Research Report

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Evaluation of Pima County's Bureau of Justice Assistance Fiscal Year 2021 Second Chance Act Pay for Success Initiative

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About This Report

This report presents RAND's evaluation of Pima County's Bureau of Justice Assistance fiscal year 2021 Second Chance Act Pay for Success Initiative (SCA-PFS), a permanent supportive housing program that aims to address the interconnected challenges of homelessness, behavioral health conditions, and repeated incarceration in Pima County. The evaluation builds on lessons from RAND's 2019–2021 pilot study and examines the program's evolution under a performance-based contracting model supported by the Bureau of Justice Assistance.

In this report, we assess the current implementation of Pima SCA-PFS and lay the groundwork for future impact analysis. The report is organized around the following five core analytic tasks:

- developing a logic model to capture program operations and expected outcomes
- generating descriptive statistics on referrals, enrollments, and exits
- identifying viable research designs for future causal impact estimation
- estimating program need using criminal justice, homelessness, and health data
- reviewing current performance metrics in light of national pay for success and supportive housing literature.

We drew on linked administrative data from multiple county agencies and program partners, enabling detailed analysis of participant characteristics, service use, and outcomes. Although the report highlights promising reductions in criminal justice involvement and associated costs among participants, it also identifies ongoing challenges related to housing access, system bottlenecks (such as limited affordable housing and voucher freezes), and data integration. We provide recommendations to strengthen future evaluation rigor, refine performance metrics, and improve cross-system collaboration.

We recommend strengthening future evaluation rigor by adopting quasi-experimental or randomized designs that use individuals who are waitlisted for housing as a comparison group. We also suggest refining performance metrics to include additional indicators, such as emergency room visits, employment status, and behavioral health engagement. To further support program improvement, we highlight the importance of enhancing real-time data linkage between justice, housing, and health systems. We intend for this work to inform Pima County's program management, policy development, and future research efforts that are aimed at improving outcomes for justice-involved individuals experiencing homelessness, as well as to offer insights for similar initiatives elsewhere.

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Summary

Pima County's Bureau of Justice Assistance fiscal year 2021 Second Chance Act Pay for Success Initiative (SCA-PFS) is a permanent supportive housing initiative that targets individuals experiencing homelessness, behavioral health challenges, and frequent involvement with the criminal justice system. Pima SCA-PFS responds to persistent local needs and builds on a successful pilot by leveraging cross-agency partnerships and a performance-based contracting model to deliver housing and wraparound services to a high-need population. The program's design emphasizes individualized case management, strong collaboration with landlords and health providers, and ongoing monitoring of participant outcomes. This report presents RAND's evaluation of Pima SCA-PFS, providing a detailed assessment of program implementation, participant outcomes, and system-level challenges. We also offer recommendations to support future program improvement and evaluation.

Issue

Justice-involved individuals experiencing homelessness and behavioral health challenges are at high risk for repeated incarceration and poor outcomes. In Pima County, Arizona, these overlapping issues have strained public systems. In response, Pima County developed a permanent supportive housing program. In this evaluation, we examine program operations, participant outcomes, ongoing challenges, and data needs.

Approach

We conducted a comprehensive evaluation of Pima SCA-PFS, building on lessons from a RAND study of the 2019–2021 pilot program. We organized the evaluation around five core analytic tasks: developing a logic model to capture program operations and expected outcomes; generating descriptive statistics on referrals, enrollments, and exits; identifying viable research designs for future causal impact estimation; estimating program need using justice, homelessness, and health data; and reviewing current performance metrics in light of national pay for success and supportive housing literature. We drew on linked administrative data from multiple county agencies and program partners, which enabled detailed examination of participant characteristics, service utilization, and outcomes.

Key Findings

The following key findings arose from our evaluation:

- **Program operations and context.** Pima SCA-PFS is an evidence-based program funded by Bureau of Justice Assistance grant funds and supported by local partners. The program features robust intake processes, individualized case management, and strong partnerships with landlords and health care providers. Although program implementers have shown resilience and adaptability, they continue to face external challenges, including Pima County's limited supply of affordable housing, restrictive landlord policies, and administrative barriers, such as voucher freezes.
- **Program need.** The numbers of referrals and eligible Pima County residents continue to outpace the available supply of permanent supportive housing. Between January 1, 2023, and June 30, 2024, approximately 400 to 500 new referrals were reported, and 349 individuals seemed to meet all Pima SCA-PFS eligibility criteria. In contrast, only 43 participants were placed into permanent supportive housing during this period. This persistent gap highlights the importance of improved data integration and need estimation to support effective resource allocation and program planning.
- **Participant outcomes.** Findings show that program participation is associated with substantial reductions in criminal justice involvement and related costs. Among 86 program enrollees who had at least 12 months of pre- and post-enrollment data, the number who experienced criminal justice outcomes fell by 35 percent after enrollment (from 80 percent in the year before enrollment to 52 percent in the year following enrollment), and the total number of criminal justice events dropped by 58 percent (from 443 events to 187 events). Average costs per participant for criminal justice services decreased by 46 percent (from $10,450 to $5,657).
- **Evaluation limitations.** Fewer than half of participants received permanent supportive housing during the evaluation period because of limited voucher availability and other system barriers. As a result, findings related to participant outcomes likely reflect conservative estimates of the program's impact. In addition, reductions in criminal justice involvement and costs are promising but descriptive. The current evaluation design does not establish whether the program had a causal effect; the observed reductions may have been caused by other factors, such as the tendency for adults to become less criminally active over time. Data integration across justice, housing, and health systems remains a challenge that limits the ability to estimate program need and track broader outcomes. Results highlight the need for more-rigorous evaluation methods and improved data infrastructure to better assess program effectiveness.
- **Performance metrics.** Pima SCA-PFS uses tiered, contract-linked performance metrics for both *jail avoidance* (measured as the proportion of program exits not related to reincarceration within 12 months) and *housing stability* (measured as retention at six and 12 months after placement). These metrics are consistent with national best practices and provide a structured framework for monitoring provider performance and incentivizing positive outcomes. We

suggest ways to further refine these metrics and expand the range of outcomes that Pima SCA-PFS staff track.

Recommendations

We make the following recommendations:

- **Strengthen data integration.** Formalize data-sharing agreements and improve linkage across Pima County justice, housing, and health systems to enable more-comprehensive tracking of participant outcomes and service utilization.
- **Enhance evaluation rigor.** To rigorously determine the return on investment of Pima SCA-PFS, implement quasi-experimental or randomized designs using waitlisted individuals or other appropriate comparison groups to strengthen causal inference regarding program impacts.
- **Refine performance metrics.** Add indicators of participant well-being and system impact, such as frequency of emergency room visits, employment status, or behavioral health engagement, and by extending the observation window for housing stability and recidivism outcomes.
- **Address systemic barriers.** Work with community partners to address persistent barriers to housing access, including the impact of voucher freezes, limited affordable housing stock, and restrictive landlord policies.
- **Expand and improve the sample size.** In this study, we examined outcomes among individuals who were enrolled in the program. However, fewer than half of these individuals received permanent supportive housing. Therefore, the specific impact of the primary intervention, permanent supportive housing, is limited in this study. A longer period and increased permanent supportive housing placement levels are needed to specifically examine the impact of permanent supportive housing rather than overall program enrollment.
- **Sustain stakeholder engagement.** Maintain regular engagement with program implementers, county agencies, and community stakeholders to ensure that program design and evaluation remain responsive to local needs and evolving best practices.

By adopting these recommendations, Pima County can further strengthen the effectiveness of Pima SCA-PFS, better meet the needs of criminal justice–involved individuals experiencing homelessness, and maximize its impact on community safety and well-being.

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Chapter 1

Introduction and Background

Pima County's Bureau of Justice Assistance (BJA) fiscal year 2021 Second Chance Act Pay for Success Initiative (SCA-PFS) aims to disrupt the recurring cycle of homelessness, behavioral health challenges, and repeated incarceration in Pima County, Arizona.[1] Pima SCA-PFS is part of a broader county strategy to address public system inefficiencies and improve outcomes through integrated housing and reentry services.[2] Quasi-experimental and randomized controlled studies have found that permanent supportive housing (PSH) significantly increases housing stability and reduces recidivism among people experiencing chronic homelessness or returning from incarceration.[3] This evaluation assesses the current implementation of Pima SCA-PFS and establishes a foundation for subsequent impact analysis and builds on the lessons learned from RAND's evaluation of the pilot phase of the program (2019–2021).[4] We examine how the program has evolved under a performance-based contracting model supported by the BJA Second Chance Act Prisoner Reentry Initiative.

We intend for this work to inform Pima County's program management, policy development, and future research efforts that are aimed at improving outcomes for justice-involved individuals experiencing homelessness, as well as to offer insights for similar initiatives elsewhere.

An annex to this report, with details on the sample, data, and programs reviewed, is available at www.rand.org/t/RRA4745-1.

Local Context

Housing instability and jail involvement are closely linked in Pima County. Individuals who experience homelessness—and who often have co-occurring mental health or substance use disorders—frequently cycle through the local detention system. According to a 2021 snapshot of the Pima County Adult Detention Complex (PCADC), "[s]ixty-five percent of detainees had reported

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[1] Unless otherwise indicated, the information in this chapter is primarily drawn from the following program documents provided to RAND by Pima County: Pima County Justice Services (PCJS), *Deliverables (15PBJA-21-GG-04016-PFSH)*, internal document provided to the authors, November 22, 2022b; PCJS, *Pay for Success Initiative, Subrecipient: Old Pueblo Community Services, Agreement No. CT-JS-23275*, internal document provided to the authors, 2023; PCJS and Old Pueblo Community Services, *Federal Financial Assistance Subrecipient Agreement (15PBJA-21-GG-04016-PFSH)*, internal document provided to the authors, February 2023; PCJS, "Attachments 1–4," in *BJA Contract*, internal document provided to the authors, 2022a.

[2] PCJS, 2022b, p. 3.

[3] See Sarah Gillespie, Devlin Hanson, Josh Leopold, and Alyse D. Oneto, *Costs and Offsets of Providing Supportive Housing to Break the Homelessness-Jail Cycle: Findings from the Denver Supportive Housing Social Impact Bond Initiative*, Urban Institute, July 2021; Sarah B. Hunter, Adam Scherling, Matthew Cefalu, and Ryan K. McBain, *Just in Reach Pay for Success: Impact Evaluation and Cost Analysis of a Permanent Supportive Housing Program*, RAND Corporation, RR-A1758-1, 2022.

[4] Ryan K. McBain, Adam Scherling, Brian Briscombe, and Sarah B. Hunter, *Pima County Housing First Initiative: Final Evaluation Report Fall 2021*, RAND Corporation, RR-A236-1, 2021.

substance use disorder and 20% self-identified they were homeless."[5] Earlier feasibility analysis indicated that, in 2016, 560 individuals who were booked into the jail multiple times lacked a permanent address.[6] (Nationally, an estimated 64 percent of individuals in local jails have a mental illness, and 68 percent have a substance use disorder;[7] 4.5 percent of jail bookings, among 173 local jails that collect this information, involve unhoused people.[8])

These findings, coupled with increasing rates of homelessness in the Tucson area, prompted county leaders to pilot a PSH program offering access to stable housing and voluntary supportive services as a platform for stabilization and recovery.

Pilot Program and RAND Evaluation

Enrollment for the pilot began in April 2019, targeting adults who met the following three criteria:

- experiencing homelessness
- two or more bookings in the PCADC within 12 months
- self-reported mental health or substance use disorder.[9]

Old Pueblo Community Services (OPCS) is the housing services provider and case management agency, providing housing navigation and coordinating short-term transitional housing, housing voucher applications, and wraparound supports. The City of Tucson provided Housing Choice Vouchers;[10] the county funds other supportive services and administrative costs.[11]

RAND researchers conducted an independent evaluation of the pilot from 2019 to 2021, sponsored by Pima County. The study addressed the following three research questions:

- What were the characteristics and service histories of program participants?
- How did participants move through key program stages (referral, enrollment, voucher receipt, housing, and exit)?
- How did service utilization and costs in health care and criminal justice systems change after enrollment?

RAND researchers used linked administrative data from six county agencies and the state health information exchange to compare participants' service use and costs in the 12 months before and after

[5] C. H. Huckelberry, "Pima County's First Housing Program," memorandum to the Pima County Board of Supervisors, May 4, 2021, p. 1.

[6] Sorenson Impact Center, *PFS Feasibility Report: Pima County, AZ*, University of Utah, last updated December 2017, pp. 8–9.

[7] Tian McPherson, "Launching the Data-Driven Justice Initiative: Disrupting the Cycle of Incarceration," Actionable Intelligence for Social Policy, University of Pennsylvania, 2024.

[8] Leah Wang, "Jailing the Homeless: New Data Shed Light on Unhoused People in Local Jails," Prison Policy Initiative, February 11, 2025.

[9] PCJS, 2022b, p. 4.

[10] The Housing Choice Voucher program, also known as Section 8, helps eligible low-income households afford safe and sanitary housing by subsidizing their rent.

[11] PCJS, 2022b, p. 3.

program enrollment. Although the design lacked a comparison group, it provided descriptive insights into early program performance.

Summary of Findings from Pilot Evaluation

Primary findings from the RAND pilot evaluation were as follows:

- By June 2021, 314 individuals had enrolled, 185 had obtained housing, and 148 remained housed.
- The median total time from referral to move-in was approximately five months.
- Twelve-month housing retention among those placed early enough to be observed was 82 percent; six-month retention was 94 percent.
- Criminal justice service utilization declined by more than 50 percent and health care costs by 45 percent in the year following enrollment.
- Combined program, health care, and justice expenditures were essentially cost neutral: $17,893 per participant post-enrollment versus $18,079 pre-enrollment.[12]

RAND researchers concluded that the pilot achieved early success in housing stability and apparent reductions in service utilization. The evaluation recommended refining participant prioritization and administrative processes, tracking outcomes over a longer time frame, and conducting a future comparison group study to assess causal impact.

Expansion and Current Evaluation

The pilot results informed the development of the current phase of the program, implemented through a performance-based contract between Pima County Justice Services (PCJS) and OPCS. The contract links 15 percent of payments to achievement of the following defined outcome targets:

- jail avoidance—reduced reincarceration within 12 months after housing placement
- housing stability—retention at six and 12 months after placement

We structured the evaluation presented in this report around five analytic tasks derived from both program goals and lessons from the pilot, which are as follows:

- developing a logic model to capture current operations and expected outcomes (Chapter 3)
- generating descriptive statistics on referrals, enrollments, and exits (Chapters 4 and 5 and Appendixes A, B, and C [see the annex])
- identifying viable research designs for future causal impact estimation (Chapter 6)
- estimating program need using criminal justice, homelessness, and health data (Chapter 7)
- reviewing current performance metrics in light of national pay for success (PFS) and supportive housing literature (Chapter 8 and Appendix D [see the annex])

[12] McBain et al., 2021, pp. 25–31.

Together, these tasks are aimed at enhancing the county's ability to measure results, manage performance, and prepare for a rigorous evaluation of the initiative's effects on housing, justice involvement, and public costs.

Chapter 2

Data and Methodology

We organized the evaluation around five core analytic tasks, each of which we describe in detail in the relevant chapters. In this chapter, we summarize the scope and methodological approach for each task.

Overview of Data and Methodology for Analytic Tasks

In Chapter 3, we detail our **logic model development**. We engaged stakeholders and reviewed program documents to develop and refine a logic model that accurately reflects current program operations, service linkages, and anticipated outcomes. This process included iterative feedback from program implementers and county agencies to ensure that the model accurately reflected current operations and program goals.

In Chapters 4 and 5 (and in Appendixes A, B, and C [see the annex]), we provide **descriptive program statistics**. Using linked administrative data, we generated descriptive statistics on referrals, enrollments, placements, exits, and other key program milestones. We also examined participant characteristics, service utilization patterns, and outcome trajectories before and after program enrollment.

In Chapter 6, we detail a **framework for causal impact estimation**. Using relevant methodological literature and information obtained on Pima SCA-PFS program processes, implementation, available data, and operational environment, we identified and assessed viable research designs for future causal evaluation. This included consideration of comparison groups (e.g., waitlisted individuals) and such methods as randomized controlled trials (RCTs), regression discontinuity design (RDD), matching and weighting, and difference-in-differences (DiD).

In Chapter 7, we present our **program need estimation**. With this task, we aimed to estimate the scale and characteristics of program need using data from justice, homelessness, and health care systems. The intended methodology was to use fully linked, individual-level data from these systems to directly quantify the population meeting all program eligibility criteria. Because of data limitations, this approach was not feasible. Instead, we collaborated with the University of Arizona to cross-reference a list (from PCJS) of individuals with two or more jail bookings with Homeless Management Information System (HMIS)[13] records for all clients served between January 1, 2023, and June 30, 2024, identifying those who also self-reported a mental health or substance use disorder. We also analyzed referral patterns over the lifetime of the program. Additionally, we summarized

[13] The HMIS is a federally mandated data system used by homeless service providers to collect, manage, and report client-level information on housing and service utilization. It supports program monitoring, performance measurement, and coordination across agencies.

existing data integration efforts and reviewed prior feasibility assessments to identify opportunities for improved resource planning.

In Chapter 8 (and Appendix D [see the annex]), we **review performance metrics**. We reviewed current performance metrics (specifically justice involvement and housing stability) in light of national PFS and PSH literature. Doing so involved a structured review of outcome domains, metric definitions, and evaluation designs used in comparable programs. Our literature review and analysis point to several strategies for improving the reliability and validity of outcome measurement in future program cycles.

Data Integration for Descriptive Program Statistics

A central feature of this evaluation is the integration of data across housing and justice domains, which enabled the construction of detailed participant histories and the tracking of service use and outcomes. This integration was essential for generating the descriptive program statistics presented in Chapters 4 and 5 and Appendixes A, B, and C (see the annex). The analysis is based on de-identified, individual-level administrative data provided by PCJS and partner agencies, with a focus on describing program operations, assessing participant outcomes, and supporting future causal evaluation while maintaining strict data protection and confidentiality standards.

The evaluation draws on a comprehensive set of secondary data sources, including the following:

- **Program records and HMIS data from OPCS:** OPCS provided detailed records that allowed us to track participant flow through all key program stages. These data included participant demographics (age, gender, race or ethnicity, household composition), referral sources and dates, screening and vulnerability scores, and information on housing voucher application and move-in dates. OPCS also supplied case management records and service engagement data and documented exit reasons and destinations following housing placement. This information enabled analysis of trends in referrals, enrollments, placements, exits, participant characteristics, prior living arrangements, and engagement with transitional and permanent housing (see Chapter 4).
- **Criminal justice data systems:** We obtained data from Pima County Pretrial Services, Pima County Public Defense Services (PCPDS), the City of Tucson Public Defender's Office (CTPD), and the Pima County Sheriff's Department. These agencies provided records of criminal justice involvement, including arrests, bookings (custodial and noncustodial), pre-trial supervision, and legal defense services. We also obtained unit cost data associated with these events from each agency, with the exception of PCPDS. For that agency, direct cost data were not available for the evaluation period, so we used cost data from RAND's prior pilot evaluation,[14] adjusted for inflation, to estimate the costs associated with legal defense services (see Chapter 5).

All data were transmitted to PCJS, which removed personal identifiers and assigned unique evaluation identification numbers prior to analysis. We received and analyzed only de-identified data,

[14] McBain et al., 2021.

with records linked across systems using these evaluation IDs. Data use agreements govern all exchanges among participating agencies, ensuring compliance with privacy regulations and minimizing confidentiality risks. All data were stored and analyzed on secure, access-controlled systems.

Limitations

Although our evaluation benefits from multi-agency data linkages, some limitations remain. Most notably, health care utilization data were not available for the current analysis. Additionally, the absence of a comparison group in the current design limits the ability to draw causal inferences about program effects. We discuss these limitations in detail in later chapters and provide recommendations for strengthening data integration and evaluation rigor in future program cycles.

Chapter 3

Logic Model and Program Framework

One of the primary tasks for this evaluation was to engage stakeholders in refining a logic model that accurately reflects current program operations, including resources, collaborating entities, program activities, outputs, and outcomes. To accomplish this, we began by reviewing program documents provided by Pima County, including the BJA contract materials referenced in Chapter 1. Using these documents, we developed a preliminary logic model, which we then refined through a series of iterative discussions with OPCS (the program implementer) and the Pima County Department of Justice Services. We incorporated stakeholder feedback to ensure the model's accuracy and relevance. Figure 3.1 presents the final Pima SCA-PFS logic model, which illustrates the program's resources, activities, outputs, and intended outcomes. The following narrative summarizes the key components and contextual factors that inform the model.

Program Inputs and Resources

The BJA grant (which ran from January 2023 to March 2026) supports the program. In addition to BJA funds, Pima County used a braided funding approach. Pima County funds were used for some transitional housing expenses, housing deposits, and application fees. The City of Tucson's Housing and Community Development Department provides housing vouchers—originally 225 were allotted to the program—though voucher availability has been affected by two recent freezes (July 2023 to April 2024 and beginning again in July 2025, ongoing as of February 2026).

OPCS staffs the program with three case managers, one program manager, and a part-time administrative assistant. Staff are trained in harm reduction, trauma-informed care, and landlord-tenant rights. OPCS staff use validated assessment instruments and the HMIS for intake, prioritization, and performance tracking. OPCS experienced staffing shortages during the grant period, including the lack of a legal services navigator during the last two years of the grant. OPCS case managers took on extra duties, and caseloads were larger than they were during the pilot.

Key partnerships include the City of Tucson Housing and Community Development Department; Pima County agencies, such as PCJS; and community organizations. OPCS maintains strong relationships with local landlords who are willing to rent to individuals with justice system involvement, histories of homelessness, and behavioral health challenges, in part because they trust OPCS to provide ongoing support and intervention when issues arise. OPCS also partners with El Rio Health for medical, behavioral health, and outreach services. OPCS provides transportation and benefits enrollment directly; it does not partner with other agencies for these functions.

Figure 3.1. Pima County PSH Program Logic Model

Inputs

Funding: $901,200.00 grant from BJA (1/1/2023–3/31/2026); Pima County funds

Program Staffing:
OPCS staff
- Three case managers
- One program manager
- One part-time administrative assistant

Training
- Harm reduction
- Trauma-informed care
- Landlord tenant rights and basic housing policy

City of Tucson, Housing & Community Development:
- Housing vouchers (planned for 225 vouchers, but impacted by availability, including two complete freezes)

Tools and Technology
- Assessment tools for intake and prioritization.
- Data-tracking systems (e.g., HMIS) for performance metrics and client

Community Partnerships:
- Referral partners
- Landlords
- El Rio (medical, behavioral health, outreach)

Activities

Intake and Assessment:
- Utilize validated assessment tools for client enrollment and needs assessment
- Collect demographic & vulnerability index data

Housing Assistance:
- Assist clients with housing applications, deposits, & negotiations with landlords
- Provide information on available housing options and support in securing leases

Income Support Services:
- Help clients access job training and employment
- Assist in applying for mainstream benefits (e.g., SNAP, SSI/SSDI)

Life Skills Training:
- Offer workshops on budgeting, tenant rights, and independent living skills
- Provide ongoing support for skill development

Intensive Case Management:
- Implement the Intensive Case Management model for high-need clients
- Regularly monitor client progress and provide personalized support

Crisis Intervention:
- Develop and implement crisis intervention protocols
- Provide harm reduction strategies for clients experiencing crises

Monitoring and Evaluation:
- Track referrals, participant enrollment, and progress and outcomes (e.g., recidivism, housing stability)

Monitoring and Evaluation:
- Quarterly evaluation reports submitted to BJA

Outputs

[Outputs in brackets are not currently tracked]

Intake and Assessment:
- Number of clients referred
- Number of client intakes
- Number of clients enrolled

Housing Assistance:
- [Number of housing applications completed]
- Number of clients housed
- Duration of housing stability

Income Support Services:
- [Number of clients accessing job training and employment opportunities]
- [Number of clients receiving mainstream benefits]

Life Skills Training:
- [Number of workshops conducted]
- [Number of clients receiving support for skill development]

Intensive Case Management:
- [Number of personalized support plans developed]
- [Number of progress evaluations conducted]

Crisis Intervention:
- [Number of crisis intervention protocols implemented]
- [Number of clients utilizing harm reduction strategies]

Outcomes

[Outcomes in brackets are not currently tracked]

Short-Term Outcomes (0–6 months):
- Increased number of clients enrolled in Pima SCA-PFS
- Improved participant access to PSH
- [Enhanced client engagement in case management and supportive services]
- [Increased knowledge and skills in life skills training workshops]

Medium-Term Outcomes (6–12 months):
- Higher rates of housing stability (85% retention) among program participants
- Reduced recidivism rates, with 80% of program exits not related to reincarceration
- Improved access to mainstream benefits
- Improved employment outcomes

Long-Term Outcomes (2–5 years):
- Sustained housing stability and reduced homelessness among participants after exit
- [Decreased reliance on emergency services (e.g., emergency room visits, jail bookings)]
- [Improved overall health and well-being of participants, including mental health and substance use outcomes]
- [Strengthened community safety through reduced criminal justice involvement]

Impacts

- Provide stable housing and supportive services for people exiting incarceration to reduce homelessness and improve well-being.
- Decrease recidivism to promote safer communities and reduce justice system costs.
- Build participants' self-sufficiency through employment and benefits access.
- Promote cross-sector partnerships to integrate services for high-risk populations.

Goal Statement: Improve housing stability and reduce recidivism for individuals experiencing chronic homelessness and justice involvement in Pima County by providing PSH and re-entry services

Program Activities

Referral, Outreach, and Discharge Coordination

As of this writing, the program does not conduct formal outreach. At program inception, OPCS and partners anticipated recruitment challenges and initially explored outreach strategies with the Corporation for Supportive Housing. However, outreach proved unnecessary because justice system partners—including the Pima County Sheriff's Department, the Tucson Police Department, the Adult Probation Department, PCPDS, and the Jail Population Review Committee—readily provided referrals. Early stakeholder meetings with these partners ensured strong awareness of the program, resulting in a steady flow of eligible participants without additional outreach activities.

Formal jail discharge planning began in 2023. Discharge planners were employed through the county's medical contractor to support high-need cases. These staff work standard business hours (8 a.m. to 5 p.m., Monday through Friday) and coordinate with multiple justice partners to facilitate referrals and transitions into housing. Referrals from each source are described in greater detail in Chapter 4.

Core Program Activities and Service Delivery

OPCS staff conduct intake and assessment, provide housing assistance, offer income support services, deliver life skills training, and carry out intensive case management and crisis intervention as core program activities. During intake and assessment, OPCS staff use validated tools to determine client needs and eligibility according to the following three categories:

- homelessness of any form
- two or more bookings in the PCADC within the previous 12 months
- self-reported mental health or substance use disorder.

For the purposes of the program, *homelessness of any form* means lacking a fixed, regular, and adequate nighttime residence, including but not limited to living unsheltered, in shelters or temporary accommodations, in jail without a permanent address, or in any situation of housing instability or imminent risk of losing housing.[15]

[15] Program documents referenced in Chapter 1 define *homelessness of any form* as follows:

- "Homelessness of any form" is an eligibility criterion and includes individuals who "identify as homeless or have housing instability" (PCJS, 2022b, pp. 4, 15).
- "Persons are considered homeless if they are: (1) Lacking a fixed, regular, and adequate nighttime residence; or (2) Have a primary nighttime residence that is a public or private place not meant for human habitation; or (3) Are living in a publicly or privately operated shelter designed to provide temporary living accommodations (including hotels, shelters, transitional housing, or by federal, state and local government programs); or (4) Are exiting an institution and having resided in an emergency shelter or place not meant for human habitation prior to entering that institution" (PCJS and Old Pueblo Community Services, 2023, pp. 6–7).
- The eligibility tool asks whether the individual is "Homeless or has Housing Instability" and includes as current location/residence: "Park, Private Property, Shelter, Jail, etc." (PCJS, 2022a, p. 17).

Housing assistance involves helping clients complete applications, pay deposits, and negotiate with landlords. For clients who are unsheltered at entry, OPCS provides short-term transitional housing until a permanent unit is secured.

Intensive case management is central to the program, with a preferred case manager–to–client ratio of 1:15 to ensure that high-need participants receive individualized support. Case managers develop individualized service plans, monitor progress, and coordinate wraparound supports, including referrals to medical, behavioral health, and social services. Staff are trained in trauma-informed care, harm reduction, and voluntary service engagement. OPCS also assists clients in accessing employment and mainstream benefits (e.g., Supplemental Nutrition Assistance Program [SNAP], Supplemental Security Income [SSI] or Social Security Disability Insurance [SSDI]) and provides life skills workshops on budgeting, tenant rights, and independent living. OPCS provides transportation for clients to attend appointments and access services.

Outputs and Outcomes

OPCS tracks such program outputs as the number of clients referred, enrolled, and housed, as well as measures of housing stability and service engagement. However, OPCS does not systematically track some outputs, including the number of workshops conducted or clients accessing employment services. Expected outcomes include

- **short-term outcomes (0 to six months):** increased enrollment and improved access to PSH
- **medium-term outcomes (six to 12 months):** high housing retention (target 85 percent), reduced recidivism (80 percent of exits are not because of reincarceration), and improved access to benefits and employment
- **long-term outcomes (two to five years):** sustained housing stability, reduced homelessness, and improved health and community safety outcomes.

External and Contextual Factors

During discussions with OPCS and county agencies, several external and contextual factors were identified that influence program implementation but could not be fully represented in the logic model because of space limitations. The most significant barrier in Tucson is the limited supply of affordable housing, which makes it difficult to find units at approved rental rates. Some landlords have become more restrictive: For example, some properties under new management no longer accept tenants with recent criminal charges (a policy that excludes many program participants). Additional challenges include out-of-state warrants that can prevent clients from obtaining vouchers, rising deposit costs, and the increasing prevalence of fluctuating utility billing systems (ratio utility billing systems) that add unpredictable costs that are not covered by Section 8. These factors collectively constrain housing availability and affordability, affecting both program operations and participant outcomes.

Monitoring and Evaluation

OPCS tracks program performance through HMIS and other data systems, focusing on referrals, enrollment, housing stability, and recidivism outcomes. Pima County submits quarterly evaluation reports to BJA using data provided by OPCS.

Chapter 4

Descriptive Findings on Referrals, Enrollments, and Exits

In this chapter, we present quantitative, descriptive results on program referrals, enrollments, and exits. We provide an overview of participant flow through key program stages and discuss trends that might inform future outreach, eligibility screening, and service delivery practices. In the first section, we examine data on all referrals throughout the program's history. The second section focuses on participants from the evaluation period, specifically, those who were enrolled between January 1, 2023, and June 30, 2025.

Referrals

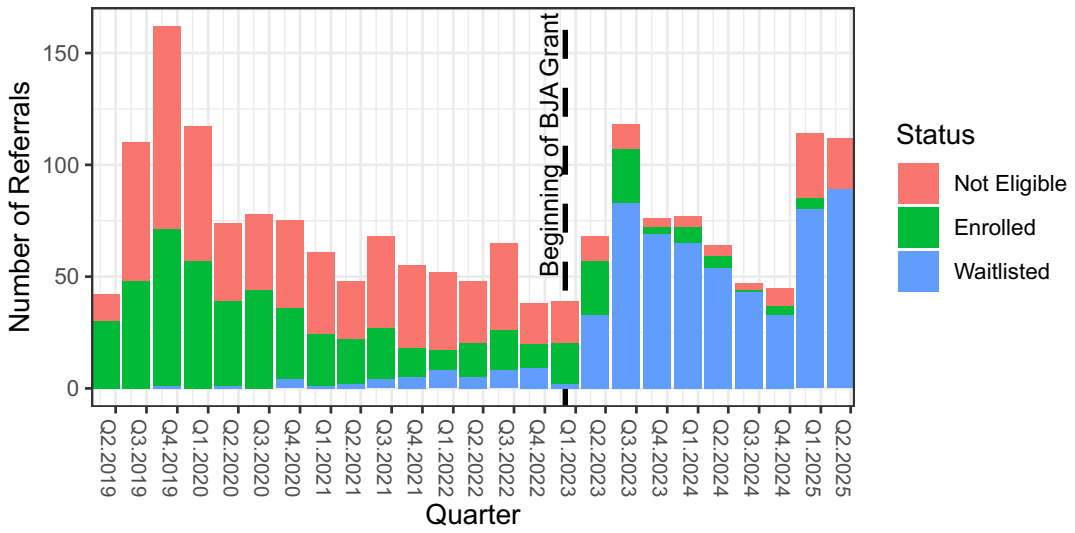
From the start of Pima SCA-PFS to the end of our study period (June 30, 2025), there were 1,853 referrals recorded and 1,791 unique referred individuals.[16] Each combination of individual identifier code and referral date is unique, indicating that some individuals were referred multiple times. Specifically, 60 individuals were referred twice, and one person was referred three times.

Figure 4.1 shows the number of referrals by quarter, colored by referral status—not eligible (pink), enrolled (green), or waitlisted as of mid-2025 (blue).[17] Referrals range from a low of 38 in quarter (Q) 3 2022 to a high of 162 in Q3 2019. Notably, referral status varies by quarter of referral: The waitlist is made up of more-recent referrals because older referrals had largely moved off the waitlist by 2025. However, ineligibility rates also appear to have been lower in 2024 and 2025 compared with previous years.

[16] We do not have the data to calculate the fraction of eligible individuals who were referred. However, we know that, during a period in which there were 576 referrals (between October 1, 2022, and January 17, 2025), there were 7,554 individuals who were jailed at least twice. These two numbers do not give the referral rate, especially because there are other eligibility criteria, but they suggest that a relatively small fraction of people with multiple jailings were referred.

[17] All individuals who ever enrolled in Pima SCA-PFS are listed as enrolled in Figure 4.1, including those who have since exited the program.

Figure 4.1. Number of Referrals to the Pima SCA-PFS Program, by Quarter

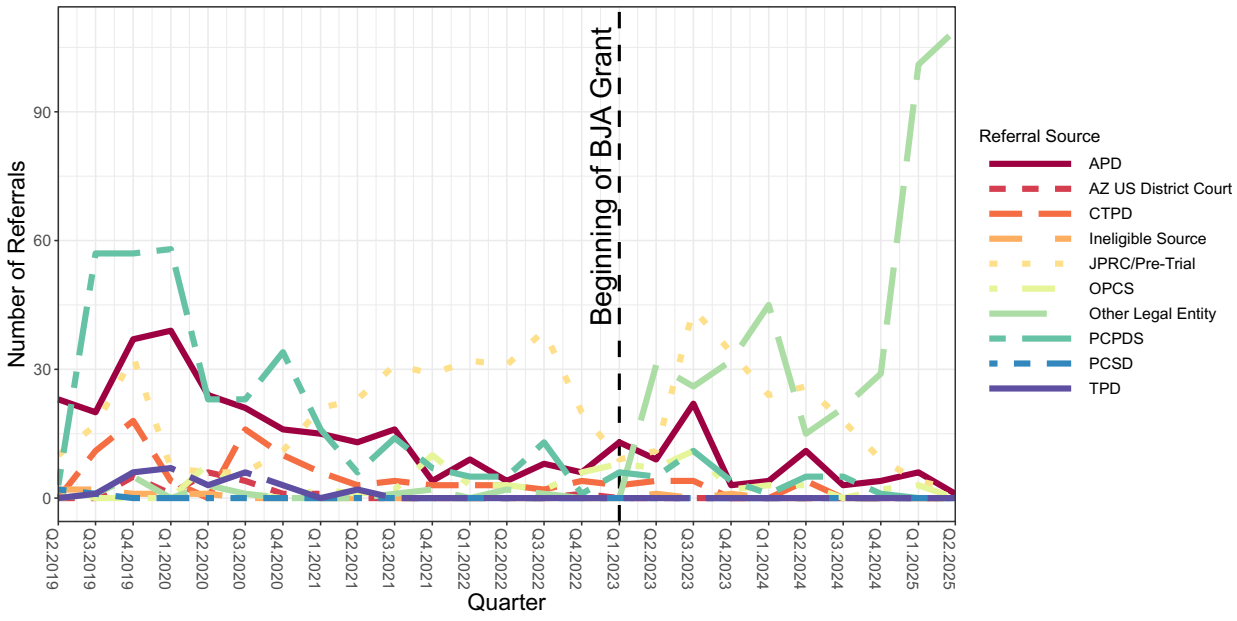


NOTE: Individuals' referral status is as of mid-2025.

We cannot definitively explain this pattern, but three complementary explanations seem likely. First, although OPCS performs an immediate check of jail booking lists to ensure that it does not place someone on the waitlist if they are ineligible because of having too few recent jailings, it further determines eligibility at program intake (by which point, people's circumstances may have changed, making some ineligible). Therefore, some people currently waitlisted will likely be deemed ineligible as time goes on. Second, housing vouchers were frozen from July 2023 through April 2024 and again beginning in July 2025 (this freeze is ongoing as of February 2026) because of funding constraints linked to rising rental costs and increased subsidy obligations. These freezes limited the issuance of new vouchers, which meant that the waitlist began to grow as enrollments slowed. Third, the proportion of eligible individuals referred to the Pima SCA-PFS Program may have increased over time (e.g., because of increased familiarity with the eligibility criteria or changes in referral sources over time).

Figure 4.2 presents the source of referrals, by quarter, revealing large changes over time. In 2019 and 2020, the two largest sources of referrals were PCPDS (39 percent) and the Adult Probation Department in Pima County (APD) (27 percent). From 2021 to 2023, there were fewer referrals from those sources, and Pima County Pretrial Services, including the Jail Population Review Committee (JPRC), became the main referral source (47 percent of referrals during that three-year period). In 2023, the number of referrals listed as "other legal entity" increased sharply. This became the main referral source by 2024; it was the source of 47 percent of referrals in 2024 and 93 percent of referrals in the first half of 2025.

Figure 4.2. Referral Source, by Quarter



NOTE: PCSD = Pima County Sheriff's Department.

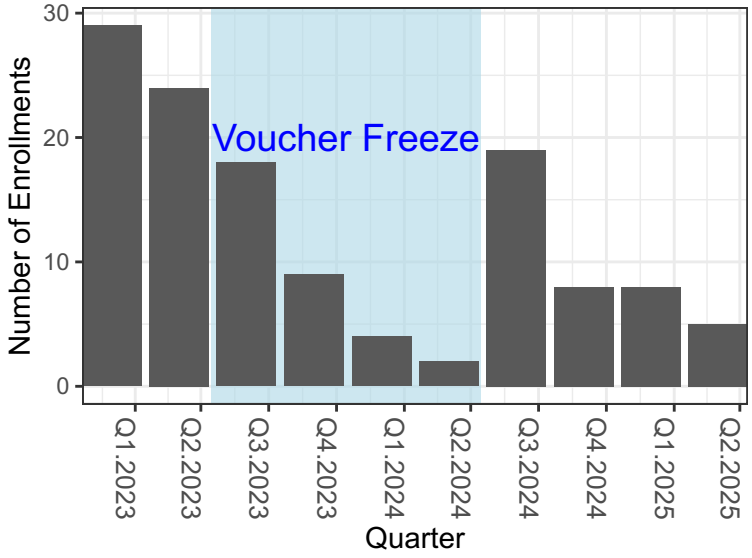
Examining these "other legal entity" cases revealed that almost all (407 of 409) such referrals from 2023 onward were from the Pima County jail's (i.e., PCADC) discharge planners. Discharge planners at the PCADC began formal operations in 2023. Prior to that point, discharge planning occurred on an informal basis. The current planners are contracted through the county's medical services to assist with high-need cases. The introduction of these positions in 2023 marked a shift from informal coordination to a more structured and consistent discharge planning process. The increasing eligibility of referrals over time may reflect that referrals have become dominated by the county jail, which has a population of individuals who are much more likely to satisfy a key Pima SCA-PFS eligibility criterion—recent jailings.

Participants

As noted previously, our evaluation period aligns with the BJA grant, which began on January 1, 2023. Therefore, in this section, we focus on the 126 Pima SCA-PFS participants who enrolled between Q1 2023 and Q2 2025. Thirteen of these 126 participants (10 percent) had enrolled in the Pima SCA-PFS program at least once before, meaning that they were re-enrolled during this period. Figure 4.3 shows the quarters in which each of the 126 participants was enrolled. These quarterly enrollment numbers are lower than many quarters studied during the RAND pilot study: For instance, from Q4 2019 to Q1 2022, there were between 33 and 65 quarterly enrollments.[18] There are several possible reasons for this difference, but one factor that may have contributed to lower enrollments during 2023 and 2024 was the first voucher freeze.

[18] McBain et al., 2021, p. 21.

Figure 4.3. Number of Program Enrollments, by Quarter



NOTE: The blue shaded region indicates enrollment quarters that coincided with the first voucher freeze, which lasted from July 2023 to April 2024.

Participant Demographics

Table 4.1 presents demographic information on the gender, race and ethnicity, age, and household type of participants. A slight majority of participants during this period were men. Ninety-one participants were White (72 percent). When we examine ethnicity separately from race, 51 participants were Hispanic (40 percent). When we examine race and ethnicity jointly, 48 participants were non-Hispanic White (38 percent), and 43 participants were Hispanic White (34 percent). Seven participants had a child in their household (6 percent). Figure 4.4 presents the distribution of participant age at enrollment. These ages ranged from 21 to 65, with an average (mean) age of 37.

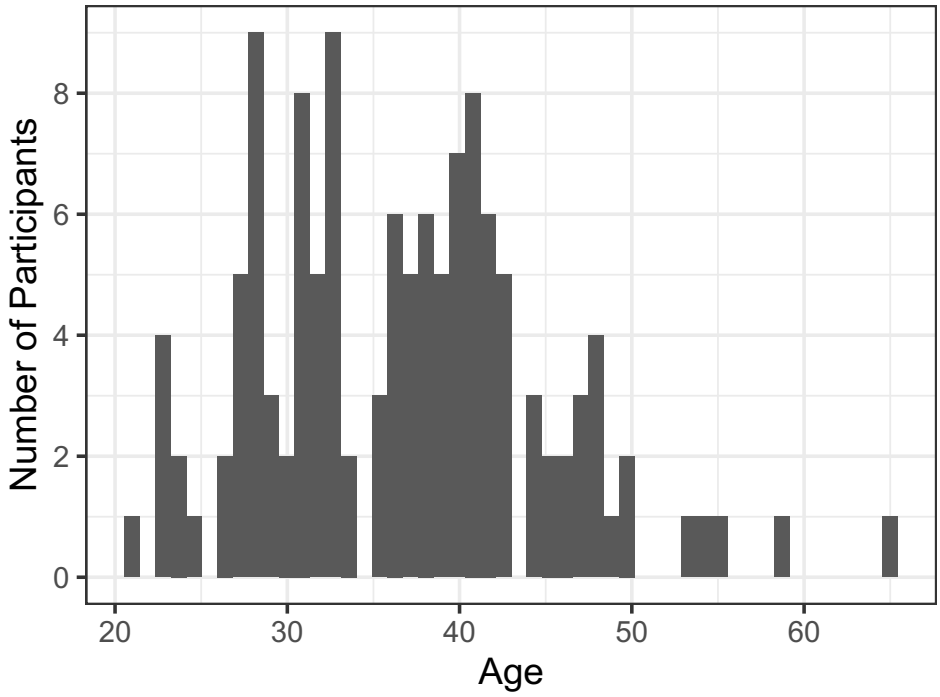
Table 4.1. Pima SCA-PFS Participant Characteristics

Variable	Count	Percentage
Gender		
Man	70	56
Woman	55	44
Transgender	1	1
Race		
White	91	72
Black	16	13
American Indian, Alaska Native, or Indigenous	10	8

Variable	Count	Percentage
Native Hawaiian or Pacific Islander	2	2
Multiracial	7	6
Ethnicity		
Hispanic	51	40
Non-Hispanic	75	60
Household type		
Adult-child household	7	6
No children	119	94

NOTE: This table presents information for individuals enrolled into the program between January 1, 2023, and June 30, 2025 (*n* = 126). Percentages may not sum to 100 because of rounding.

Figure 4.4. Pima SCA-PFS Participant Age at Enrollment



NOTE: This figure presents information for individuals enrolled into the program between January 1, 2023, and June 30, 2025 (*n* = 126).

Participants' Prior Living Arrangements

Table 4.2 shows participants' living arrangements prior to their Pima SCA-PFS program enrollment during the evaluation period.[19] Participants had a variety of living arrangements, such as staying with friends or family or staying in places not meant for habitation (such as vehicles), jails and prisons, transitional housing, residential substance use disorder (i.e., substance abuse) treatment facilities, residential projects, or halfway houses.

Table 4.2. Pima SCA-PFS Participants' Living Arrangements Prior to Enrollment

Prior Living Arrangement	Count	Percentage (%)
A family member's room, apartment, or house	26	21
Place not meant for habitation (e.g., a vehicle; an abandoned building; bus, train, or subway station; airport; anywhere outside)	22	17
Substance abuse treatment facility or detox center	21	17
Transitional housing for homeless persons	17	13
Jail or prison	16	13
Residential project or halfway house with no homeless criteria	10	8
Staying or living in a friend's room, apartment, or house	9	7
Unknown	3	2
Emergency shelter, including hotel or motel paid for with emergency shelter voucher	1	1
Hospital or other residential nonpsychiatric medical facility	1	1

NOTE: This table presents information for individuals enrolled into the program between January 1, 2023, and June 30, 2025 (n = 126).

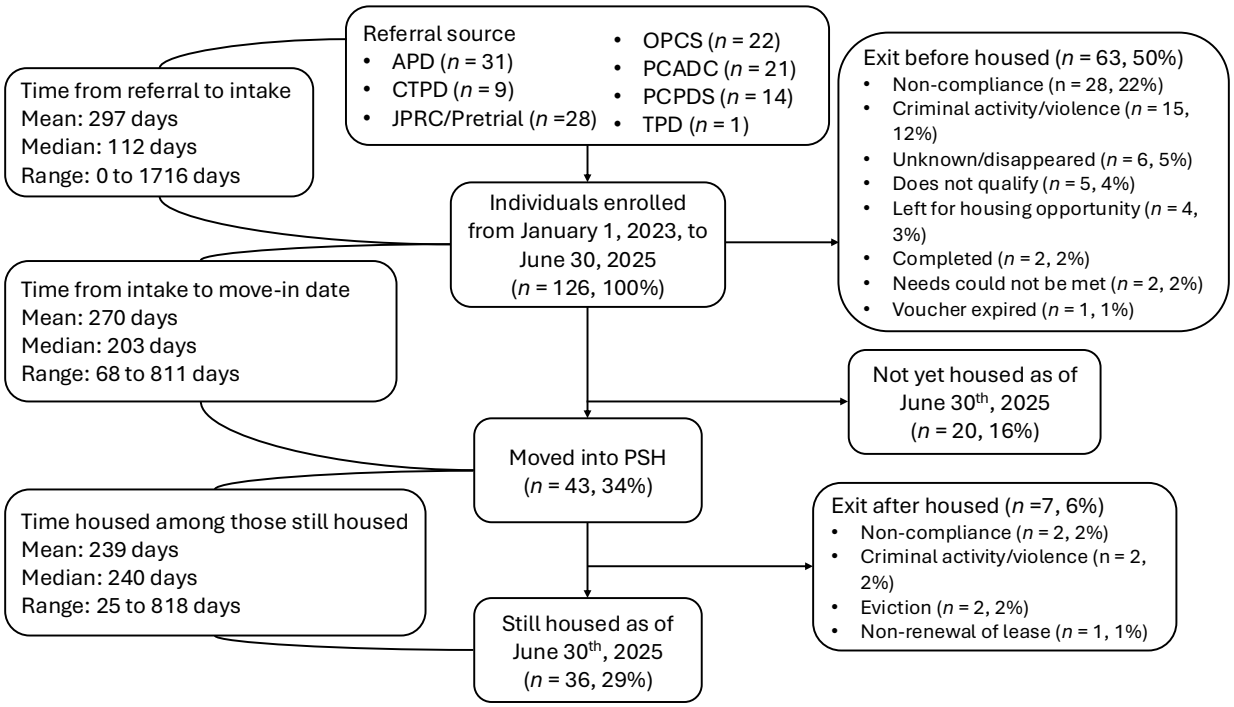
Program Progress

Figure 4.5 summarizes the program progress, as of June 30, 2025, for the 126 participants enrolled into the Pima SCA-PFS program between January 1, 2023, and June 30, 2025. These participants were referred from seven sources. The median time between referral and enrollment was 112 days, although the mean was 297 days (i.e., closer to nine months, implying a right-skewed distribution of times). Factors that may have created long times between the referral date and enrollment date are (1) the voucher freeze, which created a bottleneck throughout every step of the program; (2) some waitlisted people being difficult to locate; and (3) 13 participants being re-enrolled during this period (their re-enrollment means that the time between their referral and their earlier enrollments [not reflected in these data] would have been shorter). Because of this last explanation, these times are not strictly the time spent on the waitlist before program enrollment. Excluding the 13 re-enrollees

[19] At program intake, one prior living arrangement was recorded for each enrollee. We do not know how frequently these individuals' living arrangements were changing prior to enrollment. However, given their lack of stable housing, their living arrangements could have changed often.

allowed us to calculate that time on the waitlist for the remaining subset: The mean wait time was 208 days, and the median was 97 days.

Figure 4.5. Pima SCA-PFS Program Progress Between January 1, 2023, and June 30, 2025



NOTE: This figure focuses on participants enrolled between January 1, 2023, and June 30, 2025 (n = 126). Percentages are expressed as a fraction of this sample and may not sum to 100 percent because of rounding. TPD = Tucson Public Defender's Office.

Of the 126 participants enrolled during this period, 83 participants had not been placed into PSH and 43 participants had. Of the 83 participants who had been placed, 20 participants were still waiting for housing as of June 30, 2025, but the other 63 participants had exited the Pima SCA-PFS program. There were several reasons for exiting the program; the two most common were noncompliance with the program (n = 28) and criminal activity or violence (n = 15). Examining more-detailed case notes on these noncompliance exits revealed that these are overwhelmingly cases in which there was a lack of engagement from the participant.[20] Of the six participants listed as "unknown/disappeared," three cases reflect limitations with the data we had available. Specifically, these three individuals had long histories of involvement with the Pima SCA-PFS program for which we did not have full records. Although 83 individuals did not attain PSH during the study period, at least 37 were placed into Pima SCA-PFS's transitional living program during that period.[21] On average, these 37 participants spent 72 days in transitional housing.

[20] These detailed case notes also revealed that an individual can have several reasons for their exit, even if that is not reflected in all the participant data. For instance, about one-third of these noncompliance cases also involved criminal activity, particularly active warrants.

[21] We are missing data on this for the same three participants, meaning that the true number could be as high as 40.

Importantly, the fact that individuals are listed as having exited Pima SCA-PFS programming does not mean that they have left permanently: OPCS sometimes attempts to re-enroll these individuals. Looking at the programming history of the 43 participants who made it into PSH, two had temporarily exited the Pima SCA-PFS program before attaining housing. We do not have the data to determine which of the 63 individuals who exited before attaining PSH were being pursued for re-enrollment.

Among the 43 participants placed in PSH, the mean time between enrollment and move-in was 270 days, nearly three-quarters of a year.[22] The median was somewhat shorter (203 days). The mean wait was considerably slower than during the pilot study (for which the exact analogous number was not presented but was likely 80 to 110 days), which may be because of the first voucher freeze that lasted from July 2023 through April 2024. Relatedly, housing applications expire after a set period and must be resubmitted once vouchers become available, adding administrative delays. Although most participants reach *housing ready* status (i.e., having submitted the necessary paperwork) within roughly 90 days, the longer lags typically occur between being housing ready and housed as participants wait for voucher availability, locate suitable units, and complete inspections. When voucher programs reopen simultaneously, processing slows further because a limited number of applications can be submitted at once.

Of those 43 participants, seven had exited PSH by June 30, 2025, because of noncompliance with the program ($n = 2$), criminal activity or violence ($n = 2$), evictions ($n = 2$), and the nonrenewal of a lease ($n = 1$). Among the 36 remaining in PSH, as of June 30, 2025, the average time housed was 239 days, and the median time housed was 240 days.

We calculated the six- and 12-month PSH retention rates for the subsamples of the 43 participants who moved into PSH and were housed long enough to have had the chance to achieve those milestones. The six- and 12-month retention rates are 97 percent (29 of 30 participants) and 70 percent (seven of ten participants), respectively. Another way to estimate these rates is with survival modeling, which has the benefit of estimating how uncertain the estimates are (e.g., by providing confidence intervals). We fit a Kaplan-Meier survival curve to estimate the probability of PSH retention by day (with the clock starting on move-in day). Doing gives similar retention rates: 97 percent (95-percent confidence interval: 91 percent, 100 percent) for six months and 81 percent (95-percent confidence interval: 62 percent, 100 percent) for 12 months, with notably wide confidence intervals for the one-year retention rate estimate.[23]

[22] Table A.1 in Appendix A (see the annex, which is available separately) shows that, overall, the 43 participants who moved into PSH were quite similar to the full set of 126 enrollees in terms of their observed characteristics. The largest difference is that the majority (56 percent) of those who moved into PSH were female, although it is possible that this difference is because of chance given the small sample sizes.

[23] These retention rates are similar to those from the pilot study, which found six- and 12-month retention rates of 94 percent and 82 percent, respectively (McBain et al., 2021, p. 26).

Chapter 5

Outcomes

In this chapter, we analyze changes in criminal justice outcomes and related costs by comparing the 12-month period before program enrollment with the 12-month period following enrollment.[24] We focus on the 86 participants for whom we had at least 12 months of pre- and post-enrollment outcome data—that is, those who enrolled between Q1 2023 and Q2 2024. Appendix A (see the annex) shows that this subset is very similar in observed characteristics to the larger set of 126 participants who enrolled between Q1 2023 and Q2 2025.

We analyze data from four entities. First, Pima County Pretrial Services provided standard supervision (n = 27 events for the 86 participants, in total, across the 12-month pre- and post-enrollment periods), enhanced supervision (n = 41), Supportive Treatment and Engagement Programs (STEPs) diversion (n = 9), and jail population review releases (n = 2). Second, PCPDS provided defense for felony (n = 121), misdemeanor (n = 36), and probation cases (n = 39). Third, the CTPD provided defense for misdemeanor cases (n = 103). Finally, the Pima County Sheriff's Department provided custodial (jail) bookings (n = 231) and non-custodial bookings (n = 21). The entities analyzed reflect those for which data were made available. For example, we were unable to obtain outcomes from the Tucson Police Department, emergency medical services, or hospitals.

Note that the descriptive outcome changes reported in this chapter are not necessarily causal effects of the program. For example, reductions in involvement with criminal justice agencies might instead reflect the tendency for adults to become less criminally active over time or that individuals were most likely to become eligible for the program through the jailing criteria during periods in which they were especially involved with the criminal justice system. That could make criminal justice involvement particularly common during the pre-enrollment period. The observed reductions in service use and associated costs may reflect a natural regression to the mean; in other words, program enrollment occurred at an inflection point in participants' jail involvement, and the reduction over time demonstrates a return to normal levels, rather than the result of program impacts. In Chapter 6, we detail potential causal research designs that could be used to further evaluate the program.

Table 5.1 presents the number and percentage of participants who experienced criminal justice outcomes in the pre-enrollment and post-enrollment periods, as well as the differences between those periods. Fewer participants received services or experienced other criminal justice outcomes during the post-enrollment period compared with the pre-enrollment period. The reductions in use for Pima

[24] We do not compare changes in outcomes before and after PSH move-in. That is an important topic to study given the centrality of PSH to the program. However, it was not possible to do so reliably with the data available. Specifically, the combination of relatively few PSH move-ins during the period for which we had data, the need for sufficient data before and after move-in, and the fact that our data spanned only a few years combined to produce very small samples. For instance, of the 86 participants, only ten participants had a year of post-PSH outcome data, and between these participants there were 27 events recorded in total. We tried several ways of maximizing the use of available data, but none led to adequately larger sample sizes to study changes in outcomes before and after PSH move-in.

County Pretrial Services, PCPDS, and the Pima County Sheriff's Department are statistically significant ($p < 0.01$), whereas the reduction for the CTPD is not ($p = 0.38$). Notably, levels of involvement with the CTPD were especially low compared with the other criminal justice entities in the pre-enrollment period. Although we cannot be certain why misdemeanor public defense provided by Tucson exhibited the smallest changes, it may have to do with the fact that participant eligibility was partly determined by jailings. If jailings were primarily reserved for those with felony cases, we would expect especially high levels of involvement with the jail, county public defense, and pre-trial services in the pre-enrollment period. Overall, 52 participants experienced outcomes related to any of these four agencies in the post-enrollment period compared with 80 participants in the pre-enrollment period, a 35-percent reduction ($p < 0.01$).

Table 5.1. Number of Pima SCA-PFS Participants Experiencing Outcomes in Pre- and Post-Enrollment Periods

	Participants Experiencing Outcomes			
Entity	**Pre-Enrollment**	**Post-Enrollment**	**Difference**	***p*-Value**
Pima County Pretrial Services	42 (49%)	11 (13%)	−31 (−74%)	<0.01
PCPDS	65 (76%)	26 (30%)	−39 (−60%)	<0.01
CTPD	21 (24%)	17 (20%)	−4 (−19%)	0.38
Pima County Sheriff's Department	78 (91%)	45 (52%)	−33 (−42%)	<0.01
Total	**80 (93%)**	**52 (60%)**	**−28 (−35%)**	**<0.01**

NOTE: *p*-values are from paired Wilcoxon signed-rank tests at the individual level and are adjusted for multiple comparisons using the Holm method. This table presents information for individuals enrolled into the program between January 1, 2023, and June 30, 2024 ($n = 86$).

Table 5.2 presents counts of the number of criminal justice outcomes (rather than counts of participants, as shown in Table 5.1) in the pre-enrollment and post-enrollment periods and the differences between those periods. There was a reduction in the number of events related to all four agencies in the post-enrollment period compared with the pre-enrollment period. These reductions were all statistically significant, except for the CTPD ($p = 0.09$). Overall, there was a 58-percent reduction in the number of criminal justice events (i.e., services provided and other outcomes) in the post-enrollment period relative to the pre-enrollment period ($p < 0.01$).

Table 5.2. Number of Criminal Justice Events in Pre– and Post–Pima SCA-PFS Enrollment Periods

	Number of Outcomes			
Entity	**Pre-Enrollment**	**Post-Enrollment**	**Difference**	***p*-Value**
Pima County Pretrial Services	66	13	−53 (−80%)	<0.01
PCPDS	136	60	−76 (−56%)	<0.01
CTPD	63	40	−23 (−37%)	0.09
Pima County Sheriff's Department	178	74	−104 (−58%)	<0.01
Total	**443**	**187**	**−256 (−58%)**	**<0.01**

NOTE: *p*-values are from paired Wilcoxon signed-rank tests at the individual level and are adjusted for multiple comparisons using the Holm method. This table presents information for individuals enrolled into the program between January 1, 2023, and June 30, 2024 (n = 86).

Table 5.3 presents the average cost per participant in the pre-enrollment and post-enrollment periods for the same four criminal justice services,[25] as well as the differences in average costs across the two periods. Average cost per participant fell for all four of the criminal justice agencies. As shown in the previous two tables, these reductions are statistically significant for all agencies except the CTPD (p = 0.86). Overall, costs in the post-enrollment period fell by 46 percent compared with the pre-enrollment period—from $10,449.79 per participant to $5,657.31 per participant. The majority of this decline was because of the Sheriff's Department, related to bookings in Pima County's jail, and the second largest contributor was reductions in expenses by PCPDS. See Appendix B (in the annex, which is available separately) for details on how these costs were calculated.

Table 5.3. Average Cost of Outcomes per Participant in Pre– and Post–Pima SC-PFS Enrollment Periods

	Average Cost per Participant			
Entity	**Pre-Enrollment**	**Post-Enrollment**	**Difference**	***p*-Value**
Pima County Pretrial Services	$212.62	$25.46	−$187.16 (−88%)	<0.01
PCPDS	$2,224.71	$905.30	−$1,319.42 (−59%)	<0.01
CTPD	$194.86	$182.34	−$12.51 (−6%)	0.86
Pima County Sheriff's Department	$7,817.60	$4,544.21	−$3,273.39 (−42%)	<0.01
Total	**$10,449.79**	**$5,657.31**	**−$4,792.48 (−46%)**	**<0.01**

NOTE: *p*-values are from paired Wilcoxon signed-rank tests at the individual level and are adjusted for multiple comparisons using the Holm method. This table presents information for individuals enrolled into the program between January 1, 2023, and June 30, 2024 (n = 86).

[25] The higher cost for PCPDS may reflect its focus on felony cases; the CTPD handles misdemeanors (see Table 5.3 and the annex, which is available separately).

In Appendix C (see the annex), we present versions of these tables that are disaggregated by specific outcome type within criminal justice entities. Those results show that, typically, the outcome (or outcomes) that was most common in the pre-enrollment period saw statistically significant reductions. For the Pima County Sheriff's Department, custodial bookings (i.e., jailings) fell significantly; for Pima County Pretrial Services, standard and enhanced supervision fell significantly; and, for PCPDS, felony and probation cases fell significantly. The CTPD provided only misdemeanor public defense to these participants, so the results in Appendix C, in the annex, are the same for that entity as those presented in this chapter.

The pilot study contains analogous tables for an earlier evaluation period, which also contained outcome data from additional criminal justice and health entities.[26] The findings in Tables 5.1 to 5.3 are generally similar to those in the earlier report: That is, the post-enrollment period saw a reduction in the number of participants experiencing criminal justice outcomes, the number of criminal justice events experienced, and the associated costs. One noteworthy difference is that the reductions for the CTPD were significant in the pilot study and were not significant in this study. A striking similarity—even though the pilot contains additional criminal justice agencies—is that the pilot found a 47-percent reduction in total criminal justice costs, compared with the 46-percent reduction reported in Table 5.3. In both cases, these reductions were primarily the result of fewer events related to the Pima County Sheriff's Department.[27]

[26] McBain et al., 2021, pp. 28–29.

[27] All results in this chapter are the average for the overall sample (of 86 participants). It is possible that different types of participants (e.g., with different levels of need) might exhibit different patterns of changes in outcomes. While we do not have enough cases to examine this, doing so would be possible with a larger sample, for instance, by stratifying the sample and statistically testing whether subgroups have similar patterns of change.

Chapter 6

Framework for Future Impact Estimation

In this chapter, we outline options for estimating the program's causal impact in future evaluations, given current data capabilities and program operations. We consider potential designs that use comparison groups and identify the necessary conditions for an impact evaluation—specifically, to carry out a quantitative evaluation of the program's average treatment effects on participants.[28]

Two important questions about the program are as follows:

- How does participation in the Pima SCA-PFS program affect participants' outcomes of interest, such as their health or criminal justice system involvement?
- How do the program's costs compare with its benefits?

Answers to these questions require estimating causal effects. To examine how such estimates could be obtained, we first explore the value, challenges, and best options for constructing a comparison group. Then, we describe four comparison group–based causal methods that may be appropriate for estimating causal effects, given the structure of the program.

Identifying a Comparison Group

Understanding how the Pima SCA-PFS program affects participants requires more than a comparison of their pre- and post-enrollment outcomes, as described in Chapter 5. Had those 86 individuals not enrolled in the program, it is possible that their outcomes may still have changed for other reasons. For example, as adults age, they tend to commit fewer crimes,[29] so it is hard to say whether reductions in criminal justice involvement after enrollment reflect program effects, aging, or other factors.

A comparison group that is similar to the participants would therefore be beneficial for estimating causal impacts. In general, the more similar the comparison group is to the participants, the better for making causal inferences. Given that the Pima SCA-PFS program serves homeless, justice-involved

[28] Although we do not discuss qualitative designs, a future impact evaluation should consider their use. For example, in-depth interviews with participants and service providers may be valuable for gaining a fuller understanding of why components of the program are effective or ineffective.

[29] Lila Kazemian, "Pathways to Desistance from Crime Among Juveniles and Adults: Applications to Criminal Justice," National Institute of Justice, November 8, 2021.

individuals with a history of mental health or substance use problems, a comparison group that shares such features would be greatly beneficial.

Waitlisted individuals—those referred to the Pima SCA-PFS program, placed on the waitlist, but not yet enrolled in the program—are likely the best comparison group. These individuals experience the same referral processes as participants, so they would share important similarities, such as a pattern of homelessness and criminal justice involvement in Pima County. Furthermore, as a function of being on the program waitlist, information is already being collected on these individuals. This information can help with statistical modeling and making administrative record linkages.

There are three broad challenges with using waitlisted individuals as a comparison group. First, doing so requires a sufficiently large number of people who have been waitlisted. Although the number of comparison cases required for precise estimates depends on the statistical method (and effect sizes), many people have been waitlisted at some point, as discussed in Chapter 4.

A second challenge is that waitlisted individuals, by virtue of being on the waitlist, have some involvement with the program. A waitlist strategy compares those treated by the program (i.e., participants) with those who may believe they will be treated soon, raising the possibility that anticipatory behaviors among those in the comparison group could bias estimates of program impacts. For example, waitlisted individuals might avoid behaviors that violate program terms and conditions, lest they be removed from the waitlist.

The third, and most difficult, challenge is that those who are enrolled in the program *are not* a random subset of waitlisted individuals, which, in turn, means that making comparisons between participants and waitlisted individuals could lead to biased program effect estimates. For instance, OPCS performs a secondary program eligibility verification at the time of enrollment, something that all participants have passed, but not everyone on the waitlist will go on to pass. Another possible source of differences is self-selection into the program. Individuals who remain easy to locate, responsive to OPCS, and willing to enroll in the program may have outcomes that are changing in different ways from others, for reasons that pre-date their enrollment into the program. In short, which people move off the waitlist to become participants (and when they do so) is nonrandom. Differences in the outcomes between participants and those who remain on the waitlist therefore might not be caused by the program because the differences in outcomes might be caused by other (confounding) differences between these groups.

Before turning to causal methods that can confront this challenge, we note that administrators may be interested in two program effects: The first is the effect of enrollment in the program, and the second is the effect of placement into PSH. As shown in Chapter 4, there can be a long wait between enrollment and PSH placement, and many enrolled individuals exit the program without attaining PSH, meaning these are truly different questions. Although this chapter focuses on the effect of enrollment, much of what is written carries over to how to estimate the effect of PSH placement. The key difference is that, when studying the effects of PSH, it may not be enough to have a comparison group that resembles enrollees because the subset of enrollees who attain PSH could differ from those who enroll but exit without moving into PSH. Focusing on that subset may be especially difficult because of the smaller sample size. However, if PSH move-in were to rapidly follow program enrollment for most participants (which has not been the case in recent years), studying the effects of enrollment would adequately capture the effects of PSH placement.

Possible Causal Methods

In this section, we describe four causal methods that may be appropriate for evaluating the impacts of Pima SCA-PFS, given its structure and available data. For each, we provide an overview, highlight key advantages, and explain disadvantages that might make the approach undesirable for the purpose of either program operations or evaluation. Table 6.1 provides a summary of these methods, including their potential advantages and disadvantages in evaluating the program. An important commonality is that all four of these methods can be used to study a variety of outcomes, in terms of both the type of outcome (e.g., health, criminal justice) or how it is measured (e.g., the number of events over some period, the monetary costs of those events).

The choice of causal method is shaped not only by the structure and data available for Pima SCA-PFS but also by lessons learned from evaluations of other supportive housing programs. For example, such programs as the Denver Housing to Health (H2H) Initiative and Santa Clara's Project Welcome Home used RCTs,[30] while others, such as Peterborough's Social Impact Bond (SIB) and Los Angeles's Just in Reach,[31] have relied on quasi-experimental designs with comparison groups. Not all programs have tied payment metrics directly to these causal designs. In Chapter 8, we provide additional detail on the evaluation approaches and metrics used in these and other programs.

Table 6.1. Possible Causal Methods to Evaluate the Pima SCA-PFS Program

Evaluation Type	Description	Advantage	Disadvantage
RCT	Estimates effects by randomly determining who is enrolled and then comparing their outcomes with the waitlisted individuals who were not enrolled	• Strong causal design because of randomization	• Requires changing the enrollment process, which would take resources and may result in a different population being enrolled • Too few people being randomized can result in imprecise estimates or estimates that are biased by differences between the groups
RDD	Leverages the prioritization score to compare who were enrolled with those who had a similar prioritization score but were not enrolled	• Easy to implement • Can work even if prioritization score is not the only factor influencing enrollment	• Only estimates the program effects for a subset of the participants • Likely to yield very imprecise estimates in this context

[30] Devlin Hanson, Sarah Gillespie, and Alyse D. Oneto, *Denver Housing to Health (H2H) Pay for Success Project*, Urban Institute, July 2022, p. 1; Maria C. Raven, Matthew J. Niedzwiecki, and Margot Kushel, "A Randomized Trial of Permanent Supportive Housing for Chronically Homeless Persons with High Use of Publicly Funded Services," *Health Services Research*, Vol. 55, No. S2, October 2020, p. 798.

[31] Emma Disley, Chris Giacomantonio, Kristy Kruithof, and Megan Sim, *The Payment by Results Social Impact Bond Pilot at HMP Peterborough: Final Process Evaluation Report*, Ministry of Justice, 2015, p. 14; Hunter et al., 2022, pp. iii, viii, 7, 22.

Evaluation Type	Description	Advantage	Disadvantage
			• May give incorrect answers, especially if the prioritization score is not strongly influential in determining who is enrolled
Weighting and matching	Adjusts the comparison group to more closely resemble participants on observed characteristics, then estimates effects by comparing the outcomes across participant and comparison groups	• Easy to implement • Can use data to establish the method that has worked to make the comparison group similar to participants on observed factors	• Unobserved characteristics can lead to incorrect conclusions; given the relatively limited observed data on participants and waitlisted individuals, there are likely to be many unobserved factors that may differ across groups
DiD	Estimates effects by comparing changes in the outcomes of participants with changes in the outcomes of the comparison group	• Relatively easy to implement because it does not require changing the enrollment process • Possible to get strong causal estimates even without data on many characteristics • Variants exist that are suitable for the rolling enrollment of the program	• If participants and the comparison group were not on similar outcome trajectories before enrollment, estimates may be biased • Data-driven approaches to make the comparison group more similar may be untenable because of the relatively limited amount of data on observed characteristics

Randomized Controlled Trials

RCTs are a form of experiment in which treatment status is determined through randomization, akin to a coin toss. In principle, with enough people being allocated off the waitlist to either the treatment group (those enrolled to receive PSH) or comparison group in this way, the two groups should resemble each other, such that the difference in outcomes between groups reflects the causal impact of the program.

This is a very strong form of causal inference because of the use of randomization to determine treatment status. As noted, the key challenge in understanding the impacts of Pima SCA-PFS is that there may be many nonrandom factors influencing who is enrolled, indicating that the waitlist may not be an appropriate comparison group. An RCT could avoid this problem by randomly assigning which waitlisted individuals get enrolled.

However, using an RCT to evaluate the Pima SCA-PFS program involves several challenges. First, an RCT would require changing how people are selected for enrollment. This could be administratively difficult for OPCS, requiring time and money that might be better spent elsewhere. Also, by changing the enrollment process, the RCT could alter the program by serving a somewhat

different population. Randomly deciding who enrolls would, by design, remove any sort of prioritization in the waitlisted population that gets enrolled. Fundamentally, because certain waitlisted individuals are in fact prioritized, this means the program in its current form cannot be evaluated by an RCT. Small RCTs can lack statistical power, which means that they may give estimates that are so imprecise that they could only detect very large effects. Small RCTs can also give biased estimates if the groups are not sufficiently balanced. Therefore, many people would need to be randomized, and statistical modeling may be required to deal with remaining imbalances.[32]

Regression Discontinuity Design

RDDs can be used to study effects of programs with waitlists when there are numerical cutoffs separating participants from non-participants. RDDs center on comparing people who are similar but on opposite sides of the cutoff; the intuition is that these people should be similar except for their enrollment status. Although OPCS uses a scoring system to assist in identifying priority individuals for enrollment, decisions about whom to enroll also rely on case-specific knowledge; they are not fully determined by the score. For such cases, in which there is no sharp cutoff in score separating those enrolled from those who are not, the prioritization scoring factors that influence enrollment can be used in a similar way in a so-called fuzzy RDD. The measures required to carry out such a fuzzy RDD are treatment status (dividing the groups into participants and comparison cases), the score variable to create the cutoff for enrollment, and data on outcomes of interest.

Implementing an RDD might not require changes to program operations, and, once the data are prepared for analysis, RDD analyses are straightforward to execute. Alongside ease of implementation, if the assumptions underlying the RDD hold, it is a strong way to estimate unbiased treatment effects. A possible required change to program operations is to get consent to acquire data (e.g., through administrative record linkages) for everyone waitlisted, not just for enrollees. Even if the technical capacity to search those records without consent exists, researchers would need to consider what is feasible and ethical given institutional review board requirements. As we discuss further in this section, this issue is not unique to RDDs.

Three limitations of RDDs are noteworthy for evaluating Pima SCA-PFS. First, this method relies on observations close to the cutoff threshold. One concern with this is that it gives a local estimate.[33] That is, the method would show the effects of the program among participants close to the cutoff threshold as opposed to the effects of the program for all participants. Another concern is that, although the number of people ever waitlisted or enrolled in the Pima SCA-PFS program is not small, it is small enough that focusing on cases near the cutoff could lead to insufficient statistical power (i.e., doing so could produce imprecise estimates). Second, a fuzzy RDD would be required, and these designs can lead to especially low statistical power. Third, the scoring factor used by OPCS might only

[32] The sample size required for adequate statistical power (i.e., conventional 80-percent power) in an RCT depends on several factors, including how the outcome is measured and the estimated effect size. Assuming a 35-percent reduction in proportional (binary) outcomes caused by the program—which is large but possible given the data shown in Table 5.1—the required sample size (treated and control combined) would be between about 150 and 450 cases for outcomes that were relatively common in the control group (i.e., they occurred for between one-third and two-thirds of control cases, which seems possible given the data shown in Table 5.1).

[33] Matias D. Cattaneo and Rocío Titiunik, "Regression Discontinuity Designs," *Annual Review of Economics*, Vol. 14, 2022.

be a weak indicator of enrollment (e.g., if the scores are not relied on much in practice to determine prioritization). In addition to further reducing statistical power, this approach might bias estimates of the program's impacts.[34] None of these concerns is necessarily fatal to the potential of an RDD to evaluate the program, but any attempt to do so should involve paying careful attention to establishing the strength of the scoring factor and whether there is adequate statistical power.[35]

Weighting and Matching

Both weighting and matching methods are centered on statistically altering the comparison group so that it more closely resembles enrollees on observed features; the goal is to reduce differences between the two groups that might bias estimates of the program's impacts. The measures required to carry out matching or weighting approaches are treatment status, outcome data, and control variables (specifically, covariates measuring factors that are correlated with treatment status and the outcome but are not themselves caused by the treatment, such as mental health history and prior homelessness experiences).

Matching and weighting tend to be conceptually simple, straightforward ways to estimate causal effects. These methods might not require alterations in how the program operates. The exception, similar to other methods, is that it might be necessary to get consent to search for data on waitlisted individuals. There are many statistical packages to quickly estimate the relevant weights, given the underlying data.

However, these methods tend to rely on strong identifying assumptions, which is important because it means that, even if used to estimate causal effects, there will often be good reason to suspect that the estimates are incorrect because of these largely unverifiable assumptions. Particularly worrisome is the need to assume a negligible impact of unobserved confounders—that is, that unmeasured factors do not bias the estimated effects. To make this plausible, rich measurement on factors that might confound the relationship between enrollment status and subsequent outcomes are required. However, such data do not appear to be readily available. Administrative data linkages can be difficult to conduct with the population of this study, and the amount of existing data on participants (and waitlisted individuals) is quite limited, primarily to demographic measures and a few additional measures of housing history. Therefore, using matching or weighting absent enhanced data collection would likely require assuming away most possible concerns with nonrandom selection into the program (such as length of homelessness, clinical mental health dispositions, substance use, criminal record histories, education, and cognitive functioning, among other major social, economic, and psychological characteristics). That said, some of these concerns might be alleviated by comparing enrollees with waitlisted individuals who later went on to become enrollees because they are presumably more similar to enrollees than the larger set of all waitlisted individuals.

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[34] Douglas Staiger and James H. Stock, "Instrumental Variables Regression with Weak Instruments," *Econometrica*, Vol. 65, No. 3, May 1997.

[35] In a simulation-based power analysis using optimistic specifications (e.g., low variance in the outcome, a large first stage jump, and a concentration of cases near the cutoff), RDD was underpowered to detect even large effects (greater than one standard deviation) when using more than 1,000 cases. This suggests RDD may not be suitable, although a future evaluation should run a power analysis informed by the actual data to confirm this.

Less worrisome is the assumption that weighting or matching balances on observed characteristics (i.e., those used in the weighting or matching procedure), because that can be verified empirically and handled through changes to model specification or with regression modeling to address residual imbalances.[36] Matching and weighting can sometimes suffer from problems of low statistical power. We do not have adequate information to determine how well powered these approaches would be if applied to the Pima SCA-PFS program, though it is reasonable to think that some outcomes may be sufficiently well powered for investigation.

Difference-in-Differences

DiD designs focus on comparing (differencing) the changes in enrollees' outcomes over time with the changes in the comparison groups' outcomes. Assuming these groups' outcomes would have changed in the same way had the enrolled group not in fact enrolled, the DiD estimates the program's impact. This is called the *parallel trends assumption*, which is central to DiD designs but can be challenging to think through since it involves a counterfactual question: How would enrollees' outcomes have changed if (counter to fact) they had not enrolled in the program? The parallel trends assumption posits that the enrollee outcomes would have changed in the same way (in parallel) with those of the comparison group.

There are many variations of DiD, some of which are noteworthy for Pima SCA-PFS because they can incorporate the fact that the program has rolling enrollment.[37] Not accounting for people entering the program at different times could bias estimates; however, using a design built to do so can help ensure that treated cases are compared with the most-appropriate comparison cases. To carry this method out, time-varying measures are required on treatment status and outcomes (including pre-enrollment outcomes for the enrolled group). It is possible but not strictly necessary to include control variables.

Using DiD might not require any changes to program operations to implement, except—as with other methods—it may be necessary to acquire consent to search for data on waitlisted individuals. Although the simplest DiD design with two groups and two periods is easy to implement, newer variants can be more challenging.

Because of the parallel trends assumption, DiD does not require assuming that there are no unmeasured factors that confound the relationship between who is enrolled and outcomes. As long as the two groups' outcome trends are similar, DiD should yield unbiased estimates. This is valuable because, even though selection into the program is presumably nonrandom, we might be willing to assume that trends in outcomes would be parallel absent the program. It may be impractical to measure a wide set of covariates for waitlisted individuals, which makes the DiD approach appealing because it would not need such data if the parallel trends assumption held. Given that there is rolling enrollment into the program, the simplest DiD design should be avoided. Some newer DiD methods

[36] Elizabeth A. Stuart, "Matching Methods for Causal Inference: A Review and a Look Forward," *Statistical Science*, Vol. 25, No. 1, February 2010.

[37] Jonathan Roth, Pedro H. C. Sant'Anna, Alyssa Bilinski, and John Poe, "What's Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature," *Journal of Econometrics*, Vol. 235, No. 2, August 2023.

work with rolling enrollment.[38] These methods use a comparison group that can be made up of waitlisted individuals who never enroll, those who will become participants but have not yet enrolled, or both. The ability to use not-yet-enrolled individuals as comparison cases is appealing: They are more likely to be similar to participants (because they go on to become participants themselves), and their use as comparisons may improve statistical power compared with only using waitlisted individuals who never enroll in the program.

The main challenge with DiD is that violations of the parallel trends assumption would bias causal estimates. It is possible to indirectly test the parallel trends assumption by examining whether trends were similar across groups in the pre-enrollment period. Also, some forms of DiD allow additional covariates to be used to make the groups statistically similar such that their trends conditional on those covariates must be similar.[39] This might help make the assumption more plausible and make estimated effects more precise. However, the types of measures available in OPCS data and administrative records—such as demographic characteristics—might not be the same factors that cause trends to not be parallel (which might reflect differences in motivation or other unobserved internal states).

[38] This includes methods that are purely forms of DiD and synthetic DiD, which blends DiD with synthetic control methods, an approach that reweights the pretreatment outcome trends of control units to more closely resemble treated units.

[39] Roth et al., 2023.

Chapter 7

Program Need Estimation

As noted previously, eligibility for the Pima SCA-PFS program is based on three criteria: homelessness of any form, two or more incarcerations in the PCADC within the previous 12 months, and mental health or substance use disorder, as determined via a self-reported questionnaire response. A key objective of this evaluation was to estimate the scale and characteristics of program need using available data from criminal justice, homelessness, and health service systems. However, we were unable to access the comprehensive, linked data necessary to produce a current, data-driven estimate of need.

Instead, we collaborated with the University of Arizona to leverage available data sources and cross-reference records, as described in the sections that follow. In this chapter, we also summarize existing data integration efforts and highlight opportunities to strengthen future need estimation and resource planning. In addition, recent referral and enrollment trends provide further insight into the ongoing demand for Pima SCA-PFS program services.

Need Estimation Using PCJS and HMIS Matching

PCJS generated a list of individuals with two or more jail bookings within a specified period (October 1, 2022, through January 17, 2025; n = 7,554). This list was provided to a University of Arizona researcher, who submitted an application to the Pima County HMIS Committee to obtain access to HMIS data. The researcher then cross-referenced the PCJS list with HMIS records for all clients served between January 1, 2023, and June 30, 2024 (n = 9,724).

The matching process identified 628 unique individuals who appeared in both datasets. Of these, 349 unique individuals (56 percent) met all three Pima SCA-PFS eligibility criteria: They had two or more jail bookings in the specified period, accessed homeless services as reflected in HMIS, and answered affirmatively to either the mental health disorder or substance use disorder question. The relevant HMIS data elements used to determine behavioral health status were as follows:

- **4.09—Mental Health Disorder.** This element indicates whether the client has a diagnosed mental health disorder, including depression, anxiety, schizophrenia, bipolar disorder, posttraumatic stress disorder (PTSD), and other recognized mental health diagnoses.
- **4.10—Substance Use Disorder.** This element indicates whether the client has a diagnosed substance use disorder, including alcohol use disorder, opioid use disorder, stimulant use disorder, and other recognized substance use conditions.

These are universal data elements that are required for all HMIS-participating projects and collected during client engagement; updates are possible over time. It is important to note that these data elements are self-reported, which may lead to either under- or overreporting of behavioral health

conditions. For example, some individuals may underreport because of stigma or privacy concerns, while others may overreport if they believe that it will improve their eligibility for services. Among the 9,724 individuals in the HMIS dataset, 10 percent reported a substance use disorder, which suggests underreporting. For example, according to the 2025 annual point-in-time count, an estimated 43 percent of the adult population experiencing homelessness in Pima County had a substance use disorder.[40]

Opportunities for Data Integration and Improved Need Estimation

Because of the limitations described in previous sections (including lack of access to fully linked, individual-level data across systems; incomplete or inconsistent behavioral health information; and administrative barriers to data sharing), we were unable to independently generate a comprehensive, current estimate of program need. Pima County should continue to invest in data integration and cross-system collaboration to improve the accuracy and timeliness of need estimation and support more-effective resource planning.

Pima County has demonstrated the capacity to integrate data across criminal justice, homelessness, and health systems to estimate program need. A 2017 feasibility assessment conducted by the Sorenson Impact Center at the University of Utah for Pima County used administrative data from multiple systems to estimate the scale of need for PSH among high–service-utilizing, justice-involved individuals. The analysis began by querying Pima County jail records to identify individuals with two or more bookings in 2016 who were also flagged as homeless, through either a general delivery address or known shelter addresses. This initial cohort of 560 individuals was then matched with records from the HMIS and the Regional Behavioral Health Authority to assess service utilization patterns. The results showed that 85.7 percent of this group had accessed behavioral health services, and 38 percent had accessed homeless services during the same year.[41]

Pima County has also developed several data-sharing systems that could support more-robust need estimation. The health information exchange system at the PCADC was first implemented in 2012 to enable secure, electronic sharing of patient health data among providers. Pima County developed the system in partnership with Arizona Health-e Connection (AzHeC) and was part of a broader statewide network that includes hundreds of health care organizations. The health information exchange system allows medical staff at the jail to quickly access community health records, which can improve continuity of care and reduce reliance on self-reported information from individuals entering custody.[42] As noted in Chapter 1, according to a 2021 snapshot of the PCADC, "[s]ixty-five percent of detainees had reported substance use disorder and 20% self-identified they were homeless."[43]

[40] Tucson Pima Collaboration to End Homelessness, "2025 Tucson/Pima County Point in Time Count Summary," 2025.

[41] Sorenson Impact Center, 2017, pp. 8–9.

[42] Alyssa Hinchman, Sara Hodges, James Backus, Jr., and Terri Warholak, "Implementation of Health Information Exchange at the Pima County Adult Detention Complex: Lessons Learned," *Journal of Correctional Health Care*, Vol. 24, No. 2, April 2018.

[43] Huckelberry, 2021, p. 1.

Pima County's participation in the Data-Driven Justice Initiative, part of the MacArthur Foundation's Safety and Justice Challenge,[44] started locally in 2015, supporting the development of integrated strategies to address the intersection of behavioral health and justice involvement. The county expanded pre-trial screening to all individuals booked at the jail and used tools that assess both risk and behavioral health needs. This approach enabled early identification of people who have mental health or substance use issues and helped connect them to community-based services. The initiative also promoted regular data review by a broad collaborative of justice and health stakeholders, which informed ongoing adjustments to diversion and crisis response strategies.[45]

Insights on Program Demand from Recent Referral and Enrollment Trends

Recent referral and enrollment patterns offer further insight into the scale of program demand. The Pima SCA-PFS program continues to experience demand that exceeds its available resources. As described in Chapter 4, since the program's inception, there have been 1,853 referrals, representing 1,791 unique individuals. During the most recent evaluation period (January 2023 to June 2025), the program received approximately 400 to 500 new referrals, or about 160 to 200 referrals per year. This sustained volume of referrals, coupled with the high rate of eligibility among those referred, underscores the persistent and significant need for PSH for justice-involved adults in Pima County.

Relatedly, the ongoing excess of demand for available program slots means that a waitlist is consistently maintained. As discussed in the previous chapter, this creates favorable conditions for conducting a more robust causal impact evaluation using a waitlist control group because individuals on the waitlist can serve as a natural comparison group for those who are enrolled.

Although current data integration efforts have enabled some estimation of program need, significant gaps remain because of limitations in data access, linkage, and completeness, particularly regarding behavioral health and substance use disorder diagnoses. The experience of Pima County demonstrates both the potential and the challenges of using administrative data to inform resource planning for high-need populations. Continued investment in data integration, routine cross-system matching, and improved data quality, especially for behavioral health indicators, will be critical for more-accurate need estimation and effective program planning in the future.

Insights on Program Demand from Point in Time Counts in Pima County

A 2025 Point in Time Count in Pima County highlights the substantial number of individuals experiencing homelessness who also report serious mental health challenges or substance use disorders. The Point in Time Count identified 857 adults with a serious mental illness and 875 with a

[44] Safety and Justice Challenge, "Pima County, AZ," last updated December 16, 2025.

[45] National Association of Counties, "Pima County, Ariz.: Meeting Needs Along the Behavioral Health and Justice Continuum," 2018.

substance use disorder, most of whom were unsheltered.[46] These figures underscore the significant overlap between homelessness and behavioral health needs in the region.

[46] Tucson Pima Collaboration to End Homelessness, 2025.

Chapter 8

Metrics and Measurement Refinement

In this chapter, we review and evaluate existing performance metrics, including jail avoidance and housing stability, based on standards and practices from PFS projects and PSH studies. We recommend approaches for improving metric reliability and validity and discuss implications for ongoing performance management and reporting.

RAND's original task under this component was to collaborate with the project manager and advisory committee to refine program payment metrics and develop a methodology for validating those metrics. However, by the time the evaluation contract was executed and a RAND team began its work, the payment metrics for the BJA-funded program had already been formally established by Pima County and its partners.

Given that these payment metrics were already in place, stakeholders requested that RAND instead review the existing literature on performance metrics used in other PSH programs and develop recommendations for potential future refinements. This adjustment ensured that RAND's efforts continued to add value by situating Pima County's metrics within the broader evidence base and identifying opportunities for alignment with best practices in PSH evaluation and performance measurement.

We first detail the payment metrics that are already in place under the BJA grant. Then, we summarize the literature review and recommendations for refining metrics in future program cycles.

Pima SCA-PFS Program Metrics

The jail avoidance and housing stability metrics outlined in this chapter are integral components of Pima County's PFS model.[47] Each metric is tied to defined performance benchmarks and corresponding retainage payments. In this context, *retainage* refers to a portion of the total contract payment withheld until the provider organization meets specific performance targets. This outcome-based payment structure directly links compensation to measurable results, creating a financial incentive for providers to achieve program goals related to housing stability and reduced recidivism.

[47] These metrics are detailed in PCJS, 2023, pp. 7–9. According to Pima County, the program metrics for Pima SCA-PFS were developed using findings from a feasibility study conducted prior to the pilot, insights from the original RAND pilot study report (McBain et al., 2021), and requirements outlined in the BJA grant solicitation and deliverables. These sources informed the decision to use outcome-based metrics as part of the PFS model. The retainage percentage was increased after reviewing the original pilot program and to better align incentives. Additionally, the time frames for measuring recidivism and housing stability were extended to six and 12 months to provide a more meaningful assessment of program impact.

Jail Avoidance Metric

The jail avoidance metric measures the program's ability to prevent reincarceration within 12 months after participants are placed in PSH. *Reincarceration* is defined as an entry into the PCADC. The goal is for at least 80 percent of program exits to be unrelated to reincarceration. This metric determines the amount of retainage—5 percent of the total contract value, or $45,060—that is paid to the provider organization based on performance. If 80 percent or more of program exits are not related to reincarceration, the provider receives the full $45,060. If performance falls between 65 and 79 percent, the provider receives 85 percent of the retainage, or $38,301. If performance is below 65 percent but shows improvement compared with the previous quarter, the provider receives 70 percent of the retainage, or $31,542. If performance is below 65 percent with no improvement, no retainage is paid. Table 8.1 summarizes these performance benchmarks and corresponding payments.

Table 8.1. Pima SCA-PFS Jail Avoidance Performance Metric

Performance Benchmark	Description	Percentage of Paid Retainage (out of $45,060)	Dollar Value (out of $45,060)
80 percent or more of program exits not related to reincarceration	Meets or exceeds target for jail avoidance within 12 months of placement in PSH	100	$45,060
65 percent to 79 percent of program exits not related to reincarceration	Moderate performance; below target but demonstrates substantial jail avoidance	85	$38,301
Less than 65 percent of program exits not related to reincarceration, with improved performance compared with previous quarter	Performance below target but showing improvement over prior reporting period	70	$31,542
Less than 65 percent of program exits not related to reincarceration, with no improvement	Performance below target and no improvement observed	0	$0

NOTE: This table summarizes the payment benchmarks for the Pima County SCA-PFS program based on the percentage of program exits not related to reincarceration within 12 months.

Housing Stability Metric

The housing stability metric measures the proportion of participants who maintain housing at six and 12 months after receiving a housing voucher. Participants are considered to have achieved housing retention if they continue to hold a lease for PSH at the reporting date. Positive exits (e.g., transition to other permanent housing) and mutual exits (e.g., exceeding financial eligibility, structural housing issues, illness, death) are excluded from the calculation. The housing stability metric accounts for up

to 10 percent of the total contract retainage: 5 percent for six-month retention and 5 percent for 12-month retention. See Tables 8.2 and 8.3.

Table 8.2. Pima SCA-PFS Housing Stability Performance Metrics: Six-Month Retention

Performance Benchmark	Description	Percentage of Paid Retainage (out of $45,060)	Dollar Value (out of $45,060)
85 percent or more of clients achieved housing retention	Meets or exceeds six-month housing stability target	100	$45,060
75 percent to 84 percent of clients achieved housing retention	Moderate performance; below target but demonstrates substantial housing stability	85	$38,301
Less than 75 percent of clients achieved housing retention, with improved performance compared with previous quarter	Performance below target but showing improvement over prior reporting period	70	$31,542
Less than 75 percent of clients achieved housing retention, with no improvement compared with previous quarter	Performance below target and no improvement observed	0	$0

NOTE: This table summarizes the payment benchmarks for the Pima County SCA-PFS program based on the percentage of clients who retain housing at six months after receiving a housing voucher.

Table 8.3. Pima SCA-PFS Housing Stability Performance Metrics: 12-Month Retention

Performance Benchmark	Description	Percentage of Paid Retainage (out of $45,060)	Dollar Value (out of $45,060)
85 percent or more of clients achieved housing retention	Meets or exceeds 12-month housing stability target	100	$45,060
75 percent to 84 percent of clients achieved housing retention	Moderate performance; below target but demonstrates substantial housing stability	85	$38,301
Less than 75 percent of clients achieved housing retention, with improved performance compared with previous quarter	Performance below target but showing improvement over prior reporting period	70	$31,542
Less than 75 percent of clients achieved housing retention, with no improvement compared with previous quarter	Performance below target and no improvement observed	0	$0

NOTE: This table summarizes the payment benchmarks for the Pima County SCA-PFS program based on the percentage of clients who retain housing at 12 months after receiving a housing voucher.

Literature Review of PFS and PSH Metrics

To place Pima County's performance metrics within a broader evidence base, we conducted a structured review of PFS and SIB projects that link housing interventions to criminal justice outcomes. In the review, we examined how other jurisdictions have defined, measured, and validated similar outcomes (particularly jail avoidance and housing stability) and how those metrics have been operationalized within outcomes-based contracting frameworks. The goal was to identify common practices and potential refinements that could strengthen the reliability and validity of Pima County's metrics in future program cycles.

Methodological Approach

Our review drew on existing survey papers and policy reports that cataloged PFS and SIB projects implemented in the United States and abroad. Key sources included the Urban Institute's "Pay for Success Projects at a Glance" webpage,[48] a Nonprofit Finance Fund report,[49] and a Brookings Institution report.[50] These sources provided a comprehensive inventory of programs and their associated outcome frameworks.

Using this inventory, we conducted targeted searches on Google and Google Scholar in June and July 2025 to identify evaluation reports, government documents, and press releases. These sources provided detailed information on metric definitions, data sources, and evaluation designs. We also used the large language model–powered search engine Perplexity to identify recent updates and cross-linked references.

Programs were included if they

- used a PFS or SIB financing model
- served individuals experiencing homelessness or housing instability
- incorporated measurable outcomes related to recidivism reduction, jail diversion, housing stability, or other indicators of improved social well-being as a basis for repayment
- were implemented and had publicly available details on the outcome metrics and payment structures used for repayment.

Eleven programs met these criteria and are summarized in Appendix D's Table D.1 (see the annex). The analysis focused on identifying common practices in metric selection and validation, the rationale for outcome definitions, and the degree to which these approaches align with Pima County's existing jail avoidance and housing stability metrics.

[48] Urban Institute, "PFS Projects at a Glance," webpage, undated-b.

[49] Nonprofit Finance Fund, *Pay for Success: The First 25*, May 2019.

[50] Emily Gustafsson-Wright, Sophie Gardiner, and Vidya Putcha, *The Potential and Limitations of Impact Bonds: Lessons from the First Five Years of Experience Worldwide*, Brookings Institution, July 2015.

Common Outcome Domains

All included projects incorporated measurable outcomes related to recidivism reduction, jail diversion, or housing stability as the basis for repayment. Housing stability is most often measured as the proportion of participants who remain stably housed at specific intervals—commonly at three, six, nine, 12, or 18 months after placement (e.g., Just in Reach,[51] Project Welcome Home,[52] Lane County PSH[53]) or as the cumulative number of days spent in stable housing, adjusted for various factors such as jail time and hospital visits (e.g., Denver SIB,[54] Denver H2H[55]). Recidivism and jail diversion outcomes are typically assessed by tracking re-arrest, reconviction, or jail or prison bed days; a frequent measurement window is 12 months following program enrollment or release (e.g., Peterborough SIB,[56] Just in Reach,[57] Back on Track Initiative,[58] Salt Lake County REACH,[59] Lane County PSH,[60] Denver SIB,[61] Denver H2H[62]).

A smaller subset of programs incorporated secondary metrics to capture broader system impacts, such as reductions in hospital bed days, emergency service use, or improvements in employment (e.g., Denver H2H,[63] Aspire SIB,[64] Salt Lake County REACH,[65] Homes Not Jail[66]). Secondary metrics—such as the number of convictions recorded, days spent as hospital inpatients, quarters of employment, or engagement in treatment—were often tied directly to success payments. Denver H2H assumed a link between housing stability and reductions in use of avoidable and high-cost emergency health care services that are paid through Medicaid; this program successfully received repayment for reaching net

[51] Sarah B. Hunter and Stephanie Mercier, "Addressing Homelessness Among People with Justice Involvement: Los Angeles County's Just in Reach Pay for Success Demonstration Project," *Cityscape*, Vol. 25, No. 2, 2023, p. 61.

[52] County of Santa Clara, Abode Services, Third Sector, "Project Welcome Home Fact Sheet," August 11, 2015, p. 3.

[53] Samantha Batko, Akiva Liberman, Katharine Elder, Kelly Walsh, Pear Moraras, and Owen Noble, *Evaluation of the HUD-DOJ Pay for Success Permanent Supportive Housing Demonstration: Years 4 & 5 Report*, U.S. Department of Housing and Urban Development, September 2023, p. 30.

[54] Sarah Gillespie, Devlin Hanson, Alyse D. Oneto, Patrick Spauster, Mary Cunningham, and Michael Pergamit, *Denver Supportive Housing Social Impact Bond Initiative: Final Outcome Payments*, Urban Institute, July 2021, p. 7.

[55] Devlin Hanson, Sarah Gillespie, and Anna Doñate, *Denver Housing to Health Project Housing Stability Payment Outcomes*, Urban Institute, June 2025, p. 5.

[56] Emma Disley, Jennifer Rubin, Emily Scraggs, Nina Burrowes, and Deidre May Culley, *Lessons Learned from the Planning and Early Implementation of the Social Impact Bond at HMP Peterborough*, Ministry of Justice, 2011, pp. 31–32.

[57] Hunter and Mercier, 2023, p. 61.

[58] Impact Europe, "BNP Paribas Social Impact Bonds," September 2020.

[59] Salt Lake County; SLCo PFS 1, Inc.; First Step House; Sorenson Impact Center; The Road Home; and Third Sector, "Fact Sheet: Salt Lake County Pay for Success Initiative," 2016, p. 3.

[60] Batko et al., 2023, p. 30.

[61] Gillespie, Hanson, and Oneto, 2021, p. 7.

[62] Hanson, Gillespie, and Doñate, 2025, pp. 8–9; Hanson, Gillespie, and Oneto, 2022, p. 19.

[63] Hanson, Gillespie, and Doñate, 2025.

[64] Veronica Coram, Leanne Lester, Selina Tually, Michael Kyron, Kelly McKinley, Paul Flatau, and Ian Goodwin-Smith, *Evaluation of the Aspire Social Impact Bond: Final Report*, Centre for Social Impact, Flinders University, Adelaide and Centre for Social Impact, University of Western Australia, Perth, August 2022, pp. 27–28.

[65] Salt Lake County et al., 2016, p. 3.

[66] Salt Lake County et al., 2016, p. 4.

reduction in Medicaid expenditures. Salt Lake County REACH, which incorporated such services as mental health treatment and employment support, obtained a nonsignificant increase in employed time. Because Pima SCA-PFS serves individuals who have mental health conditions and substance use disorders, metrics that capture broader system impacts (such as hospital bed days and emergency service use) may be particularly relevant for evaluating program effectiveness.

For additional details on outcome domains, metrics, and periods for each program, see the annex, which is available separately.

Rationale for Metric Selection

Programs generally selected metrics through collaborative processes involving government entities, service providers, payors, and evaluators. Decisions were shaped by empirical evidence, local context, and the need for metrics to be both meaningful and contractually feasible. For example, the Peterborough SIB measured the frequency of reconviction events rather than a binary recidivism indicator to encourage continued engagement with participants even after they reoffend.[67] In Australia, Aspire SIB set targets relative to historical baselines of health, justice, and homelessness service utilization to ensure that they were "clear, appropriate and measurable indicators that act as reasonable proxies for social impact," enabling robust, outcomes-based contracting and investor returns.[68] The Denver H2H project selected its payment metrics (housing stability, jail day reduction, and net Medicaid and Medicare savings) because they were evidence-based, measurable, attributable to the intervention through an RCT, and aligned with local and federal priorities for cost savings and improved outcomes.[69] Salt Lake County's REACH program based its targets on findings from meta-analyses on risk-need-responsivity and other evidence-based practices.[70] The outcome metrics for Salt Lake County's Homes Not Jail initiative were established by analyzing historical performance data from Rapid Rehousing programs at The Road Home (the service provider), as well as national benchmarks. Target impact rates and payment amounts were determined based on what was both achievable and meaningful according to this evidence base "by analyzing the historical performance of Rapid Rehousing programs at The Road Home and nationwide."[71] These examples illustrate how metric design often balances empirical evidence, local context, and contractual feasibility.

Alignment with Pima County's Metrics

Pima County's housing stability and jail avoidance metrics are broadly aligned with the outcome domains commonly used in PFS and PSH programs (see Table 8.4). Most initiatives measure housing stability through milestones or cumulative days housed. Pima County follows this standard practice but distinguishes itself by using tiered performance bands that allow for partial payments based on

[67] Disley et al., 2015, p. 14.

[68] Coram et al., 2022, p. xv.

[69] Hanson, Gillespie, and Oneto, 2022, pp. 1, 3, 14.

[70] Salt Lake County et al., 2016, p. 2.

[71] Salt Lake County et al., 2016, p. 4.

incremental improvement rather than the binary or milestone-based payment models that are typical elsewhere.

For criminal justice outcomes, Pima County relies on a binary indicator of reincarceration within 12 months. In contrast, some other programs use more-nuanced metrics, such as percentage reduction in jail bed days,[72] jail avoidance,[73] or frequency of arrests,[74] which may offer a more sensitive assessment of impact.

Many programs monitor secondary outcomes, such as health care utilization or employment, to understand broader system effects, but these outcomes are generally not linked to payment. Expanding Pima County's outcome framework to include supplementary indicators would help orient the program toward achieving positive health care outcomes that reflect the program's eligibility criteria, such as mental health and substance use disorder diagnoses. Doing so would ensure that program success is measured in terms of improvements in the specific health needs that the program was designed to address. Incorporating these broader system metrics often requires more-complex data integration and cross-agency coordination.

[72] Gillespie, Hanson, Oneto, et al., 2021, p. 7; Hanson, Gillespie, and Doñate, 2025, pp. 8–9; Hanson, Gillespie, and Oneto, 2022, p. 19.

[73] Hunter and Mercier, 2023, p. 61.

[74] According to Disley et al. (2011, p. 33), "[i]nterviewees from the Ministry of Justice pointed out that frequency of reconviction events provides a useful measure, because it is likely to have a close relationship with costs to the criminal justice system."

Table 8.4. Comparison of Payment-Linked Housing Stability and Criminal Justice Metrics

Program (Jurisdiction)	Target Population	Housing Stability Metric(s)	Housing Payment Structure	Criminal Justice and Recidivism Metric(s)	Criminal Justice Payment Structure	Health Outcomes Metric(s)	Health Outcomes Payment Structure
Pima SCA-PFS (Pima County, Arizona)	126 homeless adults who have been jailed two or more times within the past 12 months and have mental health or substance use disorders	Percentage retained at six and 12 months after housing voucher receipt	Tiered: 100 percent, 85 percent, 70 percent, and 0 percent based on performance and improvement	Percentage of exits not related to reincarceration (12 months after PSH placement)	Tiered: 100 percent, 85 percent, 70 percent, and 0 percent based on performance and improvement	N/A	N/A
Denver SIB (Denver, Colorado)[a]	724 adults experiencing chronic homelessness and frequent arrests	Total days housed (number of days in housing – number of jail days)	Per-day payment ($15.12 per day); only for those stably housed for 12 months or longer	Percentage reduction in mean jail days (treatment versus control) over three years post-randomization	Tiered: $0 to max payment based on percentage difference in reduction	N/A	N/A
Denver H2H (Denver, Colorado)[b]	More than 250 adults who are experiencing homelessness and have high arrests and Medicaid costs	Total days housed (number of days in housing – number of jail days)	Per-day payment ($19.25 per day); only for those stably housed for 12 months or longer	Percentage reduction in mean jail days (treatment versus control group) during the two- and four-year periods after randomization	Per-participant reduction in jail days, measured at two and four years	Net reduction in Medicaid expenditures by end of project, 2029	Social Impact Partnerships to Pay for Results Act or Treasury payment for net reduction in Medicaid claims for treatment versus control group, calculated using DiD analysis at project end

Program (Jurisdiction)	Target Population	Housing Stability Metric(s)	Housing Payment Structure	Criminal Justice and Recidivism Metric(s)	Criminal Justice Payment Structure	Health Outcomes Metric(s)	Health Outcomes Payment Structure
Just in Reach (Los Angeles County, California)[c]	300 adults with high physical, mental, or substance use disorders who experienced multiple incarcerations and chronic homelessness in the past three years	Percentage retained in housing at six and 12 months after PSH entry	Payment per participant at each milestone	Avoidance of qualifying jail returns (two years after PSH entry)	Payment per participant with zero, one, or two returns to jail	N/A	N/A
Project Welcome Home (Santa Clara County, California)[d]	199 chronically homeless adults with high county service use	Months of continuous tenancy (three, six, nine, and 12 months, then monthly)	Set payment per milestone achieved; cumulative for 12 months of retention	N/A	N/A	N/A	N/A
Lane County PSH (Lane County, Oregon)[e]	125 adults returning from jail or prison who have high service use	Percentage retained at six, 12, and 18 months after PSH entry	Set payment per participant per milestone; full repayment if 85-percent and 78-percent thresholds reached are at six and 12 months, respectively	Lack of felony conviction (one, two, and three years) after PSH entry	Set payment per participant per milestone; full repayment if 3-percent threshold is reached	N/A	N/A
Salt Lake County REACH (Salt Lake County, Utah)[f]	225 high-risk, high-need probationers	N/A, but short-term housing support as part	N/A	35-percent reduction in days incarcerated and arrests over four	Payment per day with arrest avoided, per improvement in	Receive 200 hours of treatments in six months,	Payment per engaged participant

Program (Jurisdiction)	Target Population	Housing Stability Metric(s)	Housing Payment Structure	Criminal Justice and Recidivism Metric(s)	Criminal Justice Payment Structure	Health Outcomes Metric(s)	Health Outcomes Payment Structure
		of wraparound services		years after enrollment (versus expected rates for similar high-risk offenders); 25-percent improvement in employment over two years (versus expected baseline); 66 percent achieve 200 hours program engagement within six months	employment, per program engagement	including substance use disorder treatment and Moral Reconation Therapy with target rate of 66-percent enrollment	
Homes Not Jail (Salt Lake County, Utah)[9]	315 persistently homeless single adults (age 30 or older) with 90 to 364 days in shelter, jail, or on the streets who are not eligible for other housing services	30-percent improvement in months without jail or shelter over two years after program enrollment (compared with historical outcomes for similar individuals); 80-percent graduation to permanent locations within	Payment per improvement in months without jail or shelter, per graduation	No separate criminal justice payment metric; criminal justice involvement included in the housing stability metric as *months not spent in jail*	N/A	Improvement in mental health treatment enrollments: accrued enrollments over two years with target rate of 100-percent improvement	Payment per enrollment

Program (Jurisdiction)	Target Population	Housing Stability Metric(s)	Housing Payment Structure	Criminal Justice and Recidivism Metric(s)	Criminal Justice Payment Structure	Health Outcomes Metric(s)	Health Outcomes Payment Structure
		one year after enrollment					
Home for Good (Anchorage, Alaska)[h]	190 chronically homeless adults with high needs and frequent emergency or criminal justice system use	Housing stability (percentage of possible housing months stably housed, measured in six-month periods over three years)	Based on percentage of months stably housed	N/A	N/A	Fire department calls for emergency medical services transport	N/A
Aspire SIB (Adelaide, Australia)[i]	575 adults who were experiencing chronic homelessness or at risk of being discharged into homelessness from a correctional or health facility	Percentage reduction in crisis accommodation periods over three years after enrollment (compared with participants' own pre-program use as baseline)	Variable investor return bands based on percentage reduction in crisis accommodation	Percentage reduction in number of convictions over three years after enrollment (compared with participants' own pre-program baseline)	Variable return bands based on percentage reduction in convictions	Percentage reduction in hospital bed days	Variable return bands based on percentage reduction in hospital bed days
Peterborough SIB (Peterborough, United Kingdom)[j]	Three 1,000-person cohorts of adult male offenders released from HM Prison Peterborough after 12-month or shorter sentences	N/A	N/A	Frequency of reconviction events (12 months post-release, versus matched national comparison group)	Outcome payment if there is a more than 10-percent reduction for first treatment cohort or more than 7.5-percent reduction for three treatment cohorts	N/A	N/A

Program (Jurisdiction)	Target Population	Housing Stability Metric(s)	Housing Payment Structure	Criminal Justice and Recidivism Metric(s)	Criminal Justice Payment Structure	Health Outcomes Metric(s)	Health Outcomes Payment Structure
Back on Track Initiative (Belgium)[k]	133 young adults (ages 17–25) who were experiencing homelessness or recently released from prison	More than 85 percent of program completers obtain a rental agreement	Outcome payment if more than 85 percent of completers obtain a rental agreement	25-percent reduction in recidivism versus reference group (not specified), over three years	Outcome payment if there is a more than 25-percent reduction in recidivism versus reference rate	N/A	N/A

NOTE: N/A = not applicable. More information on the projects listed in this table is provided in the annex to this report, which is available separately.

[a] Gillespie, Hanson, Leopold, et al., 2021; Gillespie, Hanson, and Oneto, 2021; Batko et al., 2023; Rayanne Hawkins, Mayookha Mitra-Majumdar, David McClure, and Ellen Paddock, *Using Pay for Success in Criminal Justice Projects: Lessons Learned from PFS Project Stakeholders, Policy Analysis, and Landscape Analysis*, Urban Institute, November 2017.

[b] Hanson, Gillespie, and Doñate, 2025; Hanson, Gillespie, and Oneto, 2022; Sarah Gillespie, Devlin Hanson, and Alyse D. Oneto, *Scaling Supportive Housing as a Health Care Solution: Early Findings from the Denver Housing to Health Pay for Success Project*, Urban Institute, May 2024.

[c] Hunter et al., 2022; Hunter and Mercier, 2023; Batko et al., 2023; Hawkins et al., 2017.

[d] Raven, Niedzwiecki, and Kushel, 2020; County of Santa Clara Abode, Services, and Third Sector, 2015; Hawkins et al., 2017.

[e] Batko et al., 2023; Kelly Walsh, Nicole DuBois, Samantha Batko, Clare Salerno, Eleanor Noble, Akiva Liberman, and Mary Cunningham, *Evaluation of the HUD-DOJ Pay for Success Permanent Supportive Housing Demonstration: Year 3 Report*, U.S. Department of Housing and Urban Development, Office of Policy Development and Research, and Urban Institute, May 2020; Akiva Liberman, Mary Cunningham, Sarah Gillespie, Samantha Batko, Matt Eldridge, Nicole DuBois, Alexandra Ricks, and Kelly Walsh, *Evaluation of the HUD-DOJ Pay for Success Permanent Supportive Housing Demonstration: Year 2 Report*, U.S. Department of Housing and Urban Development, Office of Policy Development and Research, October 2019; Hawkins et al., 2017.

[f] Hawkins et al., 2017; Salt Lake County et al., 2016.

[g] Salt Lake County et al., 2016; Hawkins et al., 2017; University of Utah College of Social Work, "$1.3 Million to Study the Efficacy of Evidence-Based Programs for Homeless Individuals and People in the Criminal Justice System," press release, March 18, 2019; Urban Institute, "Salt Lake County's Homes Not Jail Program," fact sheet, undated-a; Taylor W. Anderson, "County Launches Program Aimed at Tracking, Reducing Repeat Criminal Offending," *Salt Lake Tribune*, May 25, 2017; Salt Lake County, "Salt Lake County Launches Two Pay for Success Projects: Goal Is to Offer Proven Solutions to Homelessness and Repeat Offenders," press release, December 19, 2016; Third Sector Capital Partners, "Salt Lake County Pay for Success Initiative," webpage, undated.

[h] Batko et al., 2023; Walsh et al., 2020; Hawkins et al., 2017; Annie Dear and Emily Bogan, "Alaska's First Pay for Success Program Helps People Experiencing Homelessness Get—and Stay—Stably Housed, Resulting in First Outcome Payment," Social Finance, August 24, 2021.

[i] Coram et al., 2022; Social Ventures Australia, "Aspire Social Impact Bond," webpage, undated; Social Ventures Australia, "A Proven Solution for Countering Chronic Homelessness, Aspire Will Live on Beyond the SIB," February 19, 2025; Social Ventures Australia, "Aspire Social Impact Bond," July 2024; Impact Investing Hub, "Case Study: Aspire Social Impact Bond," webpage, undated.

Program (Jurisdiction)	Target Population	Housing Stability Metric(s)	Housing Payment Structure	Criminal Justice and Recidivism Metric(s)	Criminal Justice Payment Structure	Health Outcomes Metric(s)	Health Outcomes Payment Structure

[j] Disley et al., 2011; Disley et al., 2015; Ministry of Justice, *Social Impact Bond Payment by Results Pilot at HMP Peterborough: Final Cohort Results and Learning Exercise*, undated; Social Finance, "Pioneered by Social Finance: The World's First Social Impact Bond (SIB), Social Finance," last updated January 23, 2026.

[k] Impact Europe, 2020.

Evaluation Designs and Validation Approaches

Evaluation rigor varied across programs, reflecting differences in data availability and contractual requirements. RCTs were used in the Denver Supportive Housing SIB Initiative,[75] the Denver H2H Initiative,[76] Santa Clara's Project Welcome Home,[77] Salt Lake County's REACH program,[78] and Salt Lake County's Homes Not Jail program.[79] Not all of these programs tied payment metrics to the results of the RCTs (see Table D.1 in the annex). Quasi-experimental designs with comparison groups were employed in Peterborough,[80] Lane County PSH,[81] and Los Angeles's Just in Reach, although Just in Reach and Lane County PSH did not tie payments to the results of the quasi-experimental analyses (see Table D.1 in the annex).[82]

Implications for Metric Refinement

Our literature review and analysis point to several strategies for improving the reliability and validity of outcome measurement in future program cycles:

- **Enhance the precision of core metrics.** Pima County should consider retaining jail avoidance and housing stability as primary outcomes but refining operational definitions. Measuring jail days avoided rather than binary reincarceration could capture partial success and provide a more sensitive indicator of program impact.
- **Incorporate supplementary indicators.** Pima County should consider adding secondary metrics—such as emergency room visits, employment status, or behavioral health engagement—to capture broader system effects and potential cost savings.
- **Extend observation periods.** Pima County should consider expanding housing stability measurement to 18 months to allow assessment of longer-term retention.
- **Strengthen data integration.** Establishing formal data-sharing agreements among justice, housing, and health agencies can enable multidomain outcome tracking and reduce measurement error.
- **Increase evaluation rigor.** Where feasible, Pima County should adopt quasi-experimental designs with matched comparison groups to validate observed outcomes and strengthen causal inferences (see Chapter 6).

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[75] Gillespie, Hanson, Oneto, et al., 2021, pp. 2, 6–7.

[76] Hanson, Gillespie, and Doñate, 2025, p. 1.

[77] Raven, Niedzwiecki, and Kushel, 2020, p. 798.

[78] Salt Lake County et al., 2016, p. 4.

[79] Salt Lake County et al., 2016, p. 4.

[80] According to the report, "[t]he impact of the One Service on reoffending is being measured separately by independent assessment using a national comparison group design" (Disley et al., 2015, p. 14).

[81] This evaluation "compares eligible individuals . . . with a comparison group for whom such housing did not become available, in a natural experiment" (Batko et al., 2023, p. 31; also see p. 54).

[82] The report "provides estimates of the impact . . . using a quasi-experimental design (comparing program participants with a statistically balanced comparison group" (Hunter et al., 2022, p. iii; also see pp. viii, 7, 22).

Chapter 9

Conclusions and Next Steps

This evaluation of the Pima SCA-PFS program provides a comprehensive assessment of program operations, participant outcomes, and the broader system context in which PSH is delivered to justice-involved individuals experiencing homelessness and behavioral health challenges. We organized the evaluation around the following five core analytic tasks:

- developing a logic model to capture program operations and expected outcomes
- generating descriptive statistics on referrals, enrollments, and exits
- identifying viable research designs for future causal impact estimation
- estimating program need using justice, homelessness, and health data
- reviewing current performance metrics in light of national PFS and supportive housing literature.

Key Findings by Task

Logic Model Development

A key element of this evaluation was developing a logic model that captures Pima SCA-PFS program operations and intended outcomes. In collaboration with stakeholders, we mapped program resources, partnerships, activities, and expected results. Supported by federal and county funds, and staffed by OPCS using evidence-based practices, the program emphasizes individualized support for high-need, justice-involved individuals. The logic model also identifies contextual challenges, such as limited affordable housing, restrictive landlord policies, and administrative barriers. Despite these constraints, the program's comprehensive design and strong partnerships position it to achieve increased enrollment, high housing retention, reduced recidivism, and improved community safety. Addressing external barriers and maintaining stakeholder engagement will be critical for sustaining and expanding impact.

Descriptive Program Statistics

Referrals, Enrollments, and Exits

From April 2019 to June 2025, Pima SCA-PFS received 1,853 referrals for 1,791 unique individuals. Quarterly referral numbers fluctuated because of changes in referral sources and system constraints, such as voucher freezes. During the BJA evaluation period (January 2023–June 2025), 126 participants enrolled, 43 were housed, 20 were awaiting placement, and 63 exited before housing. Median wait times from referral to enrollment and from enrollment to housing were longer than in the

pilot, reflecting administrative delays. The participant population continued to experience high levels of housing instability and justice involvement. These findings confirm ongoing demand for PSH and highlight the need to address system bottlenecks and resource constraints to improve program flow and outcomes.

Outcomes

We observed substantial reductions in criminal justice involvement and associated costs among program participants in the 12 months following enrollment. Among participants with complete data, the number experiencing criminal justice outcomes fell by 35 percent, and total events declined by 58 percent. The largest reductions were seen in jail bookings and related services, and average costs per participant decreased by 46 percent. These findings are consistent with findings from the pilot study: There were also significant reductions in criminal justice outcomes and costs, primarily driven by fewer jail-related events. Although these results are promising, they are descriptive and do not establish causality. In other words, these reductions were not necessarily caused by the Pima SCA-PFS program. Future evaluations should use rigorous causal methods and expand data collection to include additional agencies and health outcomes to better assess program impact. Continued monitoring and evaluation will be important for ongoing program improvement and policy decisions.

Framework for Causal Impact Estimation

Another key objective of this evaluation was to lay the groundwork for estimating the causal impact of Pima SCA-PFS on such outcomes as health, housing stability, and criminal justice involvement. Although descriptive results are promising, causal attribution is not possible without a valid comparison group. *Waitlisted* individuals, defined as those who have been referred but not yet enrolled, were identified as the most suitable comparison group for future studies. However, challenges remain, including ensuring a sufficiently large and comparable sample and addressing nonrandom selection into the program. We outlined several potential causal methods, including RCTs, RDD, matching and weighting, and DiD, each of which has trade-offs in feasibility and rigor. Strengthening data integration and considering quasi-experimental or randomized designs will be important next steps to enable more-robust impact evaluation and inform future program decisions.

Program Need Estimation

The available evidence suggests that the need for PSH among justice-involved adults in Pima County exceeds available resources. Data from HMIS and PCJS identified 349 individuals who appeared to meet all Pima SCA-PFS program eligibility criteria between January 2023 and June 2024. This figure should be interpreted as an estimate because it relies on self-reported behavioral health information that may either understate or overstate true prevalence. In addition, program data from OPCS indicate that approximately 400 to 500 new referrals were received during the same period. This sustained volume of referrals, along with the high rate of eligibility among those referred, points to ongoing unmet demand for PSH in Pima County. Limitations in data integration and reliance on self-reported information constrain the accuracy of need estimates. Continued investment in data

integration and improved estimation methods will be important for effective resource allocation and program planning.

Performance Metrics Summary

The Pima SCA-PFS program's outcome measures for jail avoidance and housing stability are broadly consistent with national practices in PFS and PSH programs; it uses tiered performance benchmarks that link provider payments to measurable results. National models and the literature suggest several ways to strengthen outcome measurement in future cycles. Pima County should consider refining core metrics, such as tracking jail days avoided rather than only tracking reincarceration, and incorporating supplementary indicators, such as emergency room visits, employment status, or behavioral health engagement, to capture broader system effects. Extending the observation period for housing stability, formalizing data-sharing agreements across agencies, and increasing evaluation rigor through quasi-experimental designs would further improve outcome measurement and align the program with best practices.

Overarching Themes and Recommendations

Several key themes emerged from our assessment. First, Pima SCA-PFS continues to attract strong demand for PSH, as reflected in high referral numbers and active waitlists. Such system-level challenges as limited affordable housing, administrative processes, and voucher freezes can affect the pace of enrollment and housing placement, but the program has demonstrated resilience and adaptability in navigating these barriers.

Second, our findings show that program participation is associated with substantial reductions in criminal justice involvement and related costs, underscoring the program's potential to improve outcomes for a high-need population. However, it is important to note that fewer than half of program participants in this evaluation received PSH, and many did not accrue sufficient time in PSH to assess its specific impact. Our estimates likely reflect conservative effects of PSH; they may be influenced by pre-PSH program activities (such as case management, short-term transitional housing, benefits enrollment assistance, and other supportive services provided prior to permanent housing placement) or partial exposure to the intervention. At the same time, these promising descriptive results highlight the value of pursuing more-rigorous evaluation methods to better establish causal program impact and inform future program development.

Third, the evaluation underscores the importance of robust data integration across justice, housing, and health systems. Continued progress in data sharing and real-time linkage will further enhance the county's ability to estimate program need, monitor outcomes, and allocate resources effectively.

Finally, although current performance metrics are well-aligned with national best practices, there are valuable opportunities to refine outcome measurement and extend the observation period to better capture long-term program effects. Importantly, because the treatment group in this evaluation includes a substantial number of participants who never obtained PSH, current outcome measures reflect both those who received the intended intervention and those who did not. This has

implications not only for housing retention metrics but also for accurately assessing the impact of PSH itself. Future evaluations should include a consideration of strategies to more precisely distinguish and track outcomes for participants who actually receive PSH, in addition to extending the observation window, to ensure that performance metrics fully capture the effects of the primary intervention.

To build on these strengths and address remaining challenges, we offer the following recommendations:

- **Strengthen data integration.** Continue efforts to formalize data-sharing agreements and improve linkage across justice, housing, and health systems to enable more-comprehensive tracking of participant outcomes and service utilization. In particular, future evaluation capacity should prioritize developing the ability to link individual-level records across these domains in real time to allow the county to directly identify and quantify the population meeting all program eligibility criteria. Doing so will require addressing technical, legal, and administrative barriers to data integration that limited the program need estimation task in this evaluation.
- **Enhance evaluation rigor.** Where feasible, implement quasi-experimental or randomized designs using waitlisted individuals or other appropriate comparison groups to strengthen causal inference regarding program impacts. In addition, future analyses could examine the characteristics of participants who succeed or do not succeed in the program to better tailor services; however, as noted during the pilot evaluation, the current sample size may be too small for meaningful analysis. As enrollment grows, future evaluations should revisit this approach to inform program improvement.
- **Refine performance metrics.** Build on current outcome measures by incorporating additional indicators of participant well-being and system impact, such as frequency of emergency room visits, employment status, or behavioral health engagement, and by extending the observation window for housing stability and recidivism outcomes. These supplementary metrics can be measured and reported to inform program management and policy but do not necessarily need to be tied to payment.
- **Address systemic barriers.** Work with community partners to address persistent barriers to housing access, including the impact of voucher freezes, limited affordable housing stock, and restrictive landlord policies.
- **Expand and improve the sample size.** In this study, we examined outcomes among individuals who were enrolled in the program. However, fewer than half of these individuals received PSH. Therefore, the specific impact of the primary intervention, PSH, is limited in this study. A longer period and increased PSH placement levels are needed to specifically examine the impact of rather than overall program enrollment.
- **Sustain stakeholder engagement.** Maintain regular engagement with program implementers, county agencies, and community stakeholders to ensure that program design and evaluation remain responsive to local needs and evolving best practices. This effort should include ongoing communication and feedback loops with frontline staff, service providers, justice and health system partners, and individuals with lived experience. Regular stakeholder meetings, collaborative planning sessions, and transparent sharing of evaluation findings can help

identify emerging challenges, inform program adjustments, and foster a shared commitment to improving outcomes. Continued stakeholder involvement will also be critical to building support for data integration initiatives, addressing system barriers, and ensuring that the program adapts effectively to changes in policy, funding, or community context.

Abbreviations

APD	Adult Probation Department in Pima County
BJA	Bureau of Justice Assistance
CTPD	City of Tucson Public Defender's Office
DiD	difference-in-differences
H2H	Housing to Health
HMIS	Homeless Management Information System
JPRC	Jail Population Review Committee
OPCS	Old Pueblo Community Services
PCADC	Pima County Adult Detention Complex
PCJS	Pima County Justice Services
PCPDS	Pima County Public Defense Services
PFS	pay for success
PSH	permanent supportive housing
Q	quarter
RCT	randomized controlled trial
RDD	regression discontinuity design
SCA-PFS	Second Chance Act Pay for Success Initiative
SIB	Social Impact Bond
SNAP	Supplemental Nutrition Assistance Program
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income

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