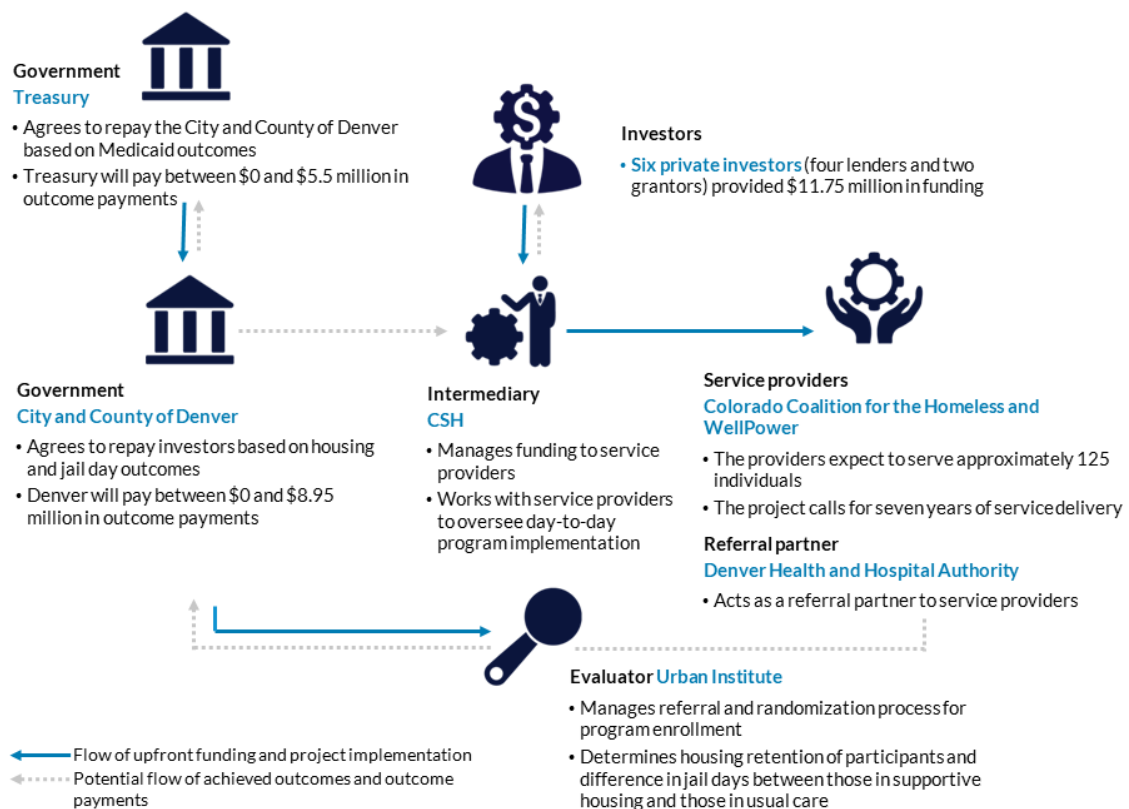
In July 2022, the City and County of Denver, four private investors, two grantors, and the US Treasury Department (Treasury) launched the Denver Housing to Health project, a pay for success project through the Treasury’s Social Impact Partnerships to Pay for Results Act (SIPPRA) program. The project represents an \$11,750,000 investment to fund a seven-year supportive housing program with 125 units for people experiencing homelessness who have frequent interactions with both the criminal legal system and emergency health care services. The city will make outcome payments to investors based on the project’s goals of housing stability and decreased jail days. Treasury will make payments at the end of the project based on net reductions in Medicaid expenditures for program participants, as measured by a randomized controlled trial evaluation. This report details the first assessment of housing stability payment outcomes over the first six project quarters.

The Denver Housing to Health (H2H) Pay for Success project provides supportive housing for individuals at the intersection of multiple public systems—those who are experiencing homelessness; have a record of at least eight arrests, at least three of which are marked as transient, over three years in Denver County; have a recent Denver Police Department contact; and are at high risk for avoidable and high-cost health services paid through Medicaid, including services received at Denver Health and Hospital Authority (Denver Health). The project is modeled after the Denver Supportive Housing Social Impact Bond Initiative (Denver SIB), a supportive housing program designed to serve a population experiencing homelessness that also experiences a disproportionate share of arrests and jail stays for

offenses associated with the experience of homelessness. In addition to improving housing stability and reducing jail stays, the evaluation of the Denver SIB found that the intervention had an impact on health care use by increasing office-based care and prescription medications and lowering the number of emergency department visits. These shifts in health care services could result in a net reduction in Medicaid and Medicare expenditures, which are largely paid by the federal government. By scaling supportive housing for people at high risk of emergency health care services, the H2H project will deliver long-term, rigorous evidence of the impact on housing stability, days in jail, and health care utilization and cost.

H2H is one of the first four projects under the federal Social Impact Partnerships to Pay for Results Act program (SIPRA).¹ It was executed in June 2022 through a partnership agreement between the City of Denver and an intermediary managed by the Corporation for Supportive Housing.² The H2H project structure is illustrated in figure 1.

FIGURE 1
Denver Supportive Housing Social Impact Bond Initiative Framework



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Source: Adapted from the Urban Institute Pay for Success Initiative and “GAO Pay for Success: An Overview from GAO-15-646,” US Government Accountability Office, accessed April 26, 2024, <https://www.gao.gov/assets/680/672446.pdf>.

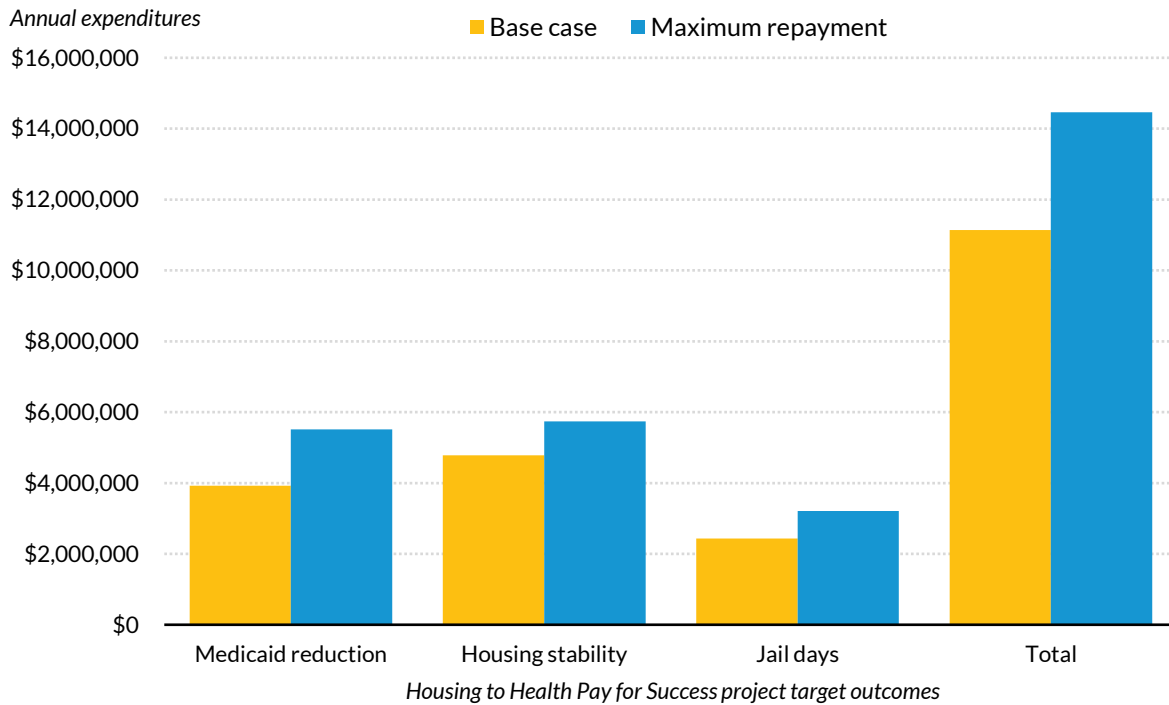
Financial Model

For the H2H project, four lenders and two grantors provided private investment, with additional funds leveraged through Medicaid reimbursement and federal, state, and local housing resources. The four H2H lenders are Northern Trust, the Denver Foundation, Gary Community Ventures, and the Colorado Access Foundation. These lenders invested a total of \$10,250,000 in the project and will all be eligible to receive success payments across the three primary outcomes. The two H2H grantors—Kaiser Permanente Foundation and the Colorado Trust—provided an additional \$1,500,000 in funding to lower the cost of the overall transaction and do not expect to receive repayment for their investment.

The financial model for the H2H project includes both the maximum payment across the three outcomes and base case assumptions about how many participants would remain housed, how many days participants would be in jail, and the impact of housing on Medicaid expenditures. If the evaluation shows that the project achieved its performance targets for housing stability and reduction in jails days, the City of Denver will repay the private investors. And, under the SIPPR program, the US Department of Treasury will pay the City of Denver based on the net reduction in Medicaid expenditures for program participants, as measured by the experimental evaluation.

Based on the outcomes of the Denver SIB, the H2H base case payment assumed the project would achieve 83 percent housing stability, 34 percent reduction in jail days, and \$6,188 reduction in Medicaid expenditures annually, per person. Achieving base case outcomes would result in a total repayment of \$11,136,302 (a return of about \$1 million), with a maximum payment of \$14,463,000 if the project exceeds projected outcomes (a return of about \$4 million, see figure 2). Comparing actual success payments to projected success payments provides an opportunity to assess the project's progress toward meeting its goals to increase housing stability and reduce days in jail and Medicaid expenditures.

FIGURE 2
Denver Housing to Health Financial Model
Base case and maximum repayment



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Source: Authors' analysis.

Housing Stability Payment Outcomes

As specified in the partnership agreement, housing stability outcomes are based on a measure of total adjusted days in housing. This measure included participants who remained in housing for at least 365 days without any periods away from housing for greater than 120 consecutive days or who had a planned exit from housing at any point).³ The days participants spent in jail were also subtracted from the total days in housing. The remaining total adjusted days in housing were multiplied by \$19.25/day, as specified in the H2H partnership agreement, to calculate the first success payment from the city (box 1). Housing stability outcomes will be measured every year for the next five and a half years and may change as more participants are engaged in the program.

BOX 1

Housing Stability Payment Calculation

Total adjusted days in housing * \$19.25 = total housing stability payment for participants meeting payment requirements

Note: Total adjusted days in housing is equal to “number of days in housing” minus “number of days in jail”

Source: Calculation of the housing stability success payment is detailed in Article 4, Section 4.02 of the Denver Housing to Health Pay For Success Social Impact Bond Partnership Agreement dated June 2022.

In accordance with the H2H partnership agreement, housing stability outcomes were observed for the first six quarters of the project, from July 1, 2022, through December 31, 2023, for participants in supportive housing who met the payment requirements. Overall, 69 participants met the payment requirement, 59 of whom remained in housing for a full year. Another 9 passed away and 1 entered a residential treatment program; these are considered planned exits per the partnership agreement terms and do not have a negative impact on the payment. Together these participants spent 30,286 days in housing. After subtracting the days participants were in jail (827 days), the project achieved 29,459 total adjusted days in housing (table 1). This outcome calls for a payment of just over \$567,085.75 from the City of Denver. This initial payment exceeds the base case for the first housing stability payment and may be a promising indicator of investor repayment. To provide context for this outcome, we examined several factors that affected the project’s housing stability success payment including progress toward housing targets, housing retention and exits, jail stays, and progress toward housing stability goals.

TABLE 1

Housing Stability Outcomes in the Denver Housing to Health Pay for Success Project
Project quarters one through six (July 1, 2022, to December 31, 2023)

	Count
number of participants meeting payment requirement	69
number of participants who remained in housing for 365 days	59
number of participants with planned exit event	10
A. total days in housing for participants meeting payment requirements	30,286
B. minus total days in jail during the payment period (7/1/2022–12/31/2023)	(827)
C. total adjusted days in housing for participants meeting payment requirement (C=A–B)	29,459
total projected payment for participants meeting payment requirement (\$19.25/day)	\$567,085.75

Sources: Days in housing and exit data are based on Colorado Coalition for the Homeless and WellPower program data from July 1, 2022, through December 31, 2023. Jail data are from the Denver Sheriff Department and do not include days spent in prisons or any jails outside Denver.

Notes: One individual who remained in housing for 365 days had a planned exit after the 365th day.

Progress toward Housing Targets

The H2H partnership agreement outlined a housing plan that detailed how many individuals would enter housing each month. This housing plan informed the financial model and expected housing stability payments. Table 2 shows the housing plans from July 2022 to December 2022, the period during which individuals could meet the payment requirements for the first housing stability payment outcomes. Per the original targets, the project had 77 percent of planned participants in housing by the end of December 2022 (table 2).

TABLE 2

Progress toward the Housing to Health Cumulative Housing Plan

	Housed participants (cumulative)	Original housing plan (cumulative)	Progress toward housing plan
July 2022	29	0	n/a
August 2022	40	0	n/a
September 2022	53	0	n/a
October 2022	66	0	n/a
November 2022	76	68	112%
December 2022	81	76	107%
January 2023	88	88	100%
February 2023	93	100	93%
March 2023	99	112	88%
April 2023	104	116	90%
May 2023	106	120	88%
June 2023	111	125	89%

Sources: Number of housed participants come from the Colorado Coalition for the Homeless and WellPower program data from July 1, 2022, to December 31, 2023. The original housing plan comes from the Denver Housing to Health Pay For Success Social Impact Bond Partnership Agreement dated June 2022.

Housing Retention and Exits

Most participants who entered housing in the first six months of the project successfully retained their housing. By December 31, 2023, the end of the observation period for the first housing stability payment outcomes, 59 participants remained stably housed for one year or more, spending an average of 488 days in housing, or about 16 months.

Some participants exited housing for planned or unplanned reasons. This categorization of exits recognizes that some exits may be intentional and positive, such as a move to other permanent housing. Deaths were also categorized as planned exits so as not to penalize provider performance given the medical vulnerability of program participants. Unplanned exits included jail stays of more than 120 days and any other interruption that caused the participant to be out of housing for more than 120 days. Unplanned exits are tracked to measure project performance, but these participants can reengage with the program and reenter housing at any time.

By December 31, 2023, ten participants had a planned exit before the end of their first year in housing. One of them had a planned exit because they entered a residential treatment program. The remaining nine planned exits were participant deaths. These participants spent an average of 152 days and a median of 181 days, or about six months, in housing before their planned exit (table 3).

TABLE 3

Days in Housing among Participants Meeting Housing Stability Payment Requirements

	All eligible	Housed for 365 days	Planned exits
Sample	69	59	10
Mean days in housing	439	488	152
Median days in housing	467	488	180.5

Sources: Days in housing and exit data come from the Colorado Coalition for the Homeless and WellPower program data from July 1, 2022, to December 31, 2023. Days in housing prior to July 1, 2022, are excluded from the analysis.

Notes: Days in housing is calculated as the number of days participants were in housing as of January 1, 2024. Jail stays have not been deducted from the days in housing calculation. “Stably housed for 365 days” includes any participants who maintained housing for one year without an exit of more than 120 days. “Planned exits” includes any individual who entered housing before January 1, 2024, and who had a planned exit. Planned exits meet housing stability payment requirements and include death and exit to other permanent housing, long-term residential treatment, or incarceration for actions solely occurring before referral.

Jail Stays

Following the partnership agreement, days participants were in jail while in H2H housing were subtracted from housing stability days for the payment outcome. Of the 69 participants who met the housing stability payment requirements, 58 percent had not been in jail at all during their time in housing (table 4). Most participants who had any jail stays during their time in housing had only one stay with an average of 29 days in jail and a median of five days in jail. These participants had been in housing for an average of 165 days, or about five months, before their first jail stay.

TABLE 4

Jail Stays among Participants Meeting Housing Stability Payment Requirements

	All Eligible		Remained in Housing for 365 Days		Planned Exits	
	N	Share/ mean	N	Share/ mean	N	Share/ mean
No jail stays	40	58%	32	54%	8	80%
Any jail stays	29	42%	27	46%	2	20%
1 stay	14	20%	13	22%	1	10%
2 stays	7	10%	6	10%	1	10%
3 stays	2	3%	2	3%	0	0%
4+ stays	6	9%	6	10%	0	0%
Mean days in jail		29		29		25
Median days in jail		5		5		25
Mean days in housing before first jail stay		165		173		60
Total	69		59		10	

Source: Jail data are from the Denver Sherriff's Department and do not include days spent in prison or any jails outside of Denver.

Notes: Jail stays are calculated as the number of times participants were booked into jail while in housing before January 1, 2024.

Days in jail is calculated as the total number of days an individual spent in jail while in housing before January 1, 2024. Jail data cover July 1, 2022, to January 1, 2024. This table includes only jail stays and days in jail that occurred after the project start period and while the participant was in housing.

Appendix A: Methods

The housing stability calculations use data from the Denver Sheriff Department on jail stays and data from H2H providers at Colorado Coalition for the Homeless and WellPower on housing entries and exits. Data from Denver Sheriff Department include the booking start and end dates for all jail stays from August 11, 2011, to January 1, 2024, for all participants referred to the H2H program by January 1, 2024. Data from Colorado Coalition for the Homeless and WellPower included information on the dates of housing and dates of housing exits from March 1, 2022, to January 1, 2024.

Participants are determined to have met the housing stability payment requirement if they remained in housing for 365 or more days without an absence from housing for more than 120 days or if they have a planned exit at any time after entering housing. For those meeting the housing stability payment requirement, days in housing are calculated as the last day in housing or January 1, 2024 (whichever comes first), minus the date of housing or July 1, 2022 (whichever comes last).

Days in jail during the payment period are calculated as the booking end date, the participant's housing exit date, or January 1, 2024 (whichever comes first), minus the booking start date or July 1, 2022 (whichever comes last; note that a participant cannot be counted as entering H2H housing while booked in jail). Jail days were only included if they took place during the time the participant was in housing from the project start on July 1, 2022, to January 1, 2024. One day was added to days in housing and days in jail, so that both the first day and last day were counted. Days in housing and days in jail were calculated at the participant level and then summed for all participants meeting the housing

stability payment requirement. Total adjusted days in housing were then calculated by taking the total days in housing and subtracting the total time in jail.

Notes

- ¹ More info on SIPPPRA can be found at “U.S. Treasury Announces Social Impact Partnership to Pay for Results Act (SIPPPRA) Project Grant for City and County of Denver, Colorado,” US Department of the Treasury, September 14, 2021, <https://home.treasury.gov/news/press-releases/jy0353>.
- ² This entity is known as the Intermediary SPV controlled by the Corporation for Supportive Housing and manages the funding and fidelity of implementation to the partnership agreement.
- ³ Adjusted days in housing and exits are defined in Article 4, Section 4.02 “Housing Stability Success Payments Calculation and Payment” of the partnership agreement. Some participants entered housing prior to the project start date of July 1, 2022. Days in housing prior to project start were not included in the total adjusted days in housing for the first payment, but those days were counted when determining if the participant achieved at least one year in housing.

About the Authors

Devlin Hanson is a principal research associate in the Center on Labor, Human Services, and Population at the Urban Institute. She is a labor economist specializing in rigorous impact evaluations whose research focuses on housing and child welfare. She is coprincipal investigator for the Denver Housing to Health evaluation, and she led the impact study of the Denver Supportive Housing Social Impact Bond Initiative. She also leads a multisite randomized controlled trial of housing vouchers for homeless families involved in child welfare.

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