The Medication Assisted Treatment and Re-entry Initiative
Year 2 Report

Submitted to
The Franklin County Sheriff's Office
160 Elm Street
Greenfield, MA 01301

Department of Health Promotion and Policy
School of Public Health and Health Sciences
University of Massachusetts Amherst
Elizabeth Evans, PhD, Principal Investigator
Calla Harrington, MPH, MSW
Elizabeth Delorme, BA
Janie Xu, BA
Isabella Izidoro

312 Arnold House, 715 North Pleasant Street
Amherst, MA 01003
https://www.umass.edu/sphhs/hpp

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Chapter I. Introduction

The Medication Assisted Treatment (MAT) and Re-entry Initiative was one of a portfolio of projects funded in 2018 by the Center for Substance Abuse Treatment (CSAT), Substance Abuse and Mental Health Services Administration (SAMHSA) to expand capacity to deliver Medication Assisted Treatment (MAT) to treat opioid use disorder. In Massachusetts, the SAMHSA grant was awarded to the Franklin County Sheriff's Office (FCSO) to conduct the program over a three-year period. FCSO contracted with the University of Massachusetts Amherst (UMass) to conduct the research and evaluation of the program.

This report documents the history, implementation, and findings of the FCSO MAT and Re-entry Initiative during the project's second year, from October 2019 to September 2020. It is important to recognize that the COVID-19 pandemic began in March 2020, significantly disrupting operations during the second year of program operation. In the present Year 2 Evaluation Report, Chapter I provides information on the organization of the report. Chapter II contains a review of the impacts of the COVID-19 pandemic on the program. Chapter III offers a summary of the status of data collection, and a description of the sample sizes used in the analyses. Chapter IV describes the characteristics of program participants at intake. Chapter V provides information on services provided during incarceration. Chapter VI provides a summary of the characteristics of program participants who completed a follow-up interview three months post-exit from jail. Finally, Chapter VII summarizes next steps and recommendations for continued implementation and evaluation of the program, based on the lessons learned thus far.

Note that the Year 1 Evaluation Report provides details regarding the knowledge base that informs the research and evaluation design, an overview of the study design, and the perspectives and experiences of jail staff and other key stakeholder members were responsible for initial implementation of the program (from October 2018 to September 2019). We intend to summarize staff and stakeholder perceptions of the second year of program implementation, including program adaptations due to COVID-19, in a supplemental report to be delivered in the first quarter of 2021.

Chapter II. Impacts of the COVID-19 Pandemic

Much of this chapter is excerpted from the following commentary: Donelan, CJ, Hayes, E, Potee, R, Schwartz, L, Evans, E. (2020). COVID-19 and treating incarcerated populations for opioid use disorder. *Journal of Substance Abuse Treatment*. In press.

Treating opioid use disorder in criminal justice settings

Criminal-justice involved individuals with opioid use disorder (OUD) are at high risk for overdose and other adverse health outcomes (Binswanger et al., 2013; Pizzicato, 2018). A key strategy to address the opioid epidemic among correctional populations is increased access to medications to treat OUD (MOUD, i.e., buprenorphine, methadone, naltrexone) (Brinkley-Rubinstein et al., 2017; Malta et al., 2019). MOUD program implementation inside correctional institutions requires significant organizational changes (Brinkley-Rubinstein et al., 2019; Grella et al., 2020; Mace et al., 2019). The Franklin County Sheriff's Office (FCSO) in Greenfield, Massachusetts and the Hampshire County Sheriff's Office (HSO) in Northampton, Massachusetts are among the first jails nationwide to offer buprenorphine and methadone, in addition to naltrexone, to treat residents with OUD. The present project aims to expand capacity to deliver MOUD to jail populations and provide insights on the challenges, benefits, and facilitators of delivering a MOUD program in jail settings.

By March 2020, key MOUD program elements included: provision of all three MOUD types, MOUD induction or continuation at entry, treatment of pre-trial and sentenced individuals, psychosocial treatment, and re-entry programming to support community-based MOUD. The jails were engaged in MOUD program refinement (under House Bill 4742, "Chapter 208"), translation into practice of lessons learned thus far, and rigorous evaluation of program implementation, outcomes, and costs (Friedmann & Evans, 2019), when COVID-19 significantly disrupted operations.

Program adaptations due to COVID-19

In response to COVID-19, FCSO and HSO implemented mitigation policies and adapted MOUD programming. Massachusetts declared a state of emergency on March 10 and the World Health Organization declared a pandemic on March 11. Soon after, both jails restricted jail access such that only essential staff and no visitors were allowed in the jails. As described in detail elsewhere (Donelan et al., 2020), the jails worked to de-densify the jail settings to reduce risk of COVID-19 transmission. Additionally, sites procured personal protective equipment (PPE), sanitization equipment/supplies, and COVID-19 test kits. Protocols were instituted to test individuals with COVID-19 symptoms immediately and to quarantine incarcerated individuals who are symptomatic or test positive. Symptomatic and positive individuals were housed in secured spaces separated from the general population. FCSO and HSO implemented CDC-recommended precautions with on-site staff including face masks, body temperature checks, symptom self-report, and physical distancing. To implement and enforce physical distancing, staff and incarcerated individuals were educated about COVID-19 and safety precautions (e.g., via materials from the Johns Hopkins University and Medicine Coronavirus Resource Center, 2020). Sites also trained staff on COVID-19 mitigation practices, set behavioral expectations, set and enforced limits on the number of people permitted in a room, and redesigned spaces for safety.

A major challenge for the implementation of the program has been the provision of in-jail OUD treatment despite COVID-19 mitigation efforts. For example, to observe physical distancing, MOUD was provided in housing units; medically quarantined individuals received medications directly to their cell. In lieu of behavioral health groups, which were cancelled, incarcerated individuals were

encouraged to work on recovery independently using workbooks (e.g., see Covington et al., 2011). At FCSO, staff received permission to re-purpose existing state and federal grant funds to create technological capacity such that distressed individuals could receive individual psychosocial telehealth sessions.

A second and significant challenge to MOUD program implementation given COVID-19 was the rapid release of incarcerated individuals. FCSO and HSO identified and assessed incarcerated individuals with high-risk medical conditions for release with electronic monitoring. Also, a Massachusetts Supreme Judicial Court ruling mandated release of non-violent pre-trial individuals, resulting in rapid de-population of the jails (ACLUM, 2020). While rapid releases were appropriate and necessary, a significant proportion were MOUD patients, many of whom were pre-trial detainees with complex health and social needs. Some were released on short notice, making it difficult to arrange for continued receipt of community-based MOUD and other care-continuity planning.

To facilitate access to community-based healthcare for criminal justice-involved populations, the Massachusetts Medicaid system (called MassHealth) made state-wide special accommodations. For example, policies were changed such that MassHealth coverage remained active when individuals were detained, incarcerated individuals with prior MassHealth enrollments were provided with rapid MassHealth re-activation without documentation, and MassHealth navigators dedicated time to help with the increased need that was created by the released population. At the same time, federal and state agencies collaborated to reduce barriers to community addiction treatment for released individuals, for example by enabling Opioid Treatment Providers to provide take-home doses of MOUD (Massachusetts Department of Public Health, Bureau of Substance Addiction Services, 2020) and by securing additional sober housing beds for probationers and parolees.

In addition to these adaptations, FCSO also implemented an adapted hub-and-spoke MOUD model in response to COVID-19. The organizational hub were telecommuting-from-home behavioral healthcare and social worker staff who had a daily telehuddle to track information (specific release dates, changing court dates) and make extensive healthcare to-do lists. Action items were handed off to the essential caseworker and clinical staff working inside FCSO. For example, these staff placed incarcerated individuals in front of the telehealth computer for engagement with FCSO caseworkers/clinicians and community-based addiction treatment partner agencies (i.e., spokes). FCSO also changed post-release re-entry programming to use telehealth options, such as Recovery Management Checkups (Scott et al., 2005), peer-recovery telehealth groups, and a mobile phone texting application to connect with, educate, and motivate individuals to access community treatment and other resources (e.g., food pantry, shelter beds). The implementation feasibility and acceptability of this telehealth capacity and other innovations are topics of investigation of ongoing evaluation and research projects (Evans et al., 2019; Friedmann & Evans, 2019).

The COVID-19 mitigation measures at FCSO and HSO were effective. For example, as of September 1, 2020, FCSO has had no COVID-19 outbreaks in the incarcerated population or among staff. The impacts of COVID-19 on the health of staff and incarcerated individuals at FCSO and HSO are relatively modest compared to national experiences (COVID Prison Project, 2020; Wallace et al., 2020).

Lessons learned and future directions

COVID-19 has changed the context of in-jail OUD treatment. FCSO and HSO will continue to implement recommended mitigation strategies (see Wurcel et al., 2020), including avoiding convening groups. The jails will continue to provide MOUD in housing units, create more psychosocial addiction treatment groups to accommodate smaller class sizes, educate incarcerated

individuals about OUD risks related to COVID-19 (e.g., see Wang et al., 2020), and reduce the number of residents in housing units. FCSO, as a licensed Opioid Treatment Program (OTP), has explored providing "take-home" MOUD at release to facilitate continuity-of-care as incarcerated individuals re-enter the community. FCSO is able to provide some MOUD services, including methadone, that are not possible in most other jail settings. FCSO is now training HSO and other jails how to navigate the onerous regulatory requirements that are involved in obtaining OTP certification (e.g., National Council of Behavioral Health, 2020; O'Neill Institute, 2020). COVID-19 also revealed that telehealth is a feasible method for jails to provide physically distanced collaborative healthcare. Smart TVs and tablets enable community partners to connect with incarcerated individuals pre-release. Texting capacity allows for safe interactions post-release. FCSO is working now to use technology for community-based providers to complete pre-release assessments/intakes, thereby providing warm-handoffs at release. Historically, jails and prisons have been slow to deploy technological innovations for behavioral health. COVID-19 has accelerated the uptake and diffusion of technology-infused innovations (e.g., Steinkamp et al., 2019) to treat OUD in criminal justice settings.

How the criminal justice system can address the opioid epidemic during the COVID-19 pandemic and afterwards is an ongoing topic of discussion. Given the chronic nature of OUD (Evans & Hser, 2019; Hser et al., 2015), it is likely the opioid epidemic will remain even as solutions to the COVID-19 pandemic are developed. COVID-19 has exposed the need for criminal justice reforms (Mukherjee & El-Bassel, 2020; Nowotny et al., 2020). Public health strategies offer prisons and jails solutions to mitigate the harms of the co-occurring epidemics of OUD and COVID-19 (both of which disproportionately affect criminal justice populations), for persons who are incarcerated and the communities to which they return.

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Chapter III. Status of Data Collection

During the second year of this project, the Franklin County Sheriff's office, in collaboration with the Hampshire County Sheriff's Office, continued to work to accomplish two overarching goals: (1) implement a program to expand capacity to provide medications to treat opioid use disorder to jail detainees (n=300) and (2) implement a comprehensive community reentry program. The project maintains multi-sectoral collaborations with key community partners to ensure a continuity of care and an integrated behavioral health and opioid use treatment approach. Standardized client assessment tools are being used by jail staff to collect data on individuals at intake into jail, during treatment while in jail, at discharge from jail, and at follow-up post-exit from jail. An additional participant interview is being conducted at three months post-exit from jail by research staff at the University of Massachusetts Amherst.

The evaluation utilizes a mixed methods pre-post research design to evaluate project implementation and assess its effectiveness. Each component of the evaluation design is described in detail in the first year evaluation report. This chapter presents a summary of the status of data collection at the end of the second year of the project. We delineate the methodological limitations of the study. We conclude with comments on the evaluation design.

Evaluation Design

The evaluation consists of two components: (1) an Implementation and Process Study and (2) an Outcome Study. The status of data collected during year two of the project is described below.

Evaluation Component 1: Implementation and Process Study

The Implementation and Process Study is designed to understand how to expand capacity to provide MOUD to the target population. This study aims to use qualitative methods to (1A) describe and monitor plans and strategies to implement a program to deliver MOUD in jail and to support MOUD engagement in the community; (1B) assess changes in criminal justice processes, clinical practices, and organizational adaptations in response to program implementation, identifying factors that enable or impede the ability of criminal justice institutions to collaborate with community-based health and social services agencies to provide comprehensive treatment and recovery support services; and (1C) assess to what extent program activities are implemented as intended and result in desired outputs.

In March 2020, COVID-19 emerged and significantly disrupted program operations. In response, FCSO and HSO implemented mitigation policies and adapted MOUD programming. The stakeholder focus group discussions and one-on-one interviews that are needed to accomplish the evaluation aims were re-scheduled to occur from October 2020 through January 2021, depending on the availability of prospective participants. To date, 6 focus groups have been conducted with 19 individuals. The discussion prompts for data collection are focused on documenting program adaptations that have been made in response to COVID-19, current operations, and next steps. A summary of findings will be prepared as a supplemental evaluation report for delivery in 2021.

Evaluation Component 2: Outcome Study

The Outcome Study is designed to assess MOUD utilization and outcomes, both during and after incarceration. This study aims to assess utilization of MOUD and other health and social

services while incarcerated and in the community and assess health and social outcomes after jail exit.

Target Client Population

All adult clients with OUD admitted to the participating jail facilities in the designated counties were to be included in the evaluation, with the exception of: (1) clients who entered the jail for a brief period of time as part of the jail's function as a regional lock-up; (2) clients who were discharged or transferred from jail prior to completing an intake assessment or release of information forms; and (3) clients who refused to release their information to the research team for evaluation purposes. During implementation, however, it happened that clients who did not provide consent for their information to be shared with the research team for research purposes were not asked to complete the intake assessment and thus were omitted from the evaluation. In effect, the intake sample is a census of all clients with OUD who gave consent to participate in research. Staff estimated that during the first year of the project, approximately 30% of individuals with OUD who were admitted to the jail refused to participate in research and were thus omitted from the evaluation. During the second year of the project, staff worked to revise practices to ensure that enrollment protocols were implemented as originally planned. All clients entered into the SPARS data system during this period were targeted for data collection, including invitation to participate in the 3-month post-exit follow-up interview.

Data Collection Procedures, Schedule, and Instruments/Measurements

Staff at participating jails were asked to assess all entering adult clients with OUD using the study instruments (described in detail below) as part of the normal admission process. This data collection began on April 1, 2019. Program staff were also responsible for completing 3-month and 6-month post intake interviews (only with individuals who were still living in jail at these time-points), and for recording and reporting services received by these clients while in jail, and for assessing clients at exit from jail. Client data collected by jail was electronically transmitted to SAMHSA by data entry into the SPARS database.

In addition, staff recruited eligible clients for the follow-up interview by explaining the study and obtaining clients' informed consent to be contacted at a later date by UMass researchers for phone interviews at 3 months post-exit from jail. Staff asked clients who consented to participate for locator information. Those who completed the follow-up interview were paid $20 in the form of a gift card mailed to their designated addresses.

Comparable standardized data were collected at each time-point during the project to measure change. See the year one evaluation report for a copy of the data collection forms and consent forms, and for a copy of the materials that were created to inform prospective participants about the re-entry component of the MOUD program.

Intake

Given COVID-19 mitigation policies, activities were adapted to deliver the MOUD program, for example via telemedicine, and to collect data from program participants. Activities did continue during the second year of the project, although with fewer participants than had been originally proposed given the efforts being conducted to decrease the numbers of people incarcerated in jail.

Baseline Interview at Intake

Jail staff aimed to complete intake/baseline interviews using the SAMHSA GPRA form within 3 days to 7 days after jail entry. Data was collected on paper and then data entered into the SAMHSA SPARS database. If an individual had been incarcerated for all of the 30 days prior to intake, for example due to transfer from one jail to another, staff adjusted the interview questions to ask about the time period prior to the current incarceration. The GPRA intake/baseline interview date was used to determine when the subsequent 3-month and 6-month post-intake interviews were due.

Recruiting Clients for the Follow-up Study

Jail staff were also responsible for recruiting clients for the 3-month post-exit-from-jail telephone interview. Staff were to explain the study and review the Informed Consent Form (ICF) with each eligible client. If the client agreed to participate, he or she signed the ICF, signed the Release of Information for research purposes form, and then provided information for the Locator Form. The ICF is a document that explains the follow-up study to eligible client participants and obtains permission for later contact and interviewing. The Locator Form collects information that UMass staff used to contact clients who agreed to participate in the follow-up study. Providers were asked to recruit clients into the follow-up study any time after intake, but ideally within the first 3 days after intake.

While Living in Jail

3-Month and 6-Month Post-Intake

Jail staff completed follow-up interviews at 3-months and 6-months post-intake with those individuals who were still living in jail at these time-points. Staff used the GPRA form for these interviews and data entered the information into SPARS. A significant proportion of individuals were released from the participating jails before these interviews were due. Staff did not seek to complete these interviews if individuals were not living in jail when these interviews were due.

Discharge from Jail

Jail staff completed a discharge record when a participant exited jail. “Discharge” was defined as the point at which participants stop receiving services at a single jail site. Staff did not discharge and readmit a client who transferred from one program to another within the same jail. Individuals without a discharge record have not yet exited jail.

Responses to discharge items were collected at exit from jail. Staff “administratively discharged” a participant who was not available for an exit interview by filling out the discharge items to the best of their ability. The date of the last face-to-face encounter and services provided was filled in from information contained in administrative jail records. The jail exit date was used to calculate when the subsequent 3-month post-exit from jail interview was due.

Sample sizes

Not all data elements were complete for all clients at each of the assessment points. Thus, sample sizes in this report vary depending on the combination of data elements and specific time points at which the analyses were conducted. To maximize the sample size and data utilization, we used the maximum number of clients for whom the complete data relevant to specific research

questions were available. Table 3.1 provides information on the numbers of clients who had data at each time-point during year one (April 1, 2019 to November 18, 2019) and year two (November 19, 2019 to November 18, 2020 of the project.

Table 3.1. Sample size at each time-point

	Year 1 04/01/19 – 11/18/19			Year 2 11/18/19 – 11/18/20			Total		
	FCSO	**HSO**	**Total**	**FCSO**	**HSO**	**Total**	**FCSO**	**HSO**	**Total**
Intake	76	86	162	89	53	142	165	139	304
3-month post-intake	9	12	21	10	5	15	19	27	46
6-month post-intake	0	0	0	4	10	14	4	10	14
Discharge	50	43	93	76	72	148	126	115	241
3-month post-discharge	10	8	18	27	32	59	37	40	77

Follow-up Interview at 3 Months Post-Discharge

The 3-month post-discharge time frame was chosen to: (1) capitalize on the clients' ability to recall specific services received while in jail and after community re-entry and accurately rate satisfaction/treatment received; (2) allow researchers to stay in touch with clients and thereby increase the follow-up rate; and (3) allow a brief assessment of clients' status.

UMass interviewers conducted by phone one follow-up interview, lasting approximately 45 minutes, with clients at 3 months post-discharge from jail. To re-contact individuals for follow-up, UMass staff utilized methods presented in the SAMHSA Staying in Touch manual. The interview is composed of GPRA items and the In-Treatment Experience Survey. The survey also includes questions about clients' treatment satisfaction and treatment services received using the Treatment Services Review (TSR) (McLellan, Alterman, Cacciola, Metzger, & O'Brien, 1992) which surveys clients with respect to the different types and frequencies of treatment services received in the past 3 months (both within and outside of the program). Data provide information on health services utilization and outcomes in the time-period after exit from jail.

Follow-up Rates for the 3-Month Interview

In this section, we present information on the follow-up rates for the 3-month post-exit-from-jail interview conducted by UMass staff. Rates reflect efforts made to date (as of 09/04/20), with the understanding that interviewing will continue in Year 3 of the project. More details about the status of the follow-up are provided in Chapter 6. Of the 190 clients who have entered the 3-month post-discharge follow-up window and are thus now eligible to complete this interview: 40.0% completed an interview, 3.7% were contacted but refused to participate, 19.5% were contacted but did not complete the interview yet (7.4% contacted directly, 12.1% friends or family contacted), 20.5% were not contacted yet, and 16.8% could not complete an interview because they were re-incarcerated (14.2%) or deceased (2.6%). If the latter group of people (i.e., those who could not complete the interview due to re-incarceration or death) were excluded from the denominator for calculation of the follow-up rate, then 48.1% of eligible participants have completed the 3-month post-exit from jail follow-up interview.

Software Employed for Statistical Analyses

Quantitative data management and statistical analysis were conducted in STATA, a widely used statistical program for complex data management and multivariate analysis. Statistical analyses include descriptive statistics (frequency, percentage, mean, correlations), and comparative analysis (e.g., paired t-tests, ANOVA). Descriptions of analyses conducted for addressing specific research questions are provided in the respective chapters.

Limitations of the Evaluation

Several practical limitations were considered in interpreting the results of the evaluation. Major issues are described here. Other issues that pertain to specific components of the evaluation are detailed in the corresponding chapters of this report. Clients under the age of 18, regional lock-up clients, and clients who exited jail prior to completing an intake assessment, and clients who refused participation in research have not been included in the evaluation. Therefore, no inferences should be drawn from the data regarding these client populations. In some instances, data were collected from individuals much later than planned, requiring individuals to remember events that had occurred some time before, which may have resulted in recall bias. The project includes jails located in two counties in Western Massachusetts who volunteered to participate in the program. Thus, the generalizability of the evaluation findings may be limited.

Chapter IV. Characteristics of Clients

Staff collected data from participants at jail intake to assess for each participant their health and social status and needs. We examined the socio-demographics and other characteristics and experiences of program participants as reported at the intake assessment. For most variables, participant status was reported in relation to "the past 30 days" or "currently." The characteristics and experiences of program participants were mostly similar by site and by year of the project. Thus, in this chapter we mostly summarize data on the total participant population, highlighting the characteristics of the group that enrolled in the program during year two, and we highlight differences by site only when relevant. Finally, we summarize the most prevalent characteristic within each domain. Data for all categories that are encompassed by each variable are presented for reference in the tables and figures that are appended to the report.

Sociodemographic characteristics

Table 4.1 presents sociodemographic characteristics of participants.

Gender

Most participants, 83.5%, are men, 16.2% are women, and 0.4% are transgender. There are gender differences by site. The Franklin County House of Corrections serves both men and women, whereas the Hampshire County House of Corrections serves only men. This explains why 100% of the participants in Hampshire are men. In Franklin, 70.6% of the participants are men, and 28.2% are women.

Race and ethnicity

Participants are predominantly White (71.2%), followed by Hispanic (14.8%), Black (6.4%), other race/ethnicity (6.4%), and Asian (1.1%). Compared to Hampshire, Franklin has more participants who are White (78.8% vs. 56.4%). Compared to Franklin, Hampshire has more participants who are Hispanic (25.5% vs. 11.8%), Black (9.1% vs. 2.4%), Other (7.3% vs. 5.9%), and Asian (1.8% vs. 1.2%).

Age

In Franklin, participants are 33 years old on average. In Hampshire, participants are 35 years old on average. The average age for all participants is 34. By age category, 8.5% of participants are age 18-24, 49.3% are age 25-34 (49.3%), 30.9% are age 35-44, and 8.8% are age 45-54. Relatively few participants are age 55-64 or older.

Education

Most of the participants have a high school diploma or GED (45.6%), 26.1% have attained less than a high school education, and 21.7% have attained some college without a degree. More participants in Franklin than in Hampshire have a high school education or GED (45.9% vs. 35.0%).

Employment

Most participants are not in the labor force (67.3%) or unemployed (14.0%), with 9.9% working full-time and 6.6% working part-time. More participants in Hampshire than in Franklin are working full- or part-time, and fewer are not in the labor force.

Income: Source, amount, and meeting basic needs

Approximately one-third of participants receive income from public assistance (34.9%) and from employment (34.2%). Of the participants, 21.7% receive income from non-legal sources, 16.5% from family and/or friends, and 7.7% from disability. In Hampshire, more participants receive income from family and friends than in Franklin (20.0% vs 11.8%). About 43.3% of participants report that their income is not at all or only a little of what is needed to meet basic needs.

Housing

Most participants lived in an institution (47.4%) in the prior 30 days, 25.4% lived in their own residence, and 16.5% lived in someone else's apartment. Participants are generally satisfied or very satisfied with their living space.

Military service

Few participants, only 3.3%, are military veterans.

Parental status

Most participants, 71.7%, have children. The average number of children per participant is between 2 and 3 children. About 14.9% of participants have one or more children living with another person by court order. Almost one-quarter of participants (22.4%) have lost their parental rights to one or more children.

Opioid and other substance use

Table 4.2 presents participant self-reported use of opioids, other drugs, and alcohol. Most participants self-reported illegal drug use (80.5%) in the prior 30 days. About 37.9% reported use of alcohol and illegal drugs on the same day.

Opioids

More than half of participants self-reported use of any opioids (58.5%) in the prior 30 days. Participants self-reported use of heroin (53.3%), followed by Percocet (13.7%), OxyContin or Oxycodone (4.1%), morphine (3.3%), Diluadid (2.3%), Codeine (1.1%) and Tylenol 2, 3, 4 (0.7%). About 5.2% reported use of non-prescription methadone.

Other drugs

More than half of the participants self-reported use of cocaine/crack (57.0%) and cannabis (50.7%). Participants also reported illegal use of benzodiazepines (18.9%), hallucinogens/psychedelics (8.7%), methamphetamine or amphetamines (7.0%), other illegal drugs (6.7%), other tranquilizers (1.1%) and inhalants (1.1%).

Alcohol

About 44.5% of participants self-reported any alcohol use in the prior 30 days. About one-third of participants reported use of alcohol to intoxication with 5 or more drinks in one sitting (30.2%). Fewer participants reported alcohol to intoxication with 4 or fewer drinks in one sitting and feeling high (13.6%).

Impacts

When asked whether alcohol or drug use caused stress in the prior 30 days, 39.0% of participants reported being extremely stressed, 17.6% were considerably stressed, 16.9% were somewhat stressed, and 13.1% were not at all stressed. Nearly half of participants reported alcohol or drug use caused them to give up important activities to an extreme (24.8%) or considerable degree (21.8%). Almost 45% reported that alcohol or other drug use caused considerable or extreme emotional problems.

Opioid and other substance use disorder

Table 4.3 presents participant self-reported diagnosis of a substance use disorder by type of substance. Of all participants, 99.6% have a diagnosed opioid use disorder. In addition, 47.2% have an alcohol use disorder, 41.5% have a cocaine use disorder, and 22.1% have a cannabis-related use disorder.

Medications to treat opioid or alcohol use disorder

Table 4.4 presents participant self-reported utilization of medications received in the 30 days prior to intake to treat opioid or alcohol use disorder. Approximately 52.9% of participants with an opioid use disorder enter jail already on buprenorphine to treat opioid use disorder, 15.4% are receiving methadone, 1.8% are receiving extended-release naltrexone, and less than 1% are receiving naltrexone. More participants in Franklin than in Hampshire are entering jail on buprenorphine (67.1% vs. 46.7%). Very few participants are receiving medications to treat alcohol use disorder. Efforts are currently underway to verify self-reported medication history against electronic health record data.

Crime and involvement with the criminal justice system

Table 4.5 presents participant self-reported criminal activity and interactions with the criminal justice system in the 30 days prior to intake. Most participants, 99.1%, reported having committed a crime, 74.9% were arrested, 40.9% were arrested for a drug-related offense, and 85.9% had spent a night in jail or prison. More than two-thirds of participants were awaiting charges, trial, or sentencing (76.8%) and 38.7% were currently on parole or probation.

Mental health conditions and symptoms

Table 4.6 presents mental health diagnoses and symptoms.

Over half of participants screened or tested positive for co-occurring mental health and substance use disorder, and 58.9% tested positive.

Few participants had a recorded mental health diagnosis. Specifically, 5.2% had a mood and anxiety disorder diagnosis, 1.1% had a childhood onset diagnosis, and 0.7% had a personality order diagnosis.

In contrast, many participants self-reported symptoms of serious anxiety or tension (81.6%), depression (71.7%), and trouble understanding, concentrating, or remembering (49.6%). About 8.5% self-reported hallucinations. Few (2.2%) had attempted suicide in the prior 30 days. About 38.2% of participants were prescribed medication for psychological or emotional problems in the prior 30 days. Most participants were moderately to extremely bothered by their psychological or emotional problems.

Exposure to violence and trauma

Table 4.7 presents experiences of violence or trauma in the lifetime. Many participants (81.4%) reported having experienced violence or trauma in their lifetime. Of those that had ever experienced violence or trauma, many reported experiencing mental and physiological effects. Specifically, 82.5% reported they had nightmares or thought about it when they did not want to, 84.3% reported they tried hard not to think about it or went out of the way to avoid situations that reminded them of it, 76.7% reported they were constantly on guard, watchful, or easily startled, and 73.5% reported they felt numb and detached from others, activities, or surroundings. About 17.7% of participants reported being hit, kicked, slapped, or otherwise physically hurt a few times in the prior 30 days.

HIV risk behaviors and testing

Table 4.8 presents self-reported data on participants' HIV risk behaviors, prevalence of HIV testing, and knowledge of HIV test results.

Sexual behavior

More than half of the participants reported engaging in sexual activity in the past 30 days (64.4%). Of those participants, 89.0% reported engaging in unprotected sex, 28.6% engaged in unprotected sex with an injection drug user, and 46.9% engaged in unprotected sex with someone high on some substance.

Injection behavior

Many participants self-reported having injected drugs in the prior 30 days (41.9%). About one-third of participants, 29.8%, had recently used drug paraphernalia (e.g., syringe/needle, cooker, cotton, or water) that someone else had used.

HIV testing and knowledge of HIV test results

Most of the participants reported having been tested for HIV (98.2%). Most participants knew the results of the HIV testing (98.1%).

Social support

Table 4.9 presents information on source of social support and satisfaction with relationships. Many participants (79.0%) had interactions with family and/or friends that are supportive of their recovery. Participants most commonly attended support groups hosted by non-religious or faith-based organizations (39.3%) or other organizations that support recovery (24.6%). About half of participants reported turning to a family member when having trouble (56.0%). About 15.3% of participants had no source of social support. About half of participants were satisfied or very satisfied with their personal relationships.

Perceived health, wellness, and quality of life

Table 4.10 presents participants' self-reported perceptions of their health, wellness, and quality of life.

Most participants rated their overall health as good (39.3%), were satisfied with their health (52.4%), mostly or completely had enough energy for everyday life, were satisfied or very satisfied with ability to perform daily activities, were satisfied or very satisfied with self, and reported a good or very good quality of life.

Health services utilization

Table 4.11 presents recent use of health services by modality (inpatient, outpatient, emergency room). Participants self-reported that they received outpatient treatment in the past 30 days (36.4%), inpatient treatment in the past 30 days (17.7%), and emergency room treatment in the past 30 days (19.1%).

Chapter V. Services Provided

Jail staff collected data at jail exit to document for each participant the health and social services that were provided during incarceration. In this chapter, we summarize those data (see the Appendix for data tables). It is important to note that in most cases, staff extracted information from existing administrative jail records to document services provided. In this process, staff encountered challenges due to differences in the definitions of codes, uncertainty regarding where and how to document services provided, and variation by site in documentation practices. Staff are currently working to perform data quality checks to improve the accuracy, reliability, and validity of these data. Given this reality, the data presented in this chapter serves as a tool to perform data quality improvement activities, and should not be interpreted to accurately represent provision of services.

Medications to treat opioid use disorder (MOUD)

Of the individuals who participated in the program and had a discharge record on file, 46.9% received buprenorphine to treat their OUD while incarcerated, 18.5% received methadone, 4.4% received naltrexone, and 30.3% did not receive a MOUD. More participants in FCSO than in HSO received buprenorphine and methadone and fewer received naltrexone. More participants in HSO than in FCSO did not receive a MOUD while incarcerated.

	FCSO	HSO	Total
Type of MOUD received in jail, %			
Buprenorphine	55.9	36.7	46.9
Methadone	25.9	10.2	18.5
Naltrexone	0.7	8.6	4.4
None	17.5	44.5	30.3

Modality

In relation to modality type, all participants were provided with case management and most received residential treatment, aftercare, and recovery support. Fewer participants received day treatment, free standing residential treatment, or other modalities. About 13.7% were recorded as having received methadone.

Treatment

Participants received a diversity of treatment services. For example, all or most participants received screening, brief intervention, assessment, treatment planning, and pharmacological interventions. Significant proportions of participants received brief treatment, referrals, individual counseling, and services for co-occurring conditions. Relatively few participants received family/marriage counseling services or counseling for HIV/AIDS.

Case management

Participants received case management services in a number of areas. For example, 73.5% received transportation services, 46.0% received employment coaching, 25.1% received HIV/AIDS services, and about 10% or less received family services, employment services, individual coordination services, and supportive transitional drug-free housing.

Medical

Almost all participants received medical care on site. Most participants received alcohol and drug testing and medical care. Relatively few received HIV and AIDS medical support and testing or other medical services.

After care

Aftercare services delivered to participants included continuing care (55.9%), relapse prevention (54.5%), self-help and support groups (28.4%), recovery coaching (16.1%), and other services.

Education

Most participants received substance abuse education (75.4%%). About one-third of participants received HIV and AIDS education (35.6%).

Peer-to-peer recovery support

Sites delivered peer-to-peer support services such as housing support (47.9%), alcohol and drug free social activities (50.2%) and information and referral services (68.7%), and peer coaching and mentoring services (26.5%).

Chapter VI. Status at Follow-Up, Satisfaction, and Services Utilization

Prior research has suggested that optimum treatment for opioid and other substance use disorders involves effectively assessing clients' problems/needs and providing services that address these needs. Some research suggests that greater service intensity and patient satisfaction with services is associated with treatment completion or longer treatment retention which is, in turn, associated with more favorable treatment outcomes (Hser et al., 2004). However, empirical studies delineating the relationships among client severity/needs, services received, and related outcomes are limited. In this chapter, we examine the status of participating clients at follow-up, services needed by clients, services received by these clients, and their satisfaction with these services. Specifically, we address the following research questions: (1) What are the outcomes of participating clients at follow-up? (2) What service components are generally received by clients participating in the program? (3) Do clients receive differential service components based on differential status at assessment? (4) Are clients satisfied with the services they received?

Methods

Study Design

The evaluation used a pre- and post-exit-from-jail design to assess changes in client status from intake to follow-up. A detailed description of the overall study design can be found in the Year 1 Evaluation Report. Data collection is still underway. Thus, we provide descriptive information on client status only. In the third year report we will assess the extent to which the health of individuals changed over time and the predictors of outcomes.

Characteristics of individuals omitted from the analytic sample

Of the n=271 individuals who completed the assessment at jail entry, n=76 also completed the 3-month post-exit from jail follow-up interview and n=195 did not. Table 6.1 shows the reasons why a follow-up interview has not yet been completed. Specifically, of the 195 individuals who have not been interviewed, 28.2% have not yet been released from jail and thus are not eligible for a follow-up interview and another 4.6% have not yet entered their window of time for follow-up. Another group of individuals are unable to complete the interview because they are re-incarcerated (13.8%), have declined participation (8.7% at intake; 3.6% at follow-up), or have died (2.6%). Research staff have been in touch with other individuals (7.2%) or their family/friends (11.8%), but have not yet completed an interview. Another 20.0% of clients have not been interviewed because interview staff have not been able to re-contact them.

Table 6.1 What is known about individuals who did not completed the follow-up interview 3 months after jail exit

	FCSO	HSO	Total
	n=105	n=90	n=195
Not yet released	26.7	30.0	28.2
Not eligible for follow up as of 9/4/20	7.6	1.1	4.6
Reincarcerated	15.2	12.2	13.8
Declined at intake	8.6	8.9	8.7
Declined at follow up	2.9	4.4	3.6
Deceased	1.9	3.3	2.6

Contact made with participant	4.8	10.0	7.2
Contact made with support person of participant	6.7	17.8	11.8
No contact made	26.7	12.2	20.0

It is important to note that these 195 individuals are omitted from the results that are presented in the remainder of this chapter. The characteristics of individuals who completed the follow-up interview (n=76) compared to those who did not complete the follow-up interview (n=195) is presented in Table 6.2. Results suggest the ways in which the follow-up sample may not represent the characteristics of people who participated in the program. In future reports, we will test whether differences between the two groups are statistically significant.

Characteristics of the follow-up sample at jail entry

The focus of the remainder of this chapter is on 76 clients who completed both the admission assessment and 3-month post-exit from jail follow-up interview (n=38 clients from FCSO and n=38 clients from HSO). Demographics and background characteristics of the clients involved in the follow-up study (n=76) as reported at entry into jail are provided by site in Table 6.2. The overall follow-up sample was 17.1% female. Most individuals (77.6%) were White, with fewer individuals identifying as Hispanic (9.2%), Black (5.3%), and other ethnic groups (7.9%). The mean age was 35.0 years. Approximately 81.6% of the clients had completed high school or higher; 7.9% were enrolled in school or job training.

In the 30 days prior to jail entry, 42.1% abstained from opioids. In addition, 22.4% abstained from illegal drugs (includes crack/cocaine, cannabis, hallucinogens, inhalants, methamphetamines, and non-prescription benzodiazepines, barbiturates, GHB, Ketamine, other tranquilizers, or other illegal drugs) and 40.8% abstained from alcohol. As for other indicators of health and social status, 17.1% were employed full time or part time, 7.9% were attending school or job training, 97.4% experienced mental health symptoms, 67.1% were homeless (i.e., staying at an institution [48.7%], someone else's apartment [11.8%], room, or house, a shelter [4.0%], hotel/ car/other [1.3%], or residential treatment [1.3%]), and 63.2% attended self-help groups.

As for indicators of involvement with the criminal justice system, in the 30 days prior to jail entry, 64.5% had been arrested, 83.1% had been incarcerated, and 66.6% were under some kind of legal supervision (probation, parole, diversion). At jail entry, 68.7% were already receiving medications to treat opioid use disorder. Of these, 50.0% were being treated with buprenorphine, 17.1% with methadone, and 5.3% with naltrexone. This information on involvement with the criminal justice system and receipt of medications was flagged by staff for further examination and verification. Staff are currently cross-checking these self-reported data against administrative data sources.

Table 6.2 Characteristics at jail entry of individuals who completed follow-up vs did not complete follow-up						
	FCSO		HSO		Total	
	In follow-up	Not in follow-up	In follow-up	Not in follow-up	In follow-up	Not in follow-up
	n=38	n=105	n=38	n=89	n=76	n=195
Gender, %						
Male	65.8	69.5	100.0	100.0	82.9	83.6
Female	34.2	29.5	0.0	0.0	17.1	15.9
Trans/non-binary/other	0.0	1.0	0.0	0.0	0.0	0.5
Race/Ethnicity, %						
White	76.3	73.3	79.0	57.8	77.6	66.2
Hispanic	10.5	7.6	7.9	25.6	9.2	15.9
African American	7.9	5.7	2.6	7.8	5.3	6.7
Other, Unknown	5.3	13.3	10.5	8.9	7.9	11.3
Age, %						
18 – 24	13.2	9.5	5.3	6.7	9.2	8.2
25 – 34	47.4	46.7	57.9	48.9	52.6	47.7
35 – 44	26.3	36.2	26.3	28.9	26.3	32.8
45 - 54	5.3	7.6	7.9	12.2	6.6	9.7
55-64	5.3	0.0	2.6	3.3	4.0	1.5
65+	2.6	0.0	0.0	0.0	1.3	0.0
Age, Mean (SE)	34.7(1.8)	33.8(.7)	35.1(1.3)	35.1(.8)	35.0(1.1)	34.4(.5)
Employment, %						
Full time	13.2	5.7	7.9	14.4	10.5	9.7
Part time	10.5	3.8	2.6	10.0	6.6	6.7
Unemployed	21.1	17.1	15.8	10.0	19.7	13.9
Not in labor force	55.3	73.3	73.7	63.3	63.2	68.7
Enrolled in school or job training, %	5.3	7.6	10.5	20.0	7.9	13.3
Educational status, %						
Less than high school	18.4	25.7	18.4	32.2	18.4	28.7
High school/GED	47.4	44.8	60.5	40.0	54.0	42.6
At least some college	34.2	29.5	21.1	27.8	27.6	28.7

Where living most of the time in past 30 days, %						
Homeless/houseless	57.9	68.7	76.3	85.6	67.1	76.9
Own/rent apartment, room, or house	42.1	31.4	23.7	13.3	32.9	22.6
Status in 30 days prior to jail entry						
Abstained from opioids	42.1	39.1	42.1	44.4	42.1	41.5
Abstained from illegal drugs[a]	15.8	17.1	29.0	31.1	22.4	23.6
Abstained from alcohol	39.5	49.5	42.1	42.2	40.8	46.2
Attended self-help groups	52.6	46.7	73.7	48.9	63.2	47.7
Experienced mental health symptoms	100.0	96.2	94.7	93.3	97.4	94.9
On probation or parole	63.2	34.3	36.8	31.1	50.0	33.3
No arrests	18.4	2.9	52.6	42.2	35.5	21.0
No incarcerations	0.0	18.1	13.2	15.6	6.6	16.9
In MOUD treatment at entry, %	81.6	86.7	63.2	47.8	72.4	68.7
Type of MOUD received at entry, %						
Buprenorphine	71.1	67.6	29.0	36.7	50.0	53.3
Methadone	10.5	19.1	23.7	7.8	17.1	13.9
Naltrexone	0.0	0.0	10.5	3.3	5.3	1.5
None	18.4	13.3	36.8	52.2	27.6	31.3

[t] =Individuals could have received income from more than 1 source, so the sum of percentages exceeds 100%

[a] =includes crack/cocaine, cannabis, hallucinogens, inhalants, methamphetamines, and non-prescription benzodiazepines, barbiturates, GHB, Ketamine, other tranquilizers, or other illegal drugs.

Assessment Schedule and Procedures

All adult clients entering MOUD treatment at the two jails participating in the project were assessed by each jail's program staff using the study instruments as part of the normal admission process. Jail staff also recorded and reported services received by these clients at exit from jail. Eligible clients were approached by jail staff to obtain informed consent to be contacted at a later date by UMass research staff for follow-up phone interviews at 3-months post-exit from jail. Clients consenting to follow-up were also asked for locator information. Those who completed the follow-up interviews were paid $20 in the form of a gift card mailed to their designated addresses. Clients with multiple treatment admissions could enroll in the 3-month follow-up sample only once per site.

Data Sources/Instruments/Measures

Data sources for this chapter include: the GPRA admission form and the 3-month post-admission follow-up interview. Services received after exit from jail and satisfaction with those services were assessed via the Treatment Services Review administered at the 3-month follow-up interview. A detailed description of these instruments can be found in the Year 1 Evaluation Report.

Analysis

We provide descriptive statistics of the sample in terms of characteristics at admission, services received, satisfaction with these services, and status at the 3-month follow-up interview.

Results

Client Status at 3-Month Follow-up Interview

At the 3-month follow-up interview, clients were asked to briefly describe their current treatment status (See Table 6.3). About 67.1% of clients were in a MOUD treatment program 3 months after exit from jail. Of those who were receiving MOUD at the follow-up (n=51), 56.9% were receiving buprenorphine, 25.5% were receiving methadone, and 17.7% were receiving naltrexone. In the 30-days prior to the follow-up interview, 82.9% self-reported having abstained from opioids, 56.5% had abstained from "illegal" drugs, and 76.3% had abstained from alcohol. In the same time period, most reported no arrests (93.4%) or incarcerations (92.1%) and 50.0% were on probation or parole. Many individuals reported mental health symptoms (84.2%). A significant proportion, 68.5%, were homeless. About 48.7% had attended self-help groups. About 36.8% were employed full- or part-time and few were attending school or job training.

Table 6.3 Status at 3-month follow-up interview

	FCSO	HSO	Total
	(n = 38)	(n = 38)	(n = 76)
In MOUD treatment, %			
No	34.2	31.6	32.9
Yes	65.8	68.4	67.1
Type of MOUD treatment, %			
Buprenorphine	68.0	46.2	56.9
Methadone	24.0	26.9	25.5
Naltrexone	8.0	26.9	17.7

In the past 30 days, %			
Abstained from opioids	89.5	76.3	82.9
Abstained from illegal drugs [t]	63.2	50.0	56.5
Abstained from alcohol	76.3	76.3	76.3
No arrests	89.5	100.0	93.4
No incarcerations	92.1	92.1	92.1
On probation or parole	68.4	31.6	50.0
Experienced mental health symptoms	89.5	79.0	84.2
Attended self-help groups	47.4	50.0	48.7
Homeless or houseless	65.8	71.0	68.5
Employed full- or part-time	39.5	34.2	36.8
Attending school or job training	2.6	0.0	1.3

[t] =includes crack/cocaine, cannabis, hallucinogens, inhalants, methamphetamines, non-prescription benzodiazepines, barbiturates, GHB, Ketamine, other tranquilizers, or other illegal drugs.

Clients Reasons For Not Being Treated with MOUD at Follow-up

At the follow-up interview, individuals who were not receiving MOUD treatment were asked to identify the top three reasons why (Table 6.4). The most common primary reason for not being treated with MOUD was that participants had stopped using opioids previously without the help of medications or felt they no longer needed medications (24.0%), followed by not wanting to be dependent on what was perceived to be another drug (20.0%). Several other reasons were also provided to explain why participants were not receiving MOUD. When similar reasons were aggregated and re-coded into broader categories, the results indicated that the primary reasons for not receiving MOUD treatment after exit from jail was due to gaps in participant knowledge (28.0%), fear of social stigma or discrimination (24.0%), barriers posed by the health care delivery system (16.0%), active substance use (12.0%), lack of health insurance or legal barriers (8.0%), and other reasons.

Table 6.4 Reasons for not receiving MOUD treatment as reported at 3-month follow-up interview, %

	FCSO	HSO	Total
Primary Reasons	(n =13)	(n =12)	(n =25)
Stopped before without MOUD or feel no longer need it	23.1	25.0	24.0
I do not want to be dependent on another drug^	15.4	25.0	20.0
My insurance won't pay for the medication	0.0	8.3	4.0
I don't have transportation to attend follow-up visits for the medication	7.7	0.0	4.0
The rules for getting the medication are too strict	0.0	8.3	4.0
The wait list for getting the medication is too long	7.7	0.0	4.0
I am not sure where to go to get the medication	7.7	0.0	4.0
I have been on medication in the past and I started abusing other substances, other than an opioid	7.7	0.0	4.0
I do not take my prescription as prescribed	0.0	8.3	4.0
I am afraid my friends/family/community will treat me with disrespect if I use the medication; they/we don't think that is sobriety	7.7	0.0	4.0
The medication prevents me from being able to feel the effects of opioids when I feel like using them	0.0	8.3	4.0
I know other people who have stopped using opioids without a medication, I can too	7.7	0.0	4.0
Never saw a doctor or received diagnosis	7.7	0.0	4.0
I don't like the physical side effects of the medication	0.0	8.3	4.0
Court or legal barrier	0.0	8.3	4.0
No reason given	7.7	0.0	4.0
^ 1 participant uses medical cannabis and didn't want to be dependent on an opioid			
Secondary Reasons	FCSO	HSO	Total
	(n =7)	(n =9)	(n =16)
I have stopped using opioids in the past without having to use a medication	28.6	11.1	18.8
I do not take my prescription as prescribed	14.3	11.1	12.5
I do not want to be dependent on another drug	28.6	0.0	12.5
Court or legal barrier	0.0	11.1	6.3
The wait list for getting the medication is too long	0.0	11.1	6.3
I am too drunk or high	0.0	11.1	6.3
Someone else (not a doctor or nurse) treated me, or I treated myself	14.3	0.0	6.3
I don't like the physical side effects of the medication; I cannot complete my normal daily activities when I am on it	0.0	11.1	6.3
I am afraid my friends/family/community will treat me with disrespect if I use the medication; they/we don't think that is sobriety	0.0	11.1	6.3
I know other people who have stopped using opioids without a medication, I can too	14.3	0.0	6.3
I can stop using opioids by attending peer support groups	0.0	11.1	6.3
I sell my prescription and do not want to do that	0.0	11.1	6.3
Tertiary Reasons	FCSO	HSO	Total
	(n =4)	(n =3)	(n=7)
I have stopped using opioids in the past without having to use a medication	25.0	33.3	28.6
I can stop using opioids by attending peer support groups	25.0	0.0	14.3

The wait list for getting the medication is too long	25.0	0.0	14.3
I have been on medication in the past and I started abusing other substances, other than an opioid.	0.0	33.3	14.3
The clinic's hours of operation are not convenient	0.0	33.3	14.3
I do not want to be dependent on another drug	25.0	0.0	14.3

Client Receipt of Services at Follow-up

At the 3-month post-exit interview, clients reported current receipt of a variety of services. Table 6.5 shows that 69.3% were receiving food stamps, 64.0% reported they were Narcan trained or were getting Narcan training, 61.3% were receiving public assistance, 17.3% were participating in a needle exchange program, 16.0% were receiving Medicare, 10.8% were receiving Employment Development Department assistance, 10.7% were receiving SSI or other disability benefits, 4.0% were receiving Child Protective Services monitoring or assistance, and 1.3% were receiving WIC benefits.

Table 6.5 Current receipt of services, as reported at 3-month post-exit interview, %

	FCSO	HSO	Total
	(n = 38)	(n =37)	(n = 75)
Food stamps	68.4	70.3	69.3
Narcan training	63.2	64.9	64.0
Public assistance (Medicaid, housing)	57.9	64.9	61.3
Needle exchange program	13.2	21.6	17.3
Medicare	10.5	21.6	16.0
Employment Development Department assistance	10.5	10.8	10.8
Supplemental Security Income (SSI) or other disability benefits	13.2	8.1	10.7
Child Protective Services monitoring or assistance	5.3	2.7	4.0
Women Infant and Children (WIC) benefits	2.6	0.0	1.3

Services Received and Treatment Satisfaction

Table 6.6 shows by domain the proportion of participants who needed services and level of satisfaction with services. For example, 89.5% of participants needed services to address medical problems. Of those who did receive medical services, 38.2% found those services to be very helpful, 16.2% pretty helpful, 11.8% somewhat helpful, 13.2% a little helpful, and 20.6% not at all helpful. Level of helpfulness varied across domains, with greater helpfulness reported for services to address drug problems, medical problems, and problems related to infectious disease (HIV, AIDS, HCV) and lesser helpfulness for services to address family problems, employment problems, and criminal problems.

Table 6.6 Satisfaction with services received, as reported at 3-month post-exit interview, %[1]

	FCSO	HSO	Total
	n=38	n=38	n=76

Medical Services			
Did not need service	10.5	10.5	10.5
Needed service	89.5	89.5	89.5
Very helpful	41.2	35.3	38.2
Pretty helpful	11.8	20.6	16.2
Somewhat helpful	14.7	8.8	11.8
A little helpful	17.7	8.8	13.2
Not at all helpful	14.7	26.5	20.6
Employment Services			
Did not need service	23.7	10.5	17.1
Needed service	76.3	89.5	82.9
Very helpful	24.1	14.7	19.1
Pretty helpful	13.8	5.9	9.5
Somewhat helpful	13.8	17.7	15.9
A little helpful	6.9	8.8	7.9
Not at all helpful	41.4	52.9	47.6
Alcohol Counseling			
Did not need service	29.0	34.2	31.6
Needed service	71.0	65.8	68.4
Very helpful	33.3	28.0	30.8
Pretty helpful	11.1	4.0	7.7
Somewhat helpful	18.5	24.0	21.2
A little helpful	7.4	4.0	5.8
Not at all helpful	29.6	40.0	34.6
Drug Counseling			
Did not need service	2.6	2.6	2.6
Needed service	97.4	97.4	97.4
Very helpful	46.0	32.4	39.2
Pretty helpful	8.1	10.8	9.5
Somewhat helpful	10.8	18.9	14.9
A little helpful	10.8	10.8	10.8
Not at all helpful	24.3	27.0	25.7
Criminal Legal Services			
Did not need service	10.5	26.3	18.4
Needed service	89.5	73.7	81.6
Very helpful	29.4	25	27.4
Pretty helpful	8.8	10.7	9.7
Somewhat helpful	11.8	14.3	12.9
A little helpful	5.9	3.6	4.8
Not at all helpful	44.1	46.4	45.2
Family Services			
Did not need service	29.0	15.8	22.4
Needed service	71.0	84.2	77.6
Very helpful	18.5	21.9	20.3

Pretty helpful	7.4	6.3	6.8
Somewhat helpful	11.1	21.9	17
A little helpful	3.7	0	1.7
Not at all helpful	59.3	50	54.2
Mental Health Services			
Did not need service	10.5	15.8	13.2
Needed service	89.5	84.2	86.8
Very helpful	32.4	28.1	30.3
Pretty helpful	20.6	12.5	16.7
Somewhat helpful	8.8	12.5	10.6
A little helpful	2.9	0	1.5
Not at all helpful	35.3	46.9	40.9
Parenting Skills/Childcare Services			
Did not need service	63.2	65.8	64.5
Refused	2.6	0.0	1.3
Needed service	34.2	34.2	34.2
Very helpful	23.1	30.8	26.9
Pretty helpful	0.0	15.4	7.7
Somewhat helpful	15.4	15.4	15.4
A little helpful	23.1	0.0	11.5
Not at all helpful	38.5	38.5	38.5
HIV/AIDS Prevention Education and Counseling			
Did not need service	13.2	15.8	14.5
Needed service	86.8	84.2	85.5
Very helpful	27.3	43.8	35.4
Pretty helpful	12.1	15.6	13.9
Somewhat helpful	12.1	9.4	10.8
A little helpful	3.0	6.3	4.6
Not at all helpful	45.5	25.0	35.4
HCV Prevention Education and Counseling			
Did not need service	10.5	21.1	15.8
Needed service	89.5	78.9	84.2
Very helpful	35.3	33.3	34.4
Pretty helpful	5.9	20.0	12.5
Somewhat helpful	11.8	16.7	14.1
A little helpful	11.8	0.0	6.3
Not at all helpful	35.3	30.0	32.8
Physical/Sexual Abuse Services			
Did not need service	50.0	44.7	47.4
Refused	5.3	0.0	2.6
Needed service	44.7	55.3	50.0
Very helpful	29.4	33.3	31.6
Pretty helpful	5.9	14.3	10.5
Somewhat helpful	23.5	9.5	15.8

A little helpful	11.8	9.5	10.5
Not at all helpful	29.4	33.3	31.6
Traditional Social Services/Case Management			
Did not need service	21.1	13.2	17.1
Refused	2.6	2.6	2.6
Needed service	76.3	84.2	80.3
Very helpful	34.5	28.1	31.2
Pretty helpful	10.3	6.3	8.2
Somewhat helpful	6.9	31.3	19.7
A little helpful	13.8	3.1	8.2
Not at all helpful	34.5	31.3	32.8
Survival Services			
Did not need service	23.7	7.9	15.8
Refused	2.6	2.6	2.6
Needed service	73.7	89.5	81.6
Very helpful	35.7	29.4	32.3
Pretty helpful	14.3	2.9	8.1
Somewhat helpful	7.1	17.7	12.9
A little helpful	7.1	11.8	9.7
Not at all helpful	35.7	38.2	37.1
[1] = need defined as any who provided their level of satisfaction for the specific domain			

Table 6.7 shows satisfaction with services on a range of indicators. About half or more of clients reported being in strong agreement with the following indicators: staff respected client background; staff helped client to believe in ability to change and improve; location of services was convenient; client was asked to participate in recovery or treatment plan; counselor showed a sincere desire to understand; general satisfaction; and client would recommend program to others.

Table 6.7 Satisfaction with services received by domain, as reported at 3-month post-exit interview,%			
	FCSO	HSO	Total
	(n = 38)	(n =38)	(n = 76)
Received services in a timely manner			
Strongly Agree	42.1	31.6	36.8
Somewhat Agree	31.6	31.6	31.6
Neutral	5.3	10.5	7.9
Somewhat Disagree	10.5	7.9	9.2
Strongly Disagree	10.5	18.4	14.5
Location services was convenient			
Strongly Agree	52.6	44.7	48.7
Somewhat Agree	26.3	31.6	29.0
Neutral	2.6	7.9	5.3
Somewhat Disagree	5.3	5.3	5.3
Strongly Disagree	13.2	10.5	11.8
Asked to participate in recovery or treatment plan			
Strongly Agree	50.0	50.0	50.0
Somewhat Agree	29.0	26.3	27.6
Neutral	0.0	2.6	1.3
Somewhat Disagree	5.3	7.9	6.6
Strongly Disagree	15.8	13.2	14.5
Staff respected background			
Strongly Agree	76.3	57.9	67.1
Somewhat Agree	10.5	31.6	21.1
Neutral	5.3	2.6	4.0
Somewhat Disagree	0.0	0.0	0.0
Strongly Disagree	7.9	7.9	7.9
Staff helped to believe I could change and improve my life			
Strongly Agree	60.5	47.4	54.0
Somewhat Agree	18.4	15.8	17.1
Neutral	10.5	13.2	11.8
Somewhat Disagree	0.0	13.2	6.6
Strongly Disagree	10.5	10.5	10.5
Learned skills to help better manage life			
Strongly Agree	42.1	39.5	40.8

Somewhat Agree	23.7	18.4	21.1
Neutral	7.9	7.9	7.9
Somewhat Disagree	7.9	10.5	9.2
Strongly Disagree	18.4	23.7	21.1
Would return to program if needed other drug treatment/recovery services in the future?			
Strongly Agree	50.0	34.2	42.1
Somewhat Agree	21.1	18.4	19.7
Neutral	5.3	7.9	6.6
Somewhat Disagree	5.3	2.6	4.0
Strongly Disagree	18.4	36.8	27.6
Would recommend program to a friend in need of alcohol or other drug treatment/recovery services			
Strongly Agree	60.5	39.5	50.0
Somewhat Agree	15.8	15.8	15.8
Neutral	2.6	10.5	6.6
Somewhat Disagree	7.9	10.5	9.2
Strongly Disagree	13.2	23.7	18.4
Got the kind of service wanted			
Strongly Agree	44.7	47.4	46.1
Somewhat Agree	21.1	15.8	18.4
Neutral	7.9	10.5	9.2
Somewhat Disagree	2.6	5.3	4.0
Strongly Disagree	23.7	21.1	22.4
Service helped to me to deal more effectively with problems			
Strongly Agree	47.4	39.5	43.4
Somewhat Agree	29.0	18.4	23.7
Neutral	2.6	13.2	7.9
Somewhat Disagree	7.9	10.5	9.2
Strongly Disagree	13.2	18.4	15.8
In overall, general sense, I am satisfied with services			
Strongly Agree	55.3	39.5	47.4
Somewhat Agree	21.1	26.3	23.7
Neutral	5.3	10.5	7.9
Somewhat Disagree	5.3	10.5	7.9
Strongly Disagree	13.2	13.2	13.2
How much do you feel your current counselor agreed with you about what would be useful goals for your treatment?			
Very much	36.8	39.5	38.2
Pretty much	23.7	10.5	17.1
Somewhat	10.5	18.4	14.5

A little	7.9	13.2	10.5
Not at all	21.1	15.8	18.4
Missing	0.0	2.6	1.3
How much did your counselor show a sincere desire to understand you and your problems?			
Very much	44.7	50.0	47.4
Pretty much	15.8	5.3	10.5
Somewhat	15.8	13.2	14.5
A little	5.3	13.2	9.2
Not at all	18.4	15.8	17.1
Missing	0.0	2.6	1.3
How much do you feel that you were working together with your counselor, that the two of you were joined in a struggle to overcome your problems?			
Very much	39.5	36.8	38.2
Pretty much	13.2	10.5	11.8
Somewhat	7.9	15.8	11.8
A little	13.2	15.8	14.5
Not at all	26.3	18.4	22.4
Missing	0.0	2.6	1.3
How satisfied do you feel with treatment?			
Very much	34.2	34.2	34.2
Pretty much	15.8	21.1	18.4
Somewhat	15.8	7.9	11.8
A little	15.8	10.5	13.2
Not at all	18.4	23.7	21.1
Missing	0.0	2.6	1.3
How much has the treatment you have received in this program matched with your ideas about what helps people in treatment?			
Very much	31.6	29.0	30.3
Pretty much	10.5	13.2	11.8
Somewhat	18.4	21.1	19.7
A little	15.8	7.9	11.8
Not at all	23.7	26.3	25.0
Missing	0.0	2.6	1.3

Table 6.8 shows by domain services needed, services received (in program, out of program, and either one), and the extent to which services received was matched to need. For example, 100.0% of clients needed services to address opioids. Most clients indicated a need for services (defined as experiencing an issue in a given domain for more than 1 day during the last 90 days or while incarcerated) for the following problems: 81.6% for legal problems, 77.6% for family or social, 68.4% for mental health, 25.0% for medical problems, and 10.5% for parenting and childcare needs. Clients indicated a need for the following services by having provided a

satisfaction level for these services while incarcerated: 85.3% for HIV/AIDS and 85.5% for HCV. Clients described a need for the following services as defined by having not at all, a little, or moderately enough money to meet their needs: 71.6% for social needs and 71.6% survival services. A need for employment services (68.4%) was indicated when the client was paid for work less than 45 days (half the observation time period) and had not indicated they were disabled or retired. A need for sexual assault services was indicated if the client had ever been physically or sexually abused (57.5%). Need for alcohol services (29.3%) was indicated if a client had consumed alcohol while taking buprenorphine or methadone, had consumed any alcohol and had indicated a need for alcohol services while incarcerated, or were consuming alcohol and opioids in the last 90 days. Note that these definitions vary from what is shown in Table 6.7.

When considering services received in relation to need, about as many clients who needed services to address opioid problems (100%) did indeed receive those services (96.1%), representing a service-need gap of 3.9%. The service-need gap was similarly small for employment problems (-1.3%; note: a negative sign indicates more people received services than needed it), mental health problems (-2.7%), parenting problems (-4.0%), and survival services (4.5%). The gap was modest for legal problems (13.1%) and infectious disease (15.8% for HCV and 18.2% for HIV). Many fewer clients received services than needed it to address social service issues (20.3% gap), physical and sexual abuse (27.2%), and family social problems (46.0%). Conversely, many more clients received services than needed it to address alcohol problems (-44.4%) and medical problems (-46.1%).

Table 6.8 Needs expressed and services received while in-program and out-of-program, %												
	FCSO (n = 38)				HSO (n = 38)				Total (n = 76)			
	Need [1]	In program	Out of program	Any	Need [1]	In program	Out of program	Any	Need [1]	In program	Out of program	Any
Opioid Problem[2^]	100.0	78.4	71.1	94.7	100.0	73.7	73.7	97.4	100.0	76.0	72.4	96.1
Hepatitis C[3]	86.8	47.4	23.7	63.2	84.2	68.4	31.6	76.3	85.5	57.9	27.6	69.7
HIV[3]	86.5	42.1	34.2	63.2	84.2	60.5	34.2	71.1	85.3	51.3	34.2	67.1
Family/Social Problem	79.0	13.2	18.4	29.0	76.3	10.5	29.0	34.2	77.6	11.8	23.7	31.6
Social Services[4]	75.7	29.0	29.0	39.5	67.6	34.2	39.5	63.2	71.6	31.6	34.2	51.3
Survival Services[4]	75.7	42.1	42.1	57.9	67.6	44.7	44.7	76.3	71.6	43.4	43.4	67.1
Employment Problem[5]	60.5	39.5	44.7	63.2	76.3	31.6	57.9	76.3	68.4	35.5	51.3	69.7
Mental Health Problem	68.4	50.0	36.8	65.8	68.4	50.0	50.0	76.3	68.4	50.0	43.4	71.1
Legal Problem	81.6	31.6	29.0	50.0	42.1	31.6	29.0	47.4	61.8	31.6	29.0	48.7
Physical/Sexual Abuse	60.0	26.3	18.4	36.8	55.3	7.9	18.4	23.7	57.5	17.1	18.4	30.3
Medical Problem	21.1	47.4	42.1	71.1	29.0	39.5	50.0	71.1	25.0	43.4	46.1	71.1
Alcohol Problem [6^]	31.6	39.5	60.5	73.7	26.3	44.7	50.0	73.7	29.0	42.1	55.3	73.7
Parenting Problem[7]	10.5	10.5	5.3	13.2	10.5	10.5	10.5	15.8	10.5	7.9	7.9	14.5
[1]= need defined as how many participants expressed more than 0 days in last 90 days or while in treatment they had an issue in these domains												
^= services received includes Alcoholics Anonymous for alcohol services and Narcotics Anonymous for opioid services received												
[2]= need defined by inclusion criteria												
[3]= defined as responded to satisfaction for this service												
[4]= need defined by 1 "Not at all" 2 "A little" & 3"Moderately" enough money for needs												
[5] = need defined as yes if paid for work was less than 45 days (half the observation time period) and had not indicated being disabled or retired												
[6]= need defined as yes if drinking while taking buprenorphine or methadone, drinking while using opioids, or drinking and received alcohol services while incarcerated												
[7] = includes those who are not parents												

Discussion

In this chapter, we examined the status of program participants as self-reported 3 months after exit from jail, along with their report health services utilization in relation to need, and level of satisfaction with care. Results indicated that after exit from jail, about 67.1% of participants self-reported receipt of medications to treat opioid use disorder (MOUD). Of those who were receiving MOUD at the follow-up interview, 56.9% were receiving buprenorphine, 25.5% were receiving methadone, and 17.7% were receiving naltrexone. These results suggest that many program participants do indeed continue to receive medications to treat opioid use disorder after exit from jail.

As for other indicators of self-reported participant status after exit from jail, 82.9% of participants self-reported having abstained from opioids in the 30 days prior to the follow-up, 56.5% had abstained from "illegal" drugs, and 76.3% had abstained from alcohol. In the same time-period, most participants reported no arrests or incarcerations, and about half of participants were on probation or parole. Many individuals reported mental health symptoms (84.2%) and homelessness (68.5%). More than one-third (36.8%) were employed full- or part-time. About 48.7% had attended self-help groups. Results are consistent with other findings (Evans et al., 2020), contextualize participant outcomes at follow-up, and underscore participants' significant need for a diverse array of health and social services after exit from jail.

At the follow-up interview, individuals who were not receiving MOUD treatment were asked to explain why. Results indicated that the primary reasons for not receiving MOUD treatment after exit from jail was due to gaps in participant knowledge about MOUD, fear of social stigma or discrimination, barriers posed by the health care delivery system, active substance use, and lack of health insurance or legal barriers. These findings are consistent with reports by other studies (Blendon & Benson, 2018; Finlay et al., 2020; Kennedy-Hendricks et al., 2016, 2017; National Academies of Sciences, Engineering, and Medicine, 2019) and point to areas to target education and intervention efforts that are designed to increase MOUD initiation and engagement rates.

We examined the proportion of participants who needed services and level of satisfaction with services. Perceived helpfulness of services received varied across domains, with greater helpfulness reported for services to address drug problems, medical problems, and problems related to infectious disease and lesser helpfulness for services to address family problems, employment problems, and criminal problems. Participants generally agreed that staff respected the background of clients, staff helped clients to believe in ability to change and improve, the location of services was convenient, clients felt asked to participate in their recovery or treatment plan, counselors showed a sincere desire to understand, and that clients would recommend the program to others. In other research on addiction health services utilization and outcomes, greater service intensity and patient satisfaction with services has been associated with treatment completion or longer treatment retention which has, in turn, been associated with more favorable treatment outcomes (Hser et al., 2004). Studies have also identified which program aspects support health services utilization. For example, a study of incarcerated adults with alcohol use disorder reported that participants valued one-to-one services, organic unstructured conversations, brief assessments, and provision of tangible services and resources at release rather than only referrals (Owens et al., 2018). Whether and how participant satisfaction with services relates to MOUD utilization and other participant outcomes are areas for future research. Also needed is an examination of which program practices support participant use of care after exit from jail.

We also considered services received in relation to need. Results indicated that about as many clients who needed services to address opioid problems did indeed receive those services, representing a small service-need gap. Also, many more clients received services than needed it to address alcohol problems and medical problems. The service-need gap was small for employment problems, mental health problems, parenting problems, and survival services. The service-need gap was modest for legal problems and infectious disease. Many fewer clients received services than needed it to address social issues, and family social problems, and physical and sexual abuse. During follow-up interviews, some participants explained a preference to not discuss histories of past abuse while being treated within jail settings, for example for fear of re-experiencing traumatic memories or sensations. Experiences of traumatic life events have been associated with the occurrence and persistence of opioid and other substance use disorders (Evans et al., 2017a; Evans et al., 2017b), underscoring the potential value of trauma-informed care practices (American Psychological Association, 2020; Center for Substance Abuse Treatment, 2000; Coffey et al., 2016; Peck et al., 2018; Roberts et al., 2016; Ruglass et al., 2017; Saunders et al., 2015) such as Seeking Safety (Najavits et al., 2014) and other trauma-informed approaches (e.g., Levenson et al., 2017).

A significant proportion of follow-up interviews were conducted after Massachusetts had declared a state of emergency due to the COVID-19. To reduce jail populations, the Massachusetts Supreme Judicial Court ordered the rapid release of eligible individuals. During follow-up interviews, some participants shared limited ability to receive services while incarcerated or after release due to COVID-19 mitigation safeguards.

Finally, an important caveat to keep in mind in relation to the results presented in this chapter is that results are based on only those individuals who did complete a follow-up interview (i.e. n=76, or 28%, of all program participants). In addition, re-contact efforts revealed that 2.6% of program participants had died after jail exit and 13.8% of program participants could not be interviewed because they had been re-incarcerated at follow-up. These latter results underscore the nature of opioid use disorder as a chronic health condition that is characterized by high mortality rates, interactions with the criminal justice system, and a need for continuing care. In the present and final year of the project, staff will continue to work together to increase the follow-up rate to include more program participants in the follow-up interviews and thus better understand participant outcomes.

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Chapter VII. Next Steps and Recommendations

This report documents the history, implementation, and findings of the delivery of a MOUD program to jail detainees in two Houses of Correction during the second year of a three-year project. In this chapter, we provide a summary of the next steps and recommendations for implementation and evaluation in the upcoming time-period.

Next steps

Implementation study

Data collected in first two years of the project provides critical insights into the barriers, facilitators, and challenges of MOUD program implementation and sustainment during the life of the project. In year two, program implementation was disrupted by the COVID-19 pandemic. We documented the ways in which the MOUD program was adapted in response to COVID-19. We are currently engaged in collecting qualitative data from key stakeholders to further assess how key implementation factors change over time and to identify the emergence, implementation, and sustainment of new program elements.

Outcome study

In Year 3 of the project, data collection will continue at each site, per the established protocols, to assess participant status at jail intake, 3-months and 6-months post-intake, and jail discharge. Also, UMass staff will continue to re-contact eligible participants and complete a 3-month post-exit from jail interview. In addition to this work, in the upcoming year, UMass will arrange to obtain administrative data on participants as maintained in jail records and other sources. Finally, all data will be analyzed to assess health services utilization and outcomes.

Recommendations

Implementation study

Participating sites are among the first Houses of Correction in the nation to implement a comprehensive MOUD program. Lessons learned during the project thus far could help criminal justice settings in Massachusetts and elsewhere to implement similar programs. Thus, it is recommended that the team disseminate findings via presentations, reports, publications, and other engagement activities and work together to translate results into policy and practice.

Outcome study

Sites have already collected intake data on the target number of participants (n=300). Given the client flow and pace of data collection thus far, it is expected that sites will collected discharge data on the targeted number of participants as well during the life of the project. However, the evaluation sample represents an estimated 70% of the population being served by the MOUD program. Thus, results generated from the evaluation sample may not generalize to the broader population. It is for these reasons that it is recommended that the team consider methods to increase detainee enrollment in data collection activities. Another option is to analyze administrative data on all program participants as a complementary source of information.

Staff identified that some data collected at intake and much of the data collected at the discharge interview thus far may not be accurate. It is recommended that the team conduct data quality assessments and identify strategies to improve the reliability and validity of these data. Staff are currently engaged in cross-checking intake and discharge data against electronic health records and other administrative data sources as part of their data quality assurance efforts.

Regarding the 3-month post-exit from jail interview, it has been challenging to re-contact individuals after jail exit. Also, a significant proportion of prospective participants cannot be re-contacted because of re-incarceration or death. To increase the re-contact and follow-up rates, UMass staff are currently working closely with jail staff to better inform prospective participants prior to jail exit about the purpose and nature of the post-discharge follow-up interview. Related to this effort, the team is exploring options to complete this interview in incarcerated settings with individuals who have been re-incarcerated.

Appendices

Appendix A

Table 4.1 Sociodemographic characteristics					
	Year 1		**Year 2**		
	FCSO	HSO	FCSO	HSO	Total
Gender					
Male	66.7	100.0	70.2	100.0	83.5
Female	33.3	0.0	28.6	0.0	16.2
Transgender	0.0	0.0	1.2	0.0	0.4
Other	0.0	0.0	1.2	0.0	0.4
Race/Ethnicity					
White	69.0	75.8	78.6	57.1	71.2
Hispanic	5.2	18.2	11.9	25.0	14.8
Black	12.1	4.6	2.4	8.9	6.4
Other	12.1	1.5	6.0	7.1	6.4
Asian	1.7	0.0	1.2	1.8	1.1
Age					
18-24	11.7	9.0	9.5	3.3	8.5
25-34	41.7	46.3	51.2	56.4	49.3
35-44	33.3	29.9	33.3	26.2	30.9
45-54	8.3	10.5	6.0	11.5	8.8
55-64	3.3	4.5	0.0	1.6	2.2
65 +	1.7	0.0	0.0	0.0	0.4
Age, mean (SD)	35.05(±1.3)	35.1(±1.0)	33.3(±0.8)	35.1(±1.0)	34.4 (±0.6)
Employment					
Full time	16.7	6.0	1.2	19.7	9.9
Part time	10.0	0.0	2.4	16.4	6.6
Unemployed	40.0	9.0	1.2	11.5	14.0
Not in Labor Force	31.7	82.1	95.2	47.5	67.3
Enrolled in school or job training	11.7	17.9	4.8	16.7	12.2
Education level					
Less than high school	28.3	29.9	21.4	26.2	26.1
High school or GED	43.3	56.7	46.4	34.4	45.6
Some college	25.0	7.5	26.2	27.9	21.7
Associate's degree	8.3	4.5	7.1	11.5	7.7
Bachelor's degree	1.7	0.0	3.6	4.9	2.6
Some vocational/technical program	0.0	1.5	0.0	3.3	1.1
Vocational/technical program certificate or	0.0	4.5	0.0	1.6	1.5

diploma					
Income source					
Employed	31.7	11.9	47.6	42.6	34.2
Public assistance	50.0	17.9	40.5	31.2	34.9
Retirement	0.0	0.0	1.2	3.3	1.1
Disability	15.0	4.5	2.4	11.5	7.7
Non-legal income	23.3	6.0	23.8	34.4	21.7
Family and/or friends	25.0	11.9	11.9	19.7	16.5
Other	1.7	3.0	0.0	3.3	1.8
Average month income (SD)	698.10 (± 236.89)	73.10 (± 21.46)	691.67 (± 123.50)	427.92 (± 84.85)	481.57 (± 70.59)
Has enough money to meet needs					
Not at all	40.0	31.3	21.4	16.4	26.8
A little	21.7	17.9	8.3	21.3	16.5
Moderately	13.3	20.9	19.1	8.2	15.8
Mostly	16.7	13.4	25.0	18.0	18.8
Completely	8.3	16.4	26.2	29.5	20.6
Where living most of the time, past 30 days					
Shelter	0.0	4.5	1.2	3.3	2.2
Street/outdoors	5.0	3.0	2.4	4.9	3.7
Institution	26.7	67.2	42.9	52.5	47.4
Own/rent apartment, room, or house	41.7	16.4	27.4	16.4	25.4
Someone else's apartment, room, or house	21.7	6.0	21.4	16.4	16.5
Dormitory/college residence	0.0	0.0	0.0	0.0	0.0
Halfway house	0.0	0.0	1.2	0.0	0.4
Residential treatment	3.3	0.0	0.0	3.3	1.5
Other	1.7	3.0	3.6	1.6	2.6
Satisfaction with living space					
Very dissatisfied	20.0	16.4	8.3	16.4	14.7
Dissatisfied	8.3	10.5	11.9	16.4	11.8
Neither satisfied nor dissatisfied	16.7	16.4	23.8	1.6	15.4
Satisfied	26.7	38.8	34.5	45.9	36.4
Very satisfied	28.3	17.9	21.4	18.0	21.3
Military service	3.3	1.5	0.0	9.8	3.3
Parental status					
Has children	81.7	70.2	66.7	70.5	71.7
Currently pregnant	0.0	0.0	4.0	0.0	2.2

Mean no. of children (SD)	2.5 (± 0.3)	2.4 (± 0.2)	2.1 (± 0.2)	2.5 (± 0.2)	2.5 (± 0.1)
One child living with other by court order	6.3	10.6	10.7	2.3	7.7
Two or more children living with other by court order	6.3	8.5	7.1	7.0	7.2
Lost parental rights to one or more children	21.3	23.8	25.5	17.5	22.4

Table 4.2 Opioid and other substance use					
	Year 1		Year 2		
	FCSO	HSO	FCSO	HSO	Total
Alcohol and other substance use, past 30 days					
Any alcohol	41.7	44.8	50.0	39.3	44.5
Alcohol to intoxication (5+ drinks in one sitting)	35.0	31.3	26.2	29.5	30.2
Alcohol to intoxication (4 or fewer drinks in one sitting and felt high)	8.3	4.5	26.2	11.5	13.6
Illegal drugs	88.3	77.6	84.5	70.5	80.5
Both alcohol and illegal drugs on the same day	38.3	41.8	38.1	32.8	37.9
Cocaine/crack	66.7	55.2	63.1	41.0	57.0
Cannabis	60.0	55.2	46.4	42.6	50.7
Any Opiates	60.0	64.2	59.5	49.2	58.5
Heroin	50.0	56.7	57.1	47.5	53.3
Morphine	5.0	3.0	3.6	1.7	3.3
Dilaudid	3.3	3.0	0.0	3.4	2.2
Demerol	0.0	0.0	0.0	0.0	0.0
Percocet	15.0	16.4	11.9	11.9	13.7
Darvon	0.0	0.0	0.0	0.0	0.0
Codeine	0.0	0.0	1.2	3.4	1.1
Tylenol 2, 3, 4	0.0	3.0	0.0	0.0	0.7
OxyContin/Oxycodone	3.3	4.5	3.6	5.2	4.1
Non-prescription methadone	10.0	3.0	6.0	1.7	5.2
Hallucinogens/psychedelics, PCP, MDMA, LSD, mushrooms, mescaline	5.0	11.9	7.1	8.5	8.2
Methamphetamine or other amphetamines	6.7	4.5	8.3	8.5	7.0
Benzodiazepines	11.7	17.9	19.1	27.1	18.9
Barbiturates	0.0	0.0	0.0	1.7	0.4
Non-prescription GHB	0.0	0.0	0.0	1.7	0.4
Ketamine	0.0	0.0	3.6	0.0	1.1
Other tranquilizers	3.3	0.0	1.2	0.0	1.1
Inhalants	3.3	0.0	1.2	0.0	1.1
Other illegal drugs	6.7	7.5	6.0	6.8	6.7
Alcohol or drug use caused stress, past 30 days					
Not at all	6.7	7.7	22.6	12.1	13.1
Somewhat	28.3	13.9	10.7	17.2	16.9
Considerably	16.7	13.9	25.0	12.1	17.6
Extremely	40.0	44.6	32.1	41.4	39.0

Alcohol or drug use caused giving up important activities, past 30 days					
Not at all	18.3	15.4	30.1	31.0	24.1
Somewhat	21.7	10.8	18.1	10.3	15.4
Considerably	21.7	20.0	28.9	13.8	21.8
Extremely	30.0	33.9	13.3	25.9	24.8
Alcohol or other drug use caused emotional problems, past 30 days					
Not at all	21.7	11.1	19.1	20.7	18.1
Somewhat	23.3	20.6	31.0	15.5	23.4
Considerably	18.3	20.6	26.2	24.1	22.6
Extremely	28.3	27.0	14.3	22.4	22.3

Table. 4.3 Opioid and other substance use disorder					
	Year 1		**Year 2**		
	FCSO	HSO	FCSO	HSO	Total
Opioid use disorder	100.0	100.0	100.0	98.4	99.6
Cocaine-related diagnosis	6.7	59.7	56.0	36.1	41.5
Alcohol-related diagnosis	50.0	43.9	56.0	36.1	47.2
Cannabis-related diagnosis	0.0	35.8	31.0	16.4	22.1
Sedative-, hypnotic-, or anxiolytic-related diagnosis	0.0	3.0	0.0	3.3	1.5

Table 4.4 Received medication to treat opioid or alcohol use disorder					
	Year 1		Year 2		
	FCSO	HSO	FCSO	HSO	Total
Has opioid use disorder, past 30 days	100.0	100.0	100.0	98.4	99.6
Received methadone	1.7	9.0	29.8	16.4	15.4
Received buprenorphine	70.0	25.4	67.9	45.9	52.9
Received naltrexone	0.0	1.5	0.0	1.6	0.7
Received extended-release naltrexone	0.0	6.0	0.0	1.6	1.8
Has alcohol use disorder, past 30 days	50.0	43.9	56.0	36.1	47.2
Received naltrexone	0.0	0.0	0.0	2.2	0.6
Received extended-release naltrexone	0.0	3.5	0.0	2.2	1.1
Received disulfiram	0.0	0.0	0.0	0.0	0.0
Received acamprosate	0.0	0.0	0.0	0.0	0.0

Table 4.5 Crime and involvement with the criminal justice system					
	Year 1		**Year 2**		
	FCSO	HSO	FCSO	HSO	Total
In the past 30 days					
committed a crime	100.0	100.0	100.0	95.7	99.1
arrested	90.0	40.3	95.2	70.0	74.9
arrested for drug-related offense	50.0	25.9	42.5	35.7	40.9
spent night in jail/prison	96.7	90.9	79.8	78.3	85.9
Currently awaiting charges, trial, or sentencing	98.3	53.7	88.1	65.6	76.8
Currently on parole or probation	46.7	30.8	40.5	36.7	38.7

Table 4.6 Mental health conditions and symptoms					
	Year 1		**Year 2**		
	FCSO	HSO	FCSO	HSO	Total
Mood and anxiety	3.3	0.0	9.5	6.6	5.2
Manic episode	0.0	0.0	0.0	0.0	0.0
Bipolar disorder	0.0	0.0	1.2	6.6	1.8
Major depressive disorder, single episode	0.0	0.0	0.0	0.0	0.0
Major depressive disorder, recurrent	0.0	0.0	1.2	0.0	0.4
Persistent mood [affective] disorders	0.0	0.0	0.0	0.0	0.0
Unspecified mood [affective] disorder	0.0	0.0	2.4	0.0	0.7
Anxiety, dissociative, stress-related, somatoform, and other nonpsychotic mental disorders	3.3	0.0	4.8	0.0	2.2
Personality disorder	0.0	1.5	0.0	1.6	0.7
Schizophrenia	0.0	1.5	0.0	0.0	0.4
Schizotypal disorder	0.0	0.0	0.0	0.0	0.0
Delusional disorder	0.0	0.0	0.0	0.0	0.0
Brief psychotic disorder	0.0	0.0	0.0	0.0	0.0
Shared psychotic disorder	0.0	0.0	0.0	0.0	0.0
Schizoaffective disorders	0.0	0.0	0.0	1.6	0.4
Other psychotic disorder not due to a substance or known physiological condition	0.0	0.0	0.0	0.0	0.0
Unspecified psychosis not due to a substance or know physiological condition	0.0	0.0	0.0	0.0	0.0
Antisocial personality disorder	0.0	0.0	0.0	0.0	0.0
Borderline personality disorder	0.0	0.0	0.0	0.0	0.0
Other personality disorders	0.0	0.0	0.0	0.0	0.0
Conduct disorders	0.0	0.0	0.0	0.0	0.0
Childhood onset	1.7	0.0	2.4	0.0	1.1
Intellectual disabilities	0.0	0.0	0.0	0.0	0.0
Pervasive and specific developmental disorders	0.0	0.0	0.0	0.0	0.0
Attention-deficit hyperactivity disorders	1.7	0.0	2.4	0.0	1.1
Emotional disorders with onset specific to childhood	0.0	0.0	0.0	0.0	0.0
Disorders of social functioning with onset specific to childhood or adolescence	0.0	0.0	0.0	0.0	0.0

Tic disorder	0.0	0.0	0.0	0.0	0.0
Other behavioral and emotional disorders	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0
Eating disorders	0.0	0.0	0.0	0.0	0.0
Sleep disorders not due to a substance or know physiological condition	0.0	0.0	0.0	0.0	0.0
Unspecified mental disorder	0.0	0.0	0.0	0.0	0.0
Mental health symptoms, past 30 days					
Experienced serious depression	73.3	68.7	70.2	75.4	71.7
Experienced serious anxiety or tension	85.0	83.6	83.3	73.8	81.6
Experienced hallucinations	11.7	7.5	3.6	13.1	8.5
Experienced trouble understanding, concentrating, or remembering	53.3	50.8	51.2	42.6	49.6
Attempted suicide	1.7	0.0	1.2	6.6	2.2
Was prescribed medication for psychological/emotional problem	48.3	34.3	35.7	36.1	38.2
Bothered by these psychological or emotional problems, past 30 days	93.3	91.0	91.7	83.6	90.1
Not at all	5.0	11.9	4.8	6.6	7.0
Slightly	21.7	19.4	23.8	21.3	21.7
Moderately	25.0	23.9	27.4	21.3	24.6
Considerably	21.7	16.4	23.8	11.5	18.8
Extremely	20.0	19.4	11.9	23.0	18.0
Screened positive for co-occurring mental health and substance use disorder	98.3	38.8	100.0	21.1	67.3
Tested positive for co-occurring mental health and substance use disorder	31.6	100.0	60.7	100.0	58.9

Table 4.7 Exposure to violence and trauma					
	Year 1		**Year 2**		
	FCSO	HSO	FCSO	HSO	Total
Ever experienced violence or trauma in any setting, home, work, school, community	80.0	78.8	79.8	88.1	81.4
Experience was so frightening that					
had nightmares or thought about it when you did not want to	85.1	82.7	81.8	80.8	82.5
tried hard not to think about it or went out of the way to avoid situations that reminded you of it	85.4	84.6	84.6	82.7	84.3
were constantly on guard, watchful, or easily startled	79.2	71.2	73.1	84.6	76.7
felt numb and detached from others, activities, or surroundings	81.3	60.0	72.7	80.4	73.5
Was hit, kicked, slapped or otherwise physically hurt, past 30 days	32.2	10.5	14.5	15.8	17.7
Never	68.3	89.6	79.8	77.1	79.0
A few times	31.7	10.5	16.7	14.8	18.0
More than a few times	0.0	0.0	3.6	4.9	2.2

Table 4.8 HIV risk behaviors					
	Year 1		**Year 2**		
	FCSO	HSO	FCSO	HSO	Total
Engaged in sexual activity, past 30 days	64.4	56.1	72.3	62.3	64.4
Unprotected sexual contacts	89.5	89.2	85.7	93.8	89.0
Unprotected sexual contacts with someone who is HIV positive or has AIDS	0.0	0.0	0.0	0.0	0.0
Unprotected sexual contacts with an injection drug user	29.4	30.3	26.5	29.0	28.6
Unprotected sexual contacts with someone high on some substance	52.9	57.6	38.8	41.9	46.9
Tested for HIV	98.3	97.0	100.0	96.7	98.2
Knows results of HIV testing	100.0	96.9	100.0	94.9	98.1
Injected drugs, past 30 days	48.3	38.8	47.6	31.2	41.9
Used a syringe/needle, cooker, cotton, or water that someone else used, past 30 days					
Always	0.0	3.9	2.5	21.1	5.3
More than half the time	3.5	0.0	0.0	0.0	0.9
Half the time	3.5	3.9	10.0	5.3	6.1
Less than half the time	13.8	23.1	20.0	10.5	17.5
Never	79.3	69.2	67.5	63.2	70.2

Table 4.9 Social support					
	Year 1		Year 2		
	FCSO	HSO	FCSO	HSO	Total
Interacted with family and/or friends supportive of recovery, past 30 days	81.7	77.6	81.0	75.4	79.0
Attended any support groups, past 30 days					
Non-religious or faith-based organization	40.0	41.8	27.4	52.5	39.3
Religious or faith affiliated self-help groups	10.0	17.9	13.1	13.1	13.6
Other organization that support recovery	35.0	20.9	28.6	13.1	24.6
Source of support when having trouble					
Clergy member	1.7	1.5	0.0	1.7	1.1
Family member	51.7	54.6	65.9	48.3	56.0
Friends	6.7	18.2	11.0	18.3	13.4
Other	28.3	9.1	7.3	15.0	14.2
No one	11.7	16.7	15.9	16.7	15.3
Satisfaction with personal relationships					
Very dissatisfied	15.0	6.0	3.6	1.8	6.3
Dissatisfied	21.7	23.9	13.1	29.8	21.3
Neither	13.3	14.9	21.4	15.8	16.8
Satisfied	30.0	37.3	41.7	29.8	35.5
Very satisfied	20.0	17.9	20.2	22.8	20.2

Table 4.10 Perceived Health and wellness, and quality of life					
	Year 1		Year 2		
	FCSO	HSO	FCSO	HSO	Total
Current overall health right now					
Excellent	6.7	19.4	8.3	11.5	11.4
Very Good	13.3	20.9	15.5	14.8	16.2
Good	40.0	35.8	42.9	37.7	39.3
Fair	25.0	17.9	23.8	21.3	22.1
Poor	15.0	6.0	9.5	13.1	10.7
Satisfaction with health					
Very dissatisfied	5.0	3.0	3.6	5.2	4.1
Dissatisfied	21.7	14.9	6.0	10.3	12.6
Neither	25.0	13.4	25.0	25.9	22.3
Satisfied	46.7	53.7	59.5	46.6	52.4
Very satisfied	1.7	14.9	6.0	12.1	8.6
Enough energy for everyday life					
Not at all	11.9	7.5	7.1	5.0	7.8
A little	18.6	10.5	13.1	10.0	13.0
Moderately	27.1	10.5	20.2	11.7	17.4
Mostly	22.0	35.8	38.1	31.7	32.6
Completely	20.3	35.8	21.4	41.7	29.3
Satisfaction with ability to perform daily activities					
Very dissatisfied	6.7	4.6	1.2	1.7	3.4
Dissatisfied	11.7	10.6	7.2	6.7	8.9
Neither	23.3	9.1	18.1	15.0	16.4
Satisfied	45.0	53.0	57.8	43.3	50.6
Very satisfied	13.3	22.7	15.7	33.3	20.8
Satisfaction with self					
Very dissatisfied	20.0	15.2	4.8	8.5	11.5
Dissatisfied	30.0	10.6	21.4	25.4	21.6
Neither	23.3	15.2	25.0	20.3	21.2
Satisfied	21.7	47.0	39.3	32.2	35.7
Very satisfied	5.0	12.1	9.5	13.6	10.0
Quality of life					
Very poor	3.4	3.1	2.4	6.7	3.7
Poor	17.0	12.3	16.7	16.7	15.7
Neither	37.3	24.6	25.0	18.3	26.1
Good	28.8	43.1	45.2	46.7	41.4
Very good	13.6	16.9	10.7	11.7	13.1

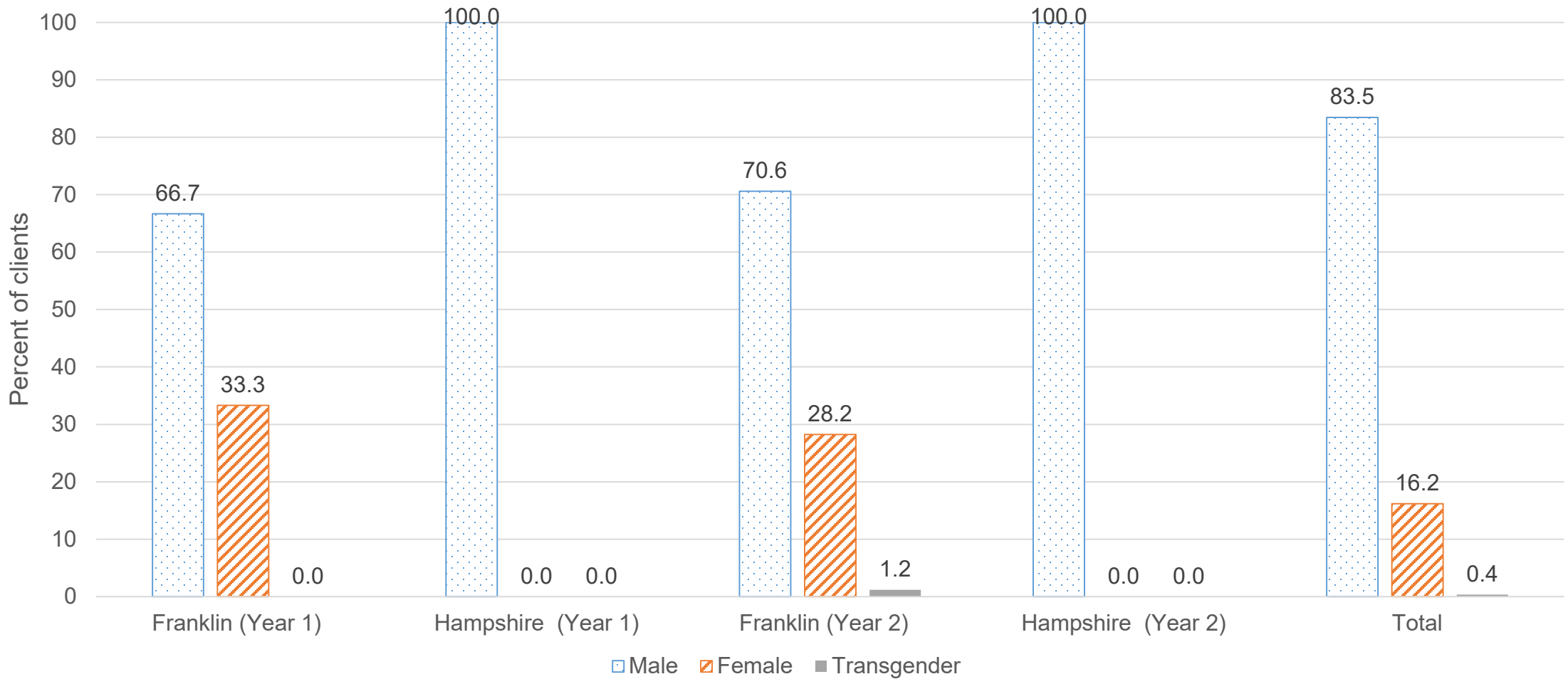
4.11 Health services utilization					
	Year 1		**Year 2**		
	FCSO	HSO	FCSO	HSO	Total
Received inpatient treatment, past 30 days	33.3	13.4	11.9	14.8	17.7
Received outpatient treatment, past 30 days	35.0	35.8	26.2	52.5	36.4
Received emergency room treatment, past 30 days	21.7	20.9	21.4	11.5	19.1

5.1 Health utilization at discharge					
	Year 1		Year 2		
	FCSO	HSO	FCSO	HSO	Total
Program tested client for HIV	0.0	47.6	11.1	19.4	15.9
Program referred client for HIV testing	0.0	18.2	0.0	74.1	25.4
Modality:					
Case management	100.0	100.0	100.0	100.0	100.0
Day treatment	92.3	77.3	44.4	18.4	47.4
Inpatient	0.0	0.0	0.0	0.0	0.0
Outpatient	0.0	0.0	0.0	0.0	0.0
Outreach	0.0	0.0	0.0	0.0	0.0
Intensive Outpatient	0.0	0.0	0.0	0.0	0.0
Methadone	0.0	4.6	26.4	11.8	13.7
Residential Rehab	97.4	9.1	97.2	65.8	75.8
Hospital Inpatient detox	0.0	0.0	0.0	0.0	0.0
Free standing residential	69.2	0.0	58.3	15.8	38.4
Ambulatory detox	0.0	0.0	0.0	1.3	0.5
After care	94.9	45.5	100.0	67.1	81.0
Recovery support	94.9	54.6	100.0	54.0	77.7
Other modalities	0.0	68.2	0.0	15.8	13.3
Treatment:					
Screening	100.0	95.5	100.0	100.0	99.5
Brief intervention	79.5	40.9	100.0	71.1	79.2
Brief treatment	59.0	40.9	81.9	61.8	65.9
Referral treatment	33.3	77.3	73.6	63.2	63.0
Assessment	82.1	95.5	98.6	94.7	93.8
Treatment/recovery planning	89.7	68.2	100.0	76.3	85.8
Individual counseling	20.5	72.7	25.0	69.7	45.5
Group counseling	69.2	72.7	81.9	68.4	73.9
Family/marriage counseling	0.0	4.6	1.4	25.0	10.0
Co-occurring treatment/recovery services	64.1	13.6	88.9	10.5	48.3
Pharmacological interventions	92.3	86.4	94.4	76.3	86.7
HIV/AIDS counseling	0.0	18.2	1.4	19.7	9.5
Other	0.0	0.0	0.0	0.0	0.0
Case management:					
Family (marriage, education, parenting, child development)	0.0	4.6	8.3	6.6	6.2
Child care	0.0	0.0	0.0	0.0	0.0
Employment, pre-employment	2.6	31.8	2.8	9.2	8.5
Employment coaching	7.7	54.6	65.3	44.7	46.0
Individual coordination	0.0	22.7	1.4	6.6	5.2

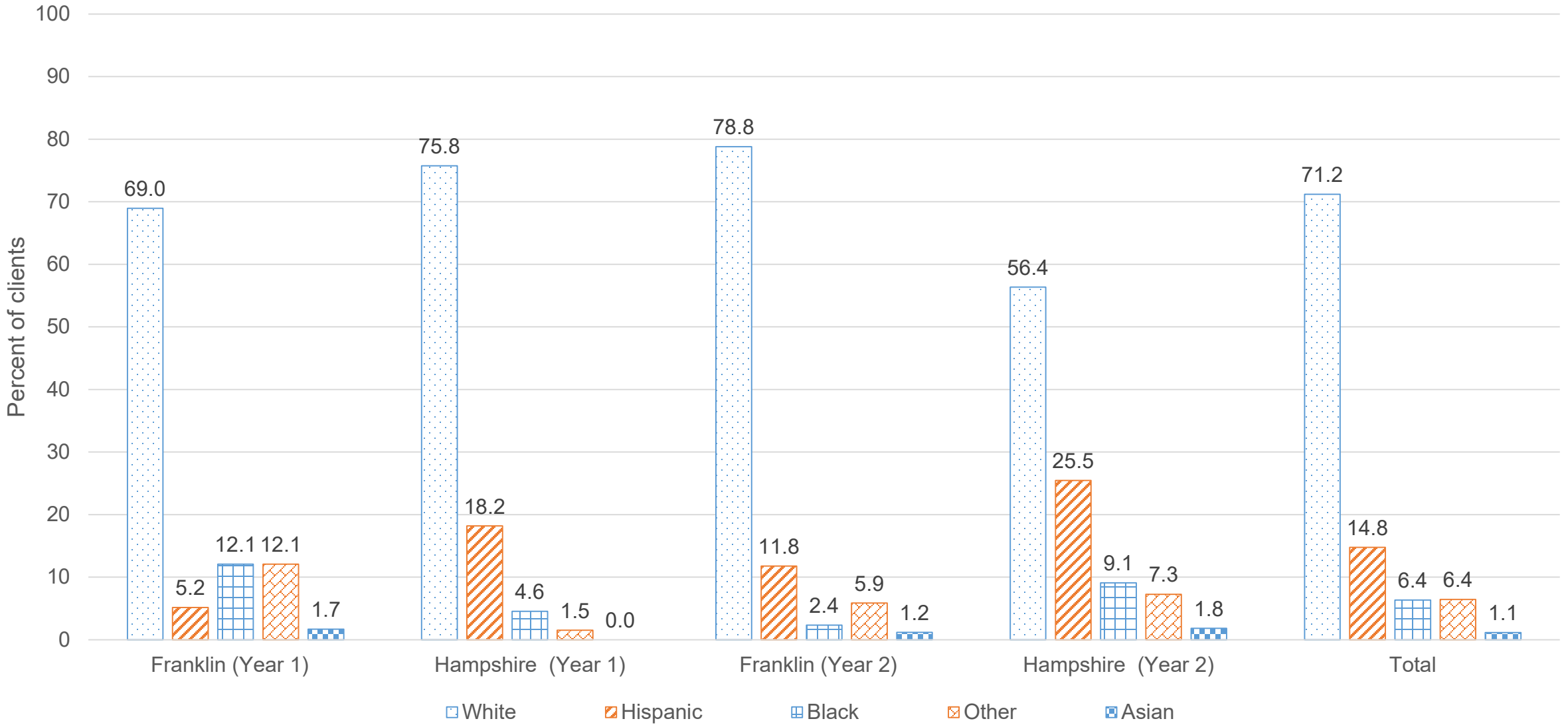
Transportation	69.2	45.5	90.3	67.1	73.5
HIV/AIDS services	7.7	13.6	56.9	6.6	25.1
Supportive transitional drug-free housing	0.0	13.6	0.0	19.7	9.0
Other	0.0	0.0	0.0	5.3	1.9
Medical:					
Medical care	100.0	86.4	100.0	89.5	94.8
Alcohol/drug testing	87.2	81.8	98.6	8.2	91.0
HIV/Aids medical support and testing	0.0	31.8	11.1	13.2	12.3
Other	7.7	27.3	31.9	39.5	29.4
After care:					
Continuing Care	23.1	40.9	95.8	39.5	55.9
Relapse prevention	15.4	45.5	72.2	60.5	54.5
Recovery coaching	7.7	9.1	16.7	21.1	16.1
Self-help and support groups	0.0	40.9	5.6	59.2	28.4
Spiritual support	0.0	9.1	0.0	11.8	5.2
Other	0.0	0.0	0.0	1.3	0.5
Education:					
Substance abuse education	66.7	81.8	72.2	80.3	75.4
HIV/Aids education	2.6	59.1	37.5	43.4	35.6
Other	0.0	13.6	0.0	47.4	19.4
Peer-to-peer recovery support					
Peer coaching or mentoring	10.3	18.2	18.1	44.7	26.5
Housing support	15.4	18.2	84.7	38.2	47.9
Alcohol and drug free social activities	18.0	31.8	52.8	69.7	50.2
Information and referral	23.1	68.2	90.3	72.4	68.7
Other	0.0	0.0	0.0	0.0	0.0

Appendix B

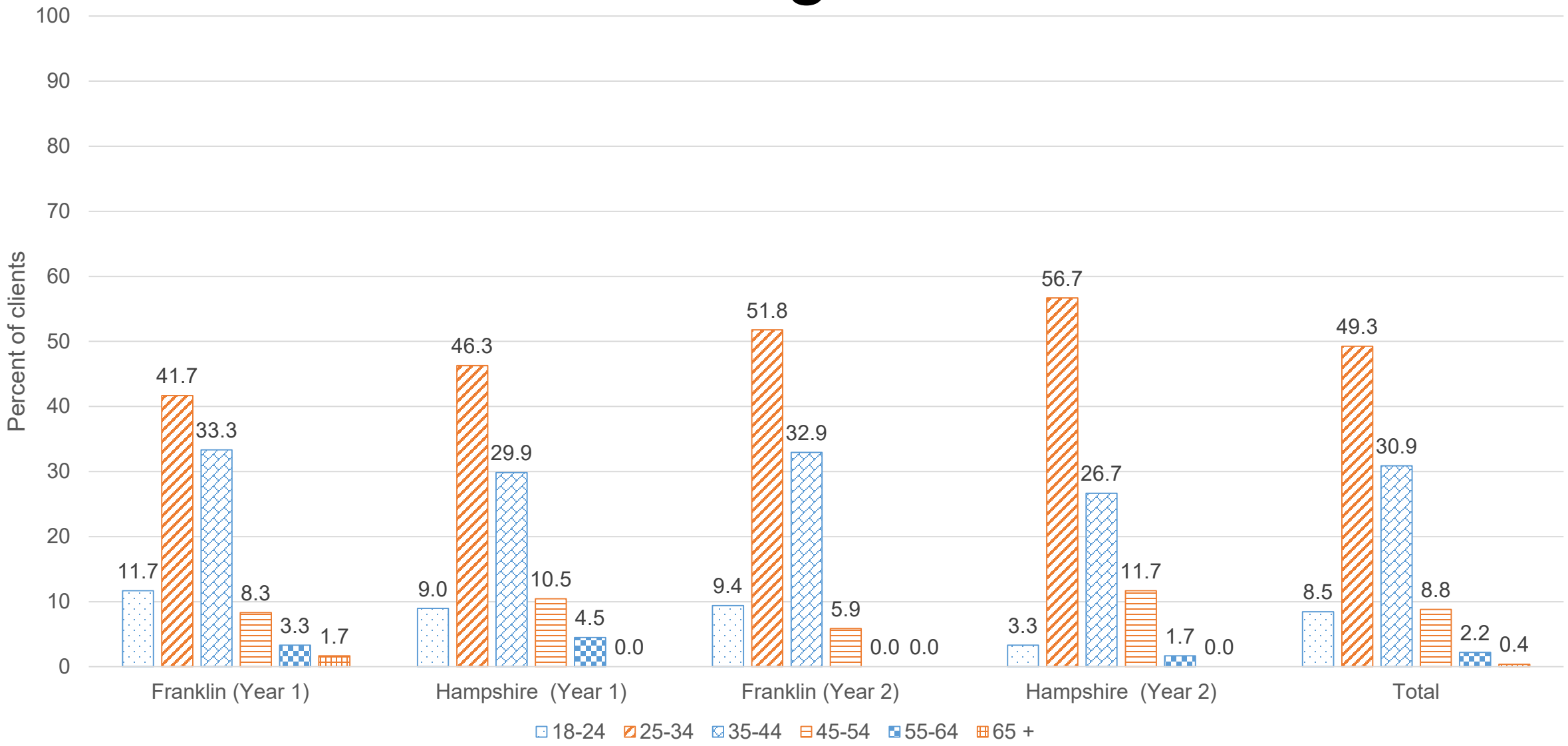
Gender


Percent of clients
100
90
80
70
60
50
40
30
20
10
0
66.7
33.3
0.0
100.0
0.0
0.0
70.6
28.2
1.2
100.0
0.0
0.0
83.5
16.2
0.4
Franklin (Year 1)
Hampshire (Year 1)
Franklin (Year 2)
Hampshire (Year 2)
Total
Male
Female
Transgender

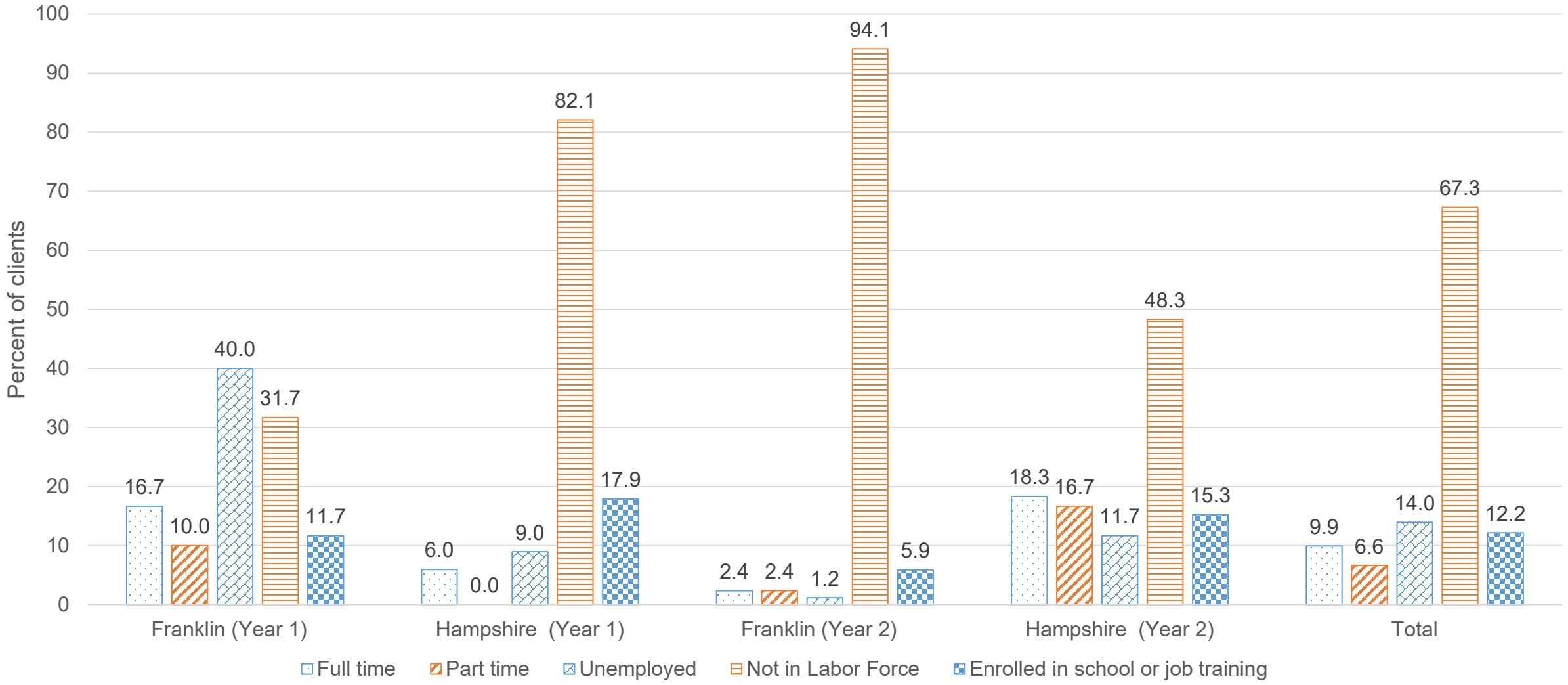
Race and ethnicity



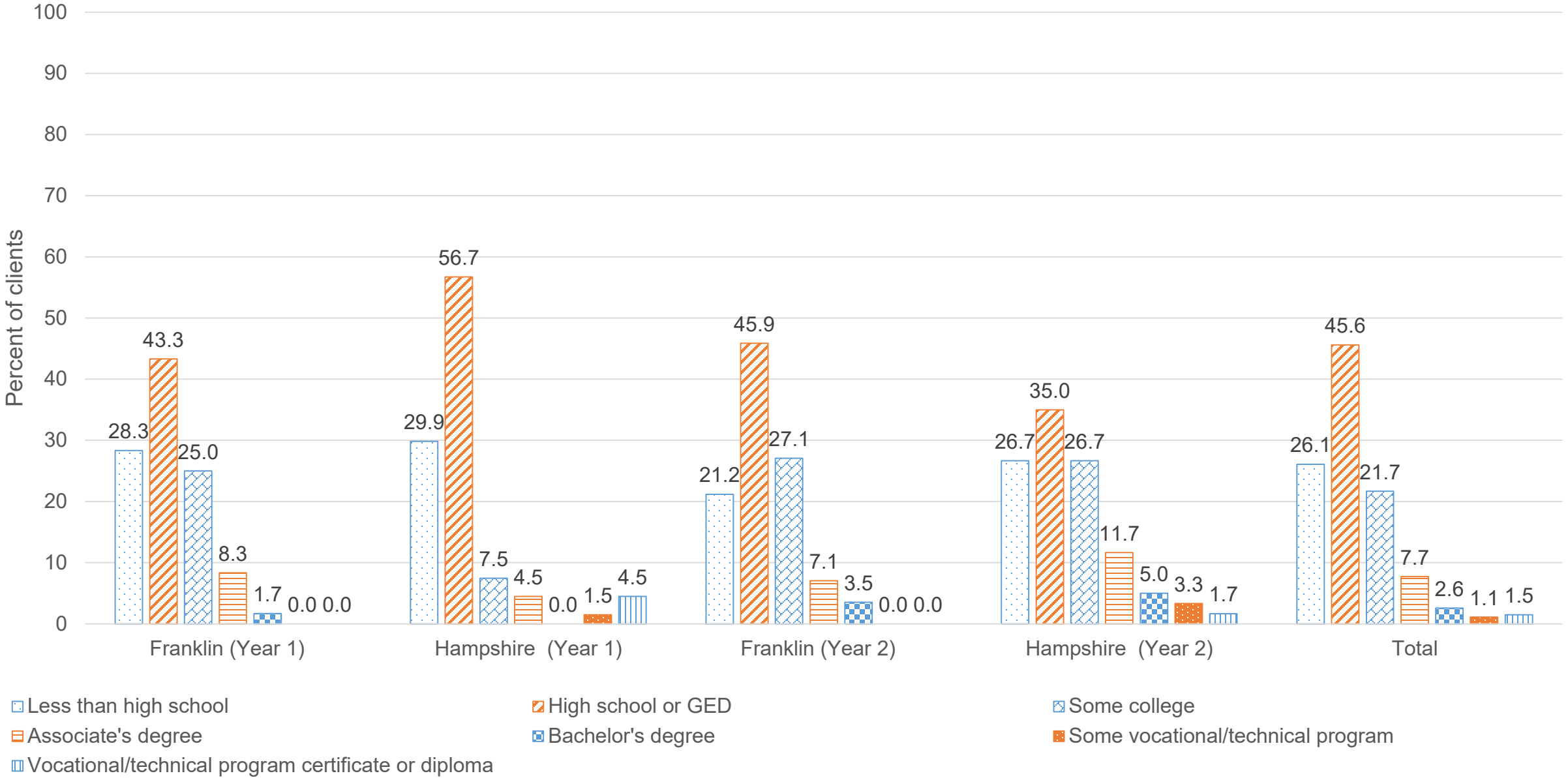
Age


Percent of clients
100
90
80
70
60
50
40
30
20
10
0
11.7
41.7
33.3
8.3
3.3
1.7
9.0
46.3
29.9
10.5
4.5
0.0
9.4
51.8
32.9
5.9
0.0
0.0
3.3
56.7
26.7
11.7
1.7
0.0
8.5
49.3
30.9
8.8
2.2
0.4
Franklin (Year 1)
Hampshire (Year 1)
Franklin (Year 2)
Hampshire (Year 2)
Total
18-24
25-34
35-44
45-54
55-64
65 +

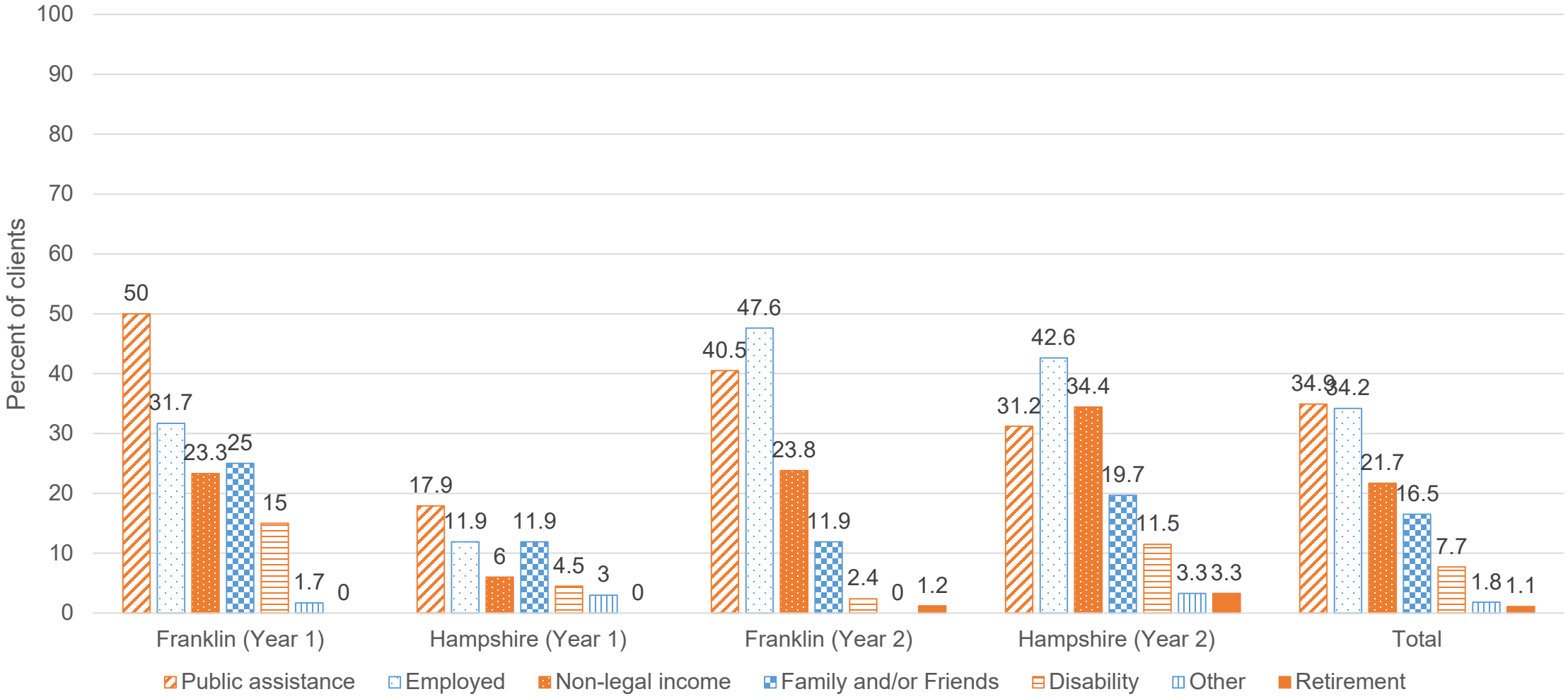
Employment status



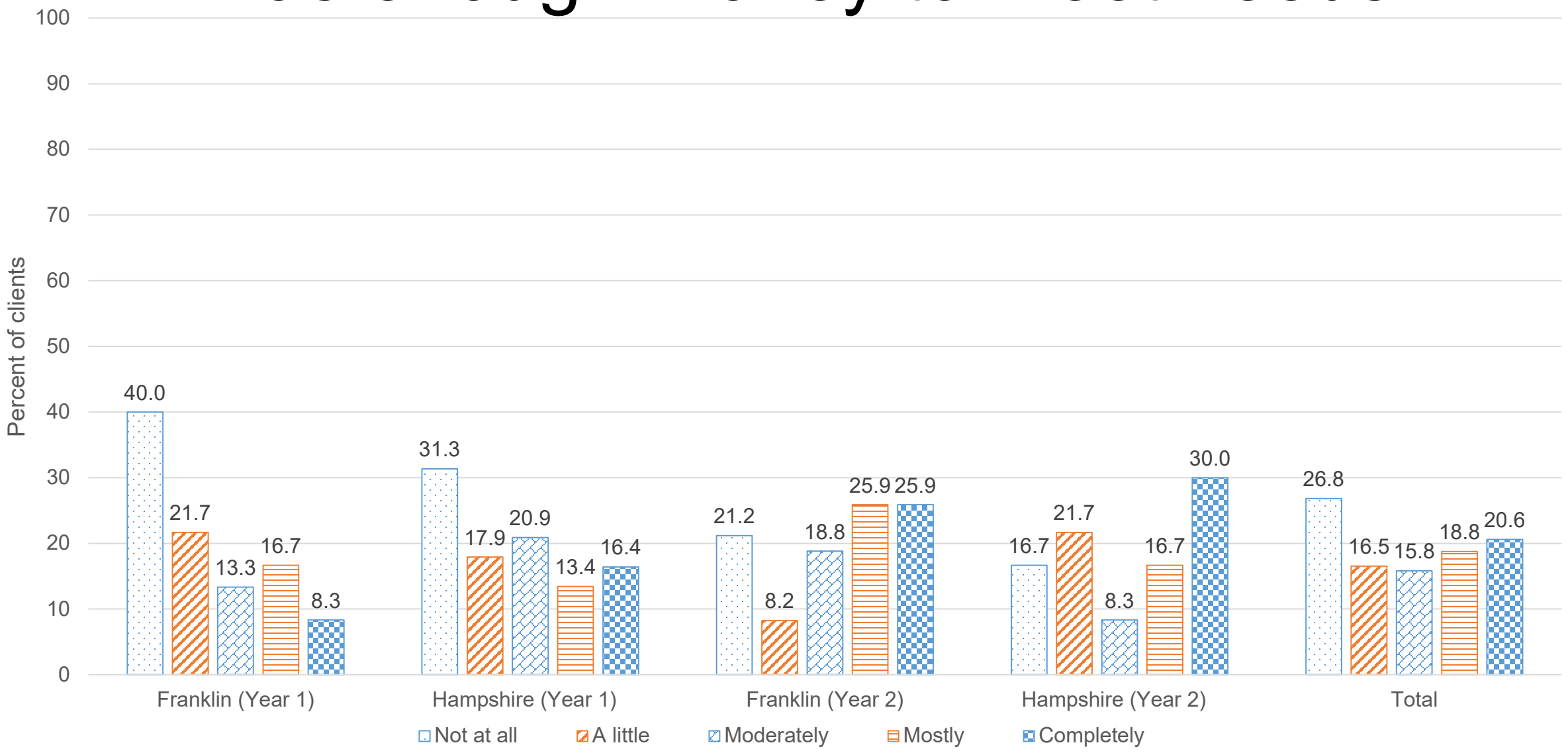
Education level



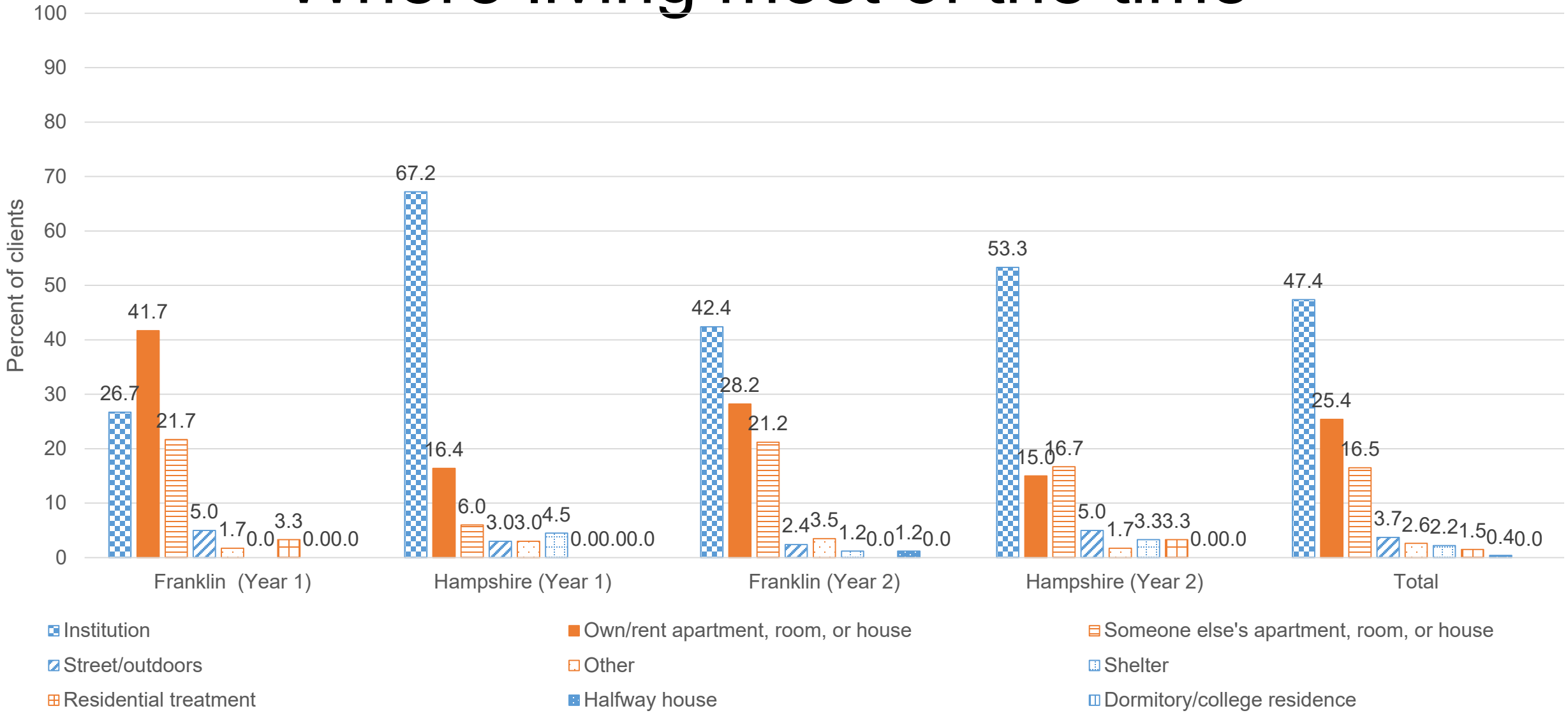
Income source



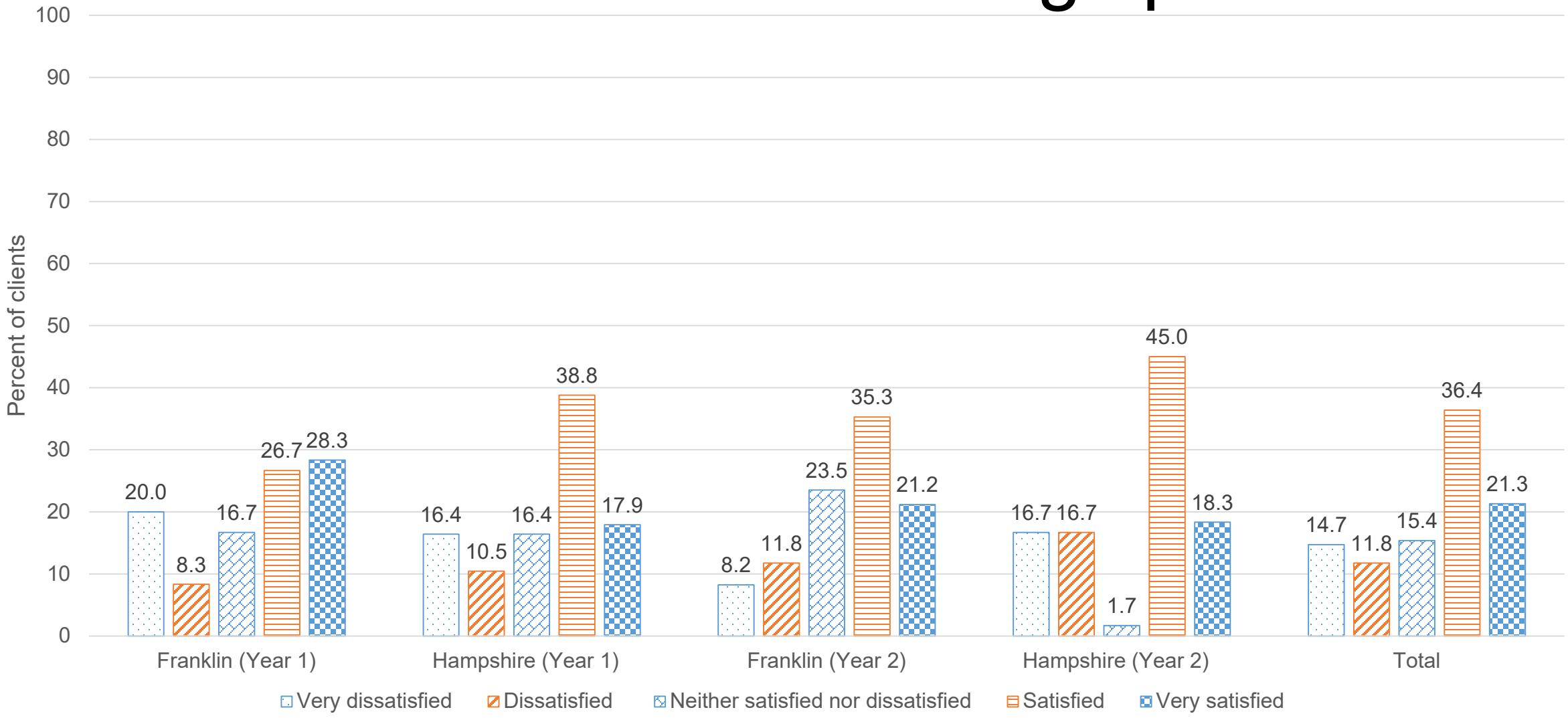
Has enough money to meet needs



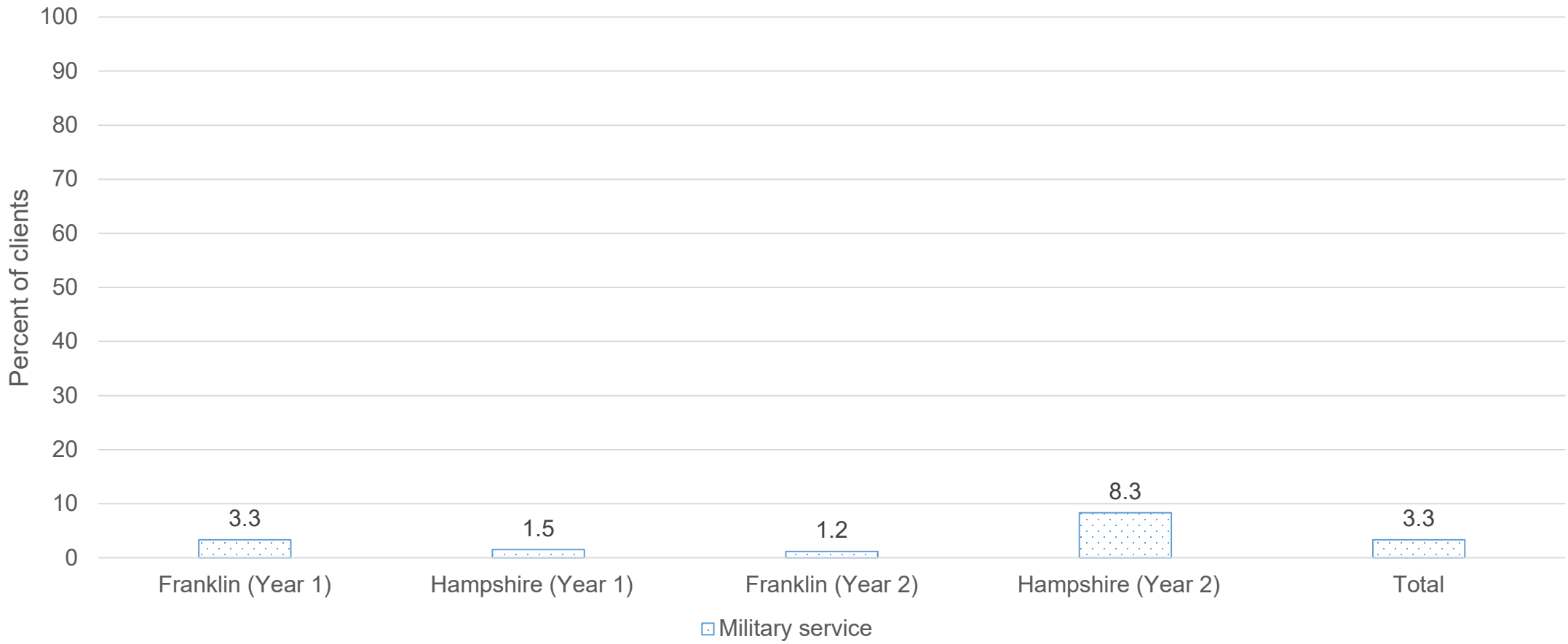
Where living most of the time



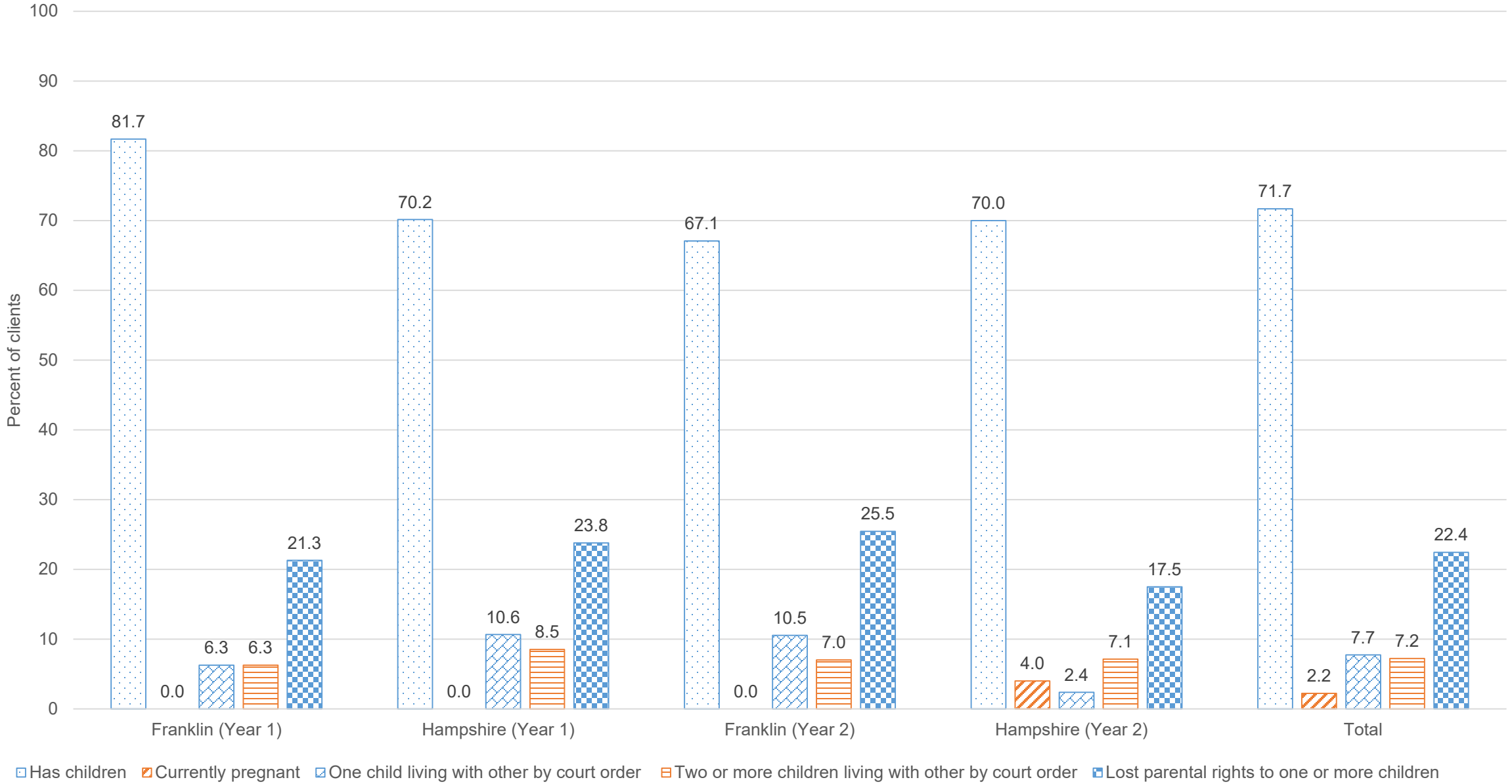
Satisfaction with living space



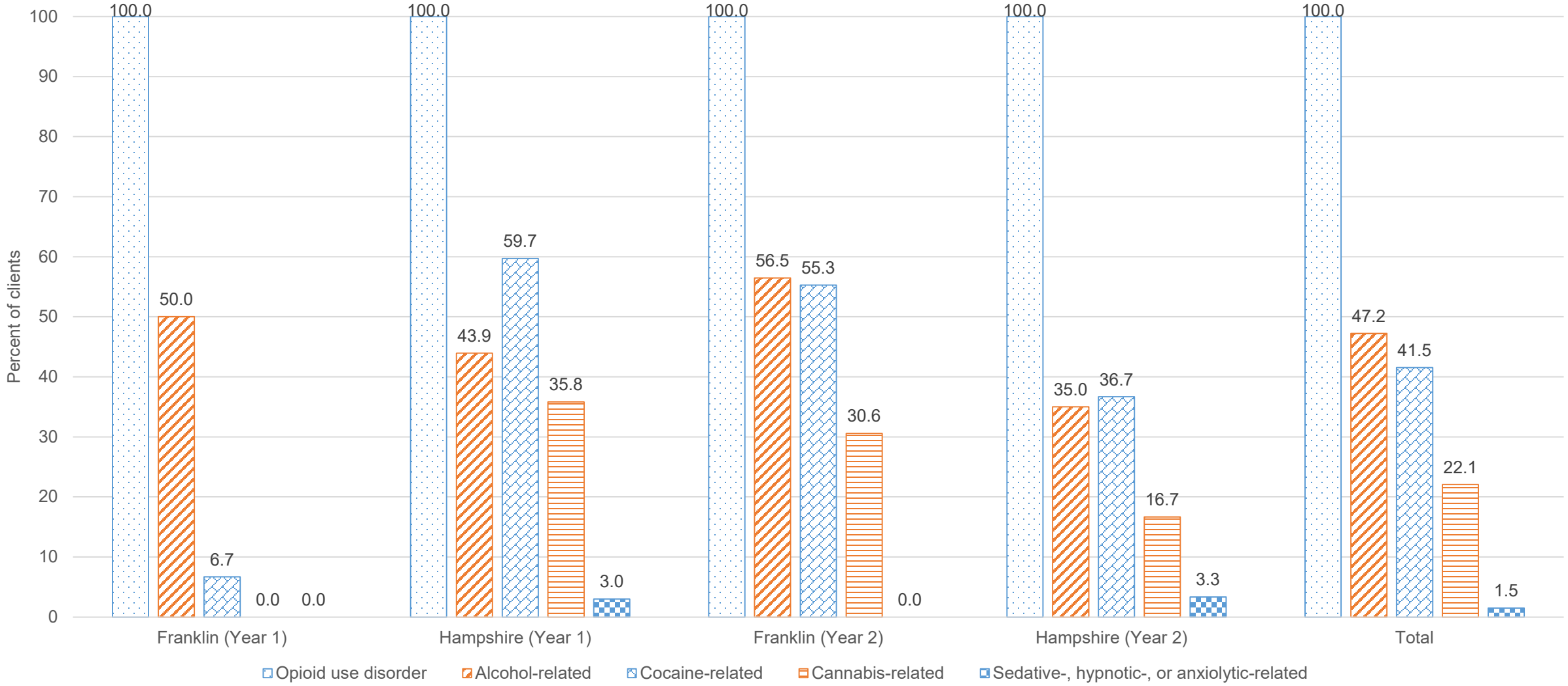
Military veteran



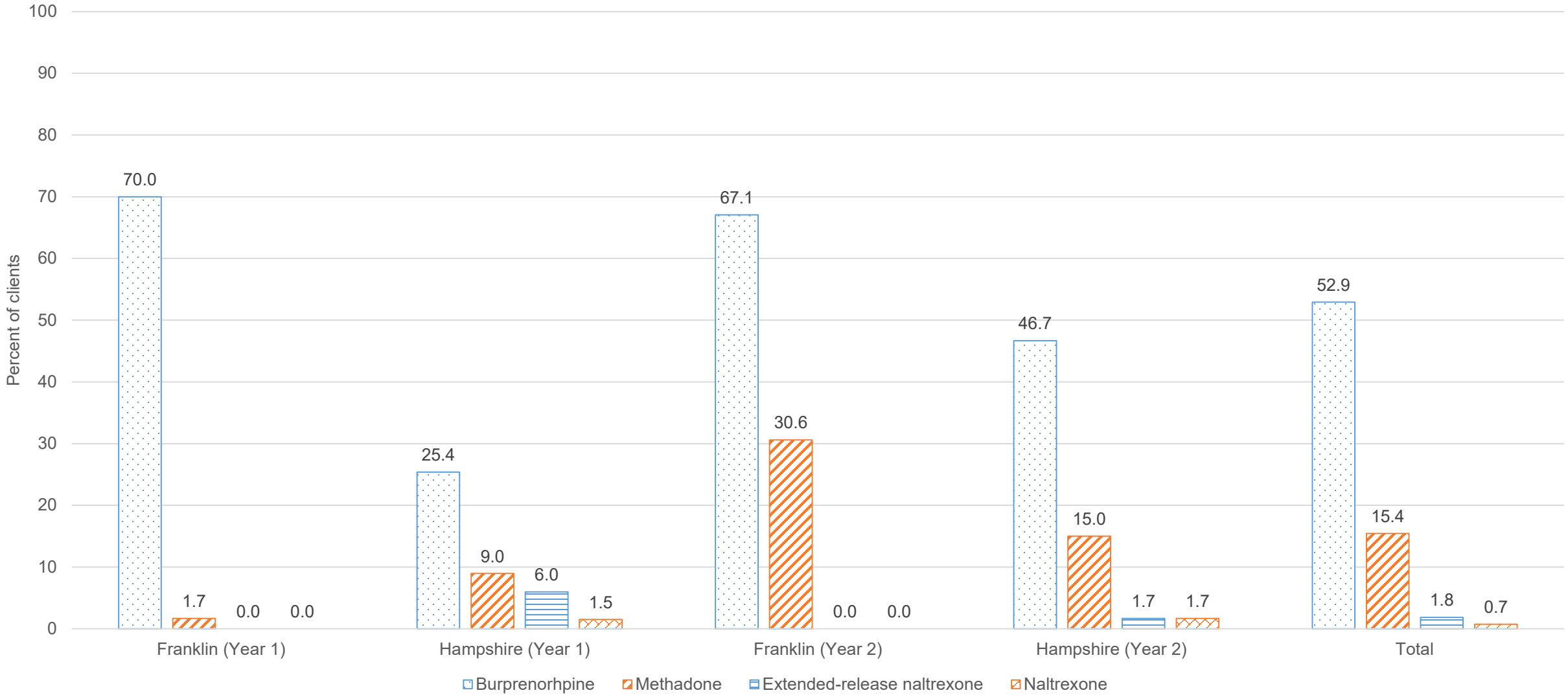
Parental status



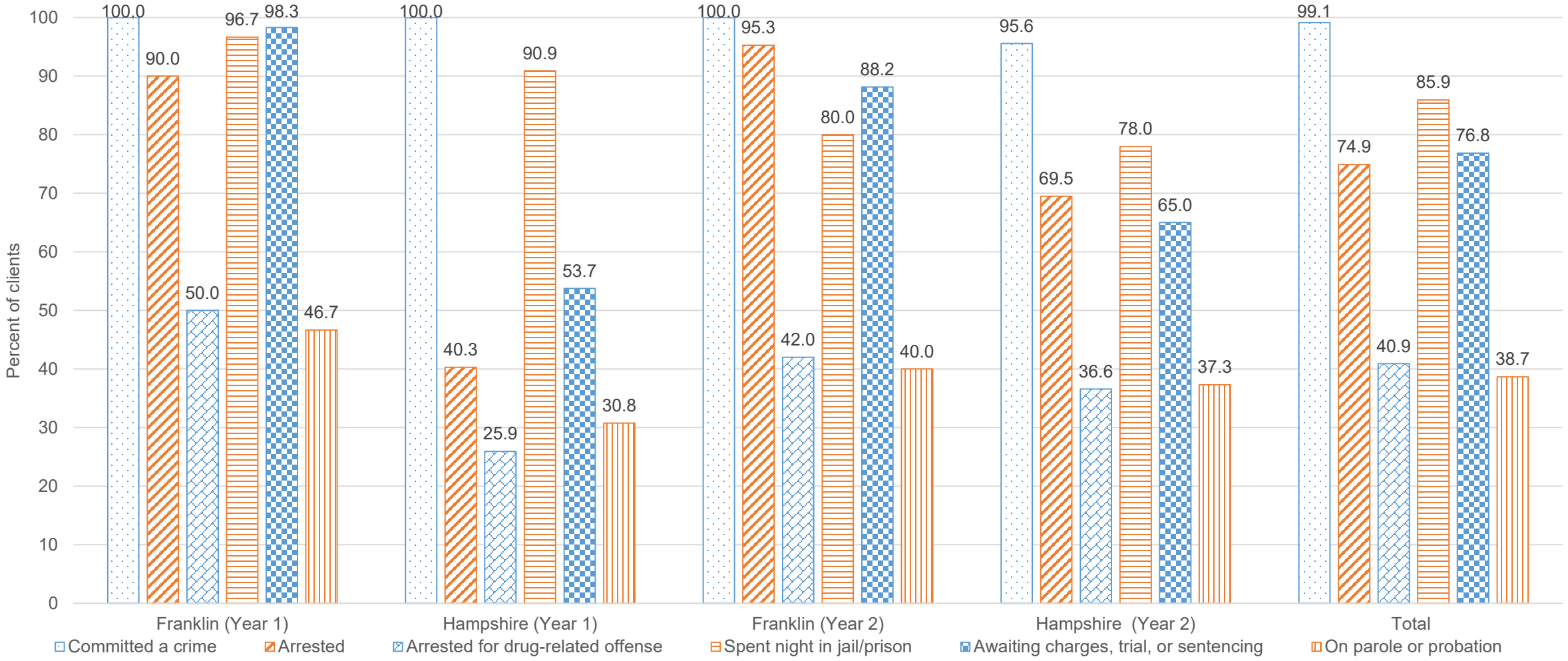
Opioid and other substance use disorder diagnosis



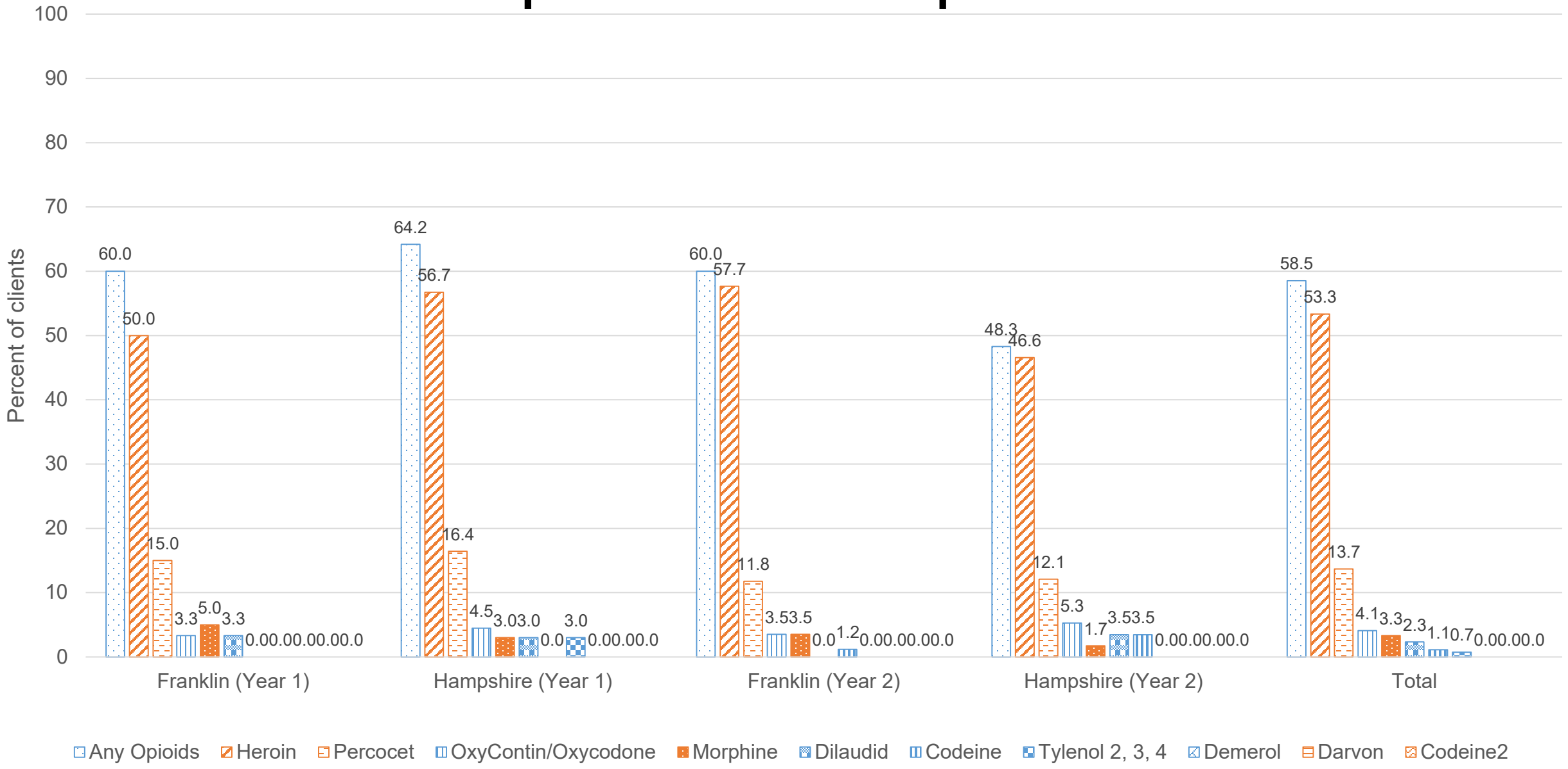
Received medications to treat opioid use disorder, 30 days prior to jail intake



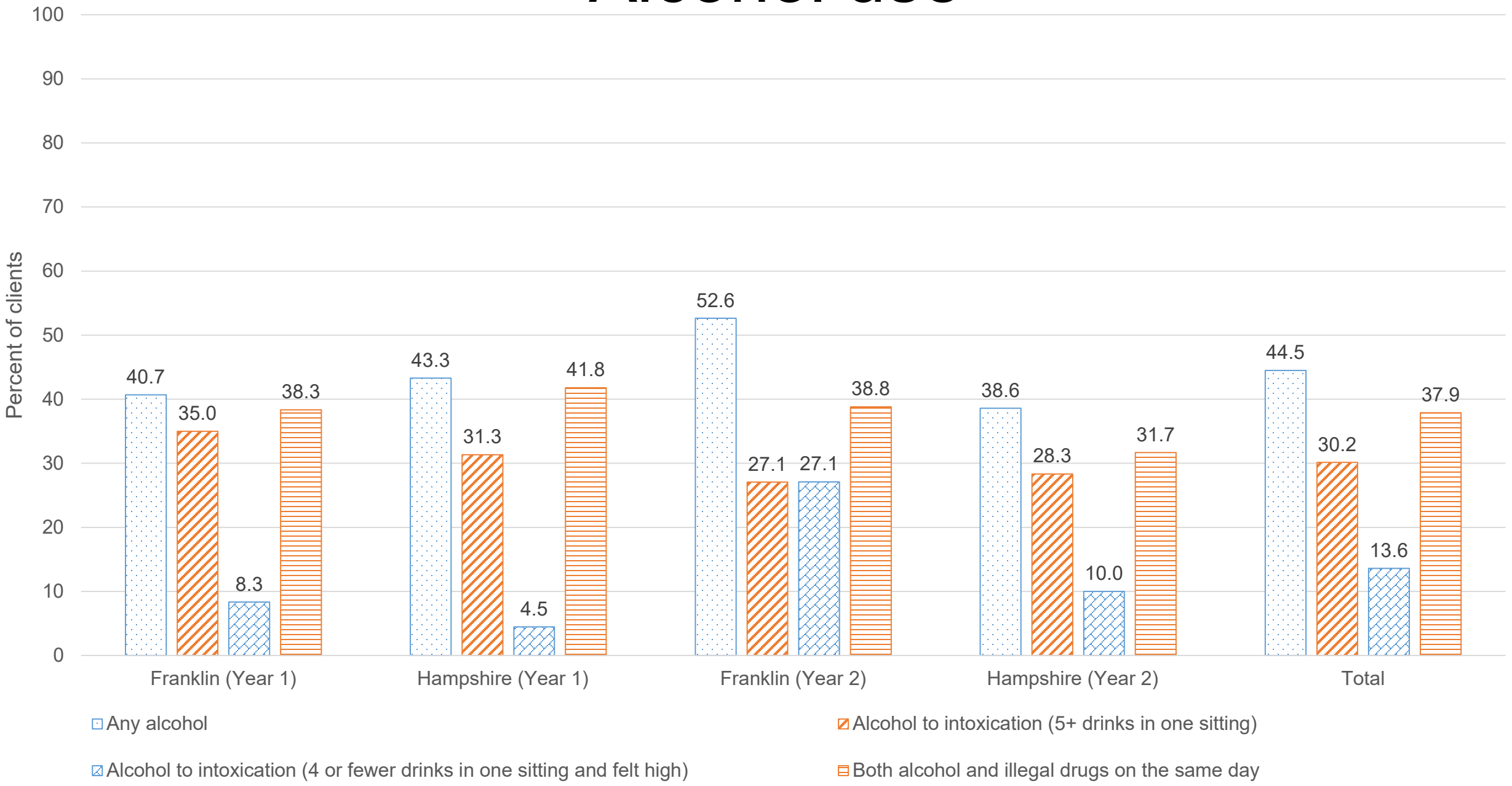
Crime and criminal justice system involvement



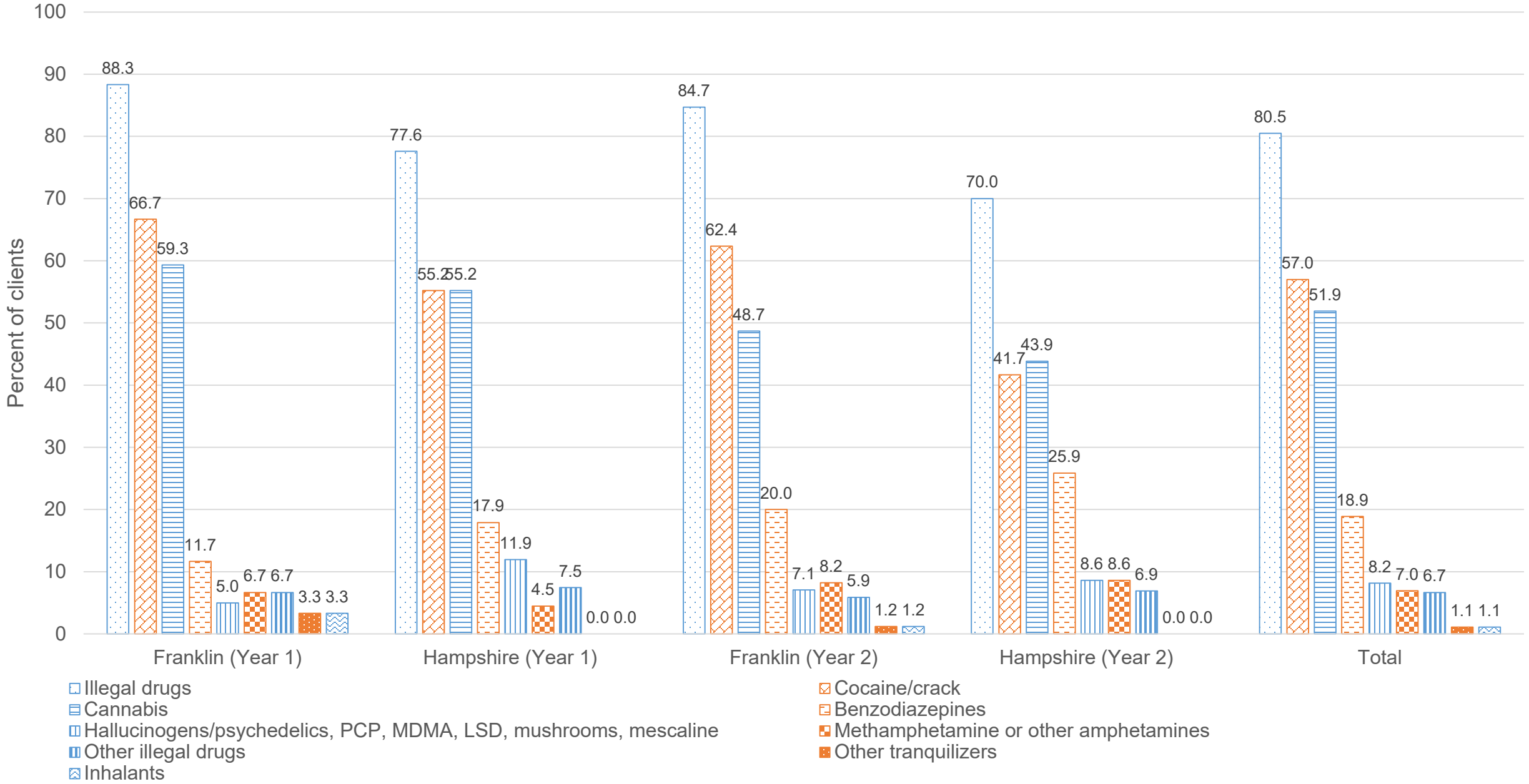
Non-prescribed opioid use



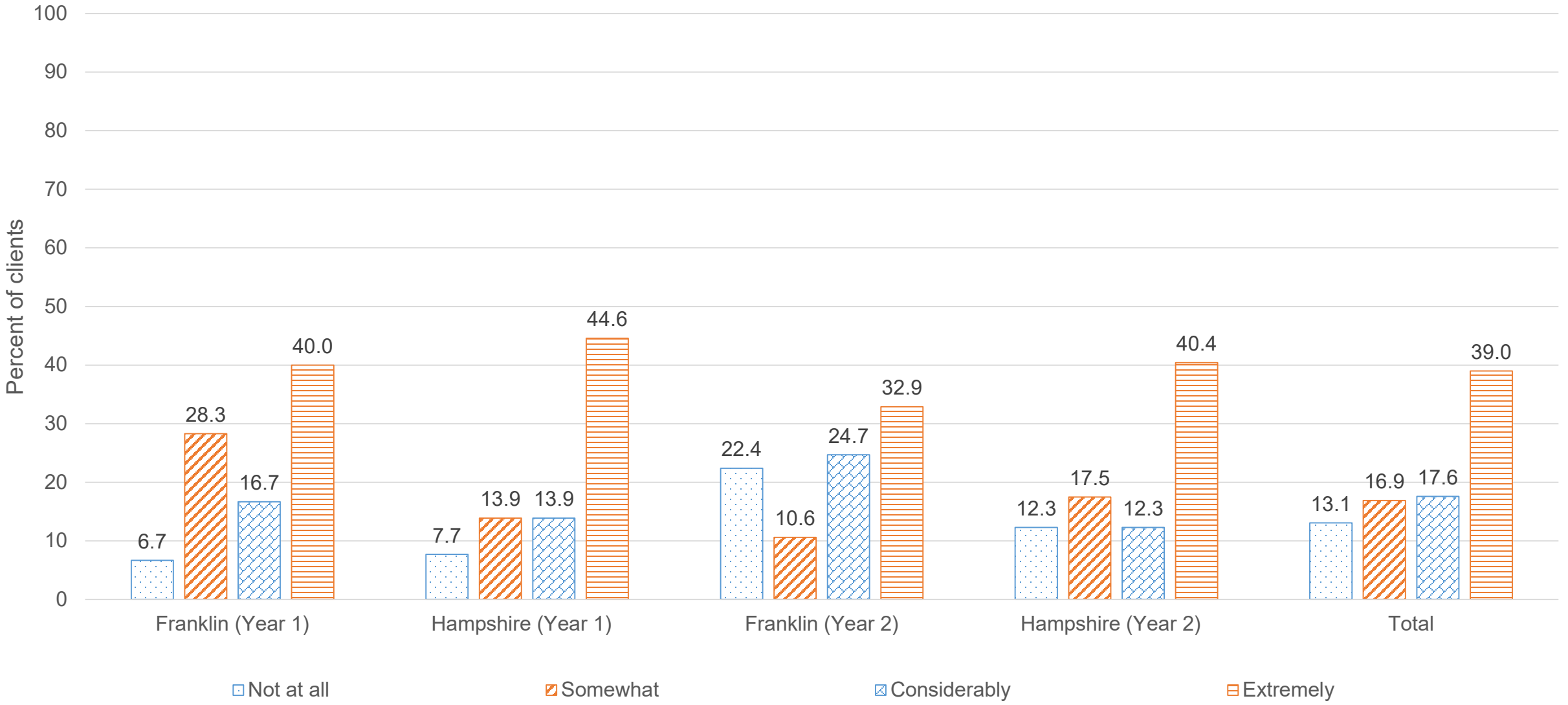
Alcohol use


100
90
80
70
60
50
40
30
20
10
0
Percent of clients
40.7
35.0
8.3
38.3
43.3
31.3
4.5
41.8
52.6
27.1
27.1
38.8
38.6
28.3
10.0
31.7
44.5
30.2
13.6
37.9
Franklin (Year 1)
Hampshire (Year 1)
Franklin (Year 2)
Hampshire (Year 2)
Total
Any alcohol
Alcohol to intoxication (5+ drinks in one sitting)
Alcohol to intoxication (4 or fewer drinks in one sitting and felt high)
Both alcohol and illegal drugs on the same day

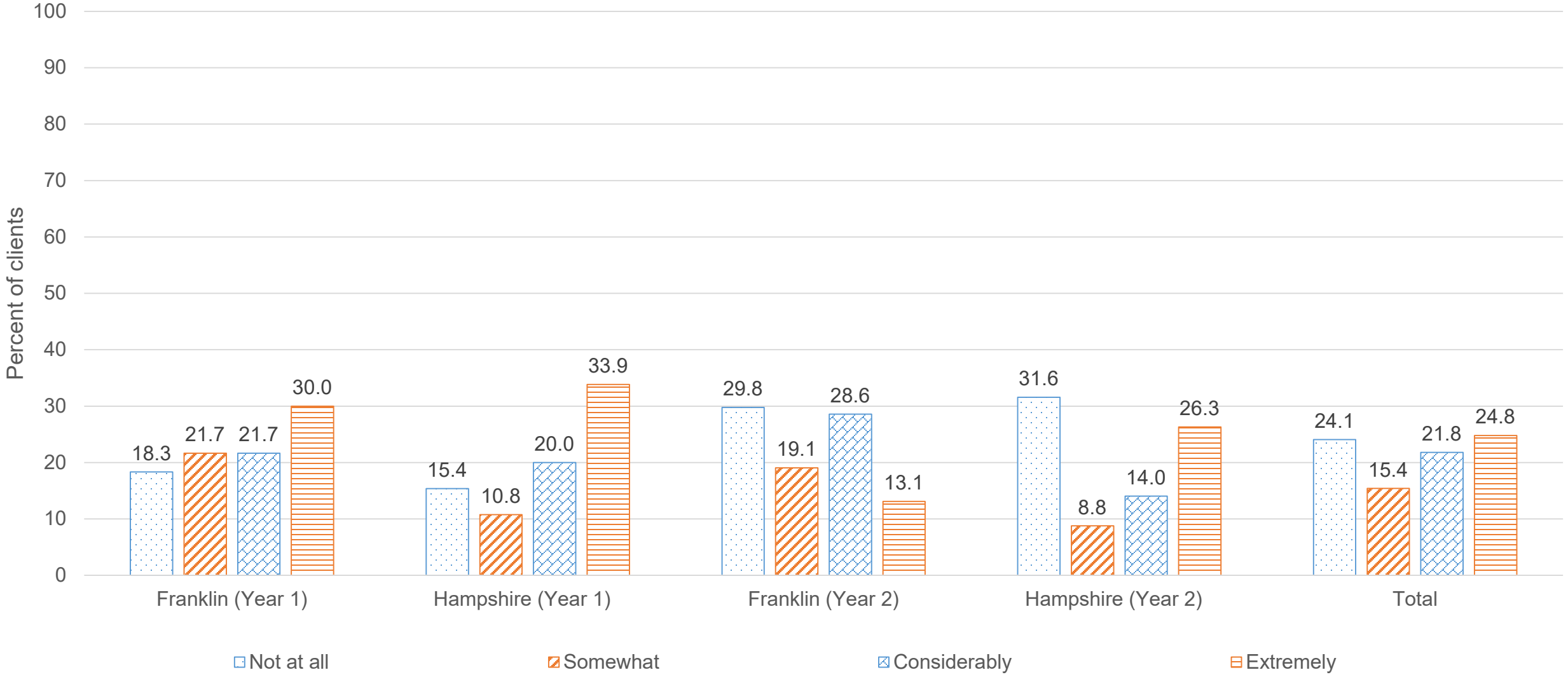
Other substance use



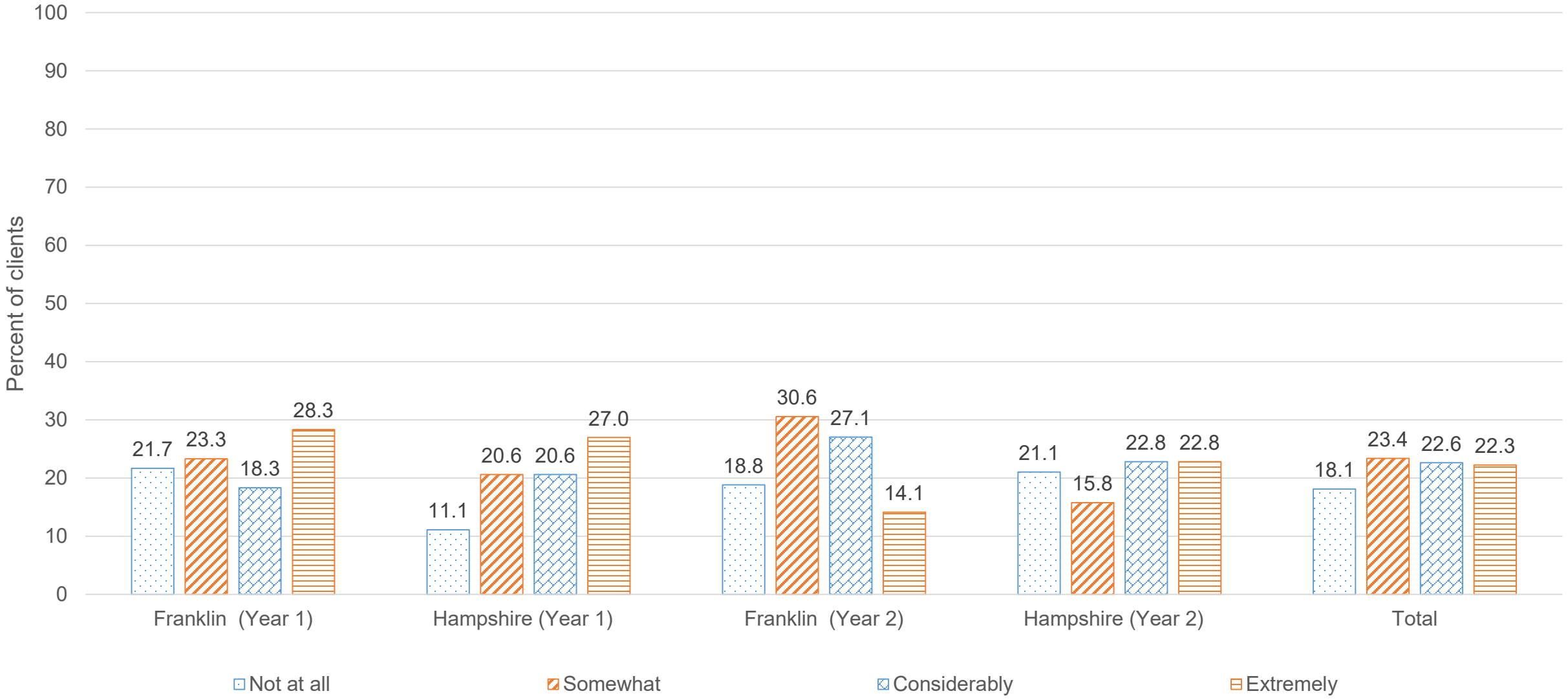
Alcohol or drug use caused stress



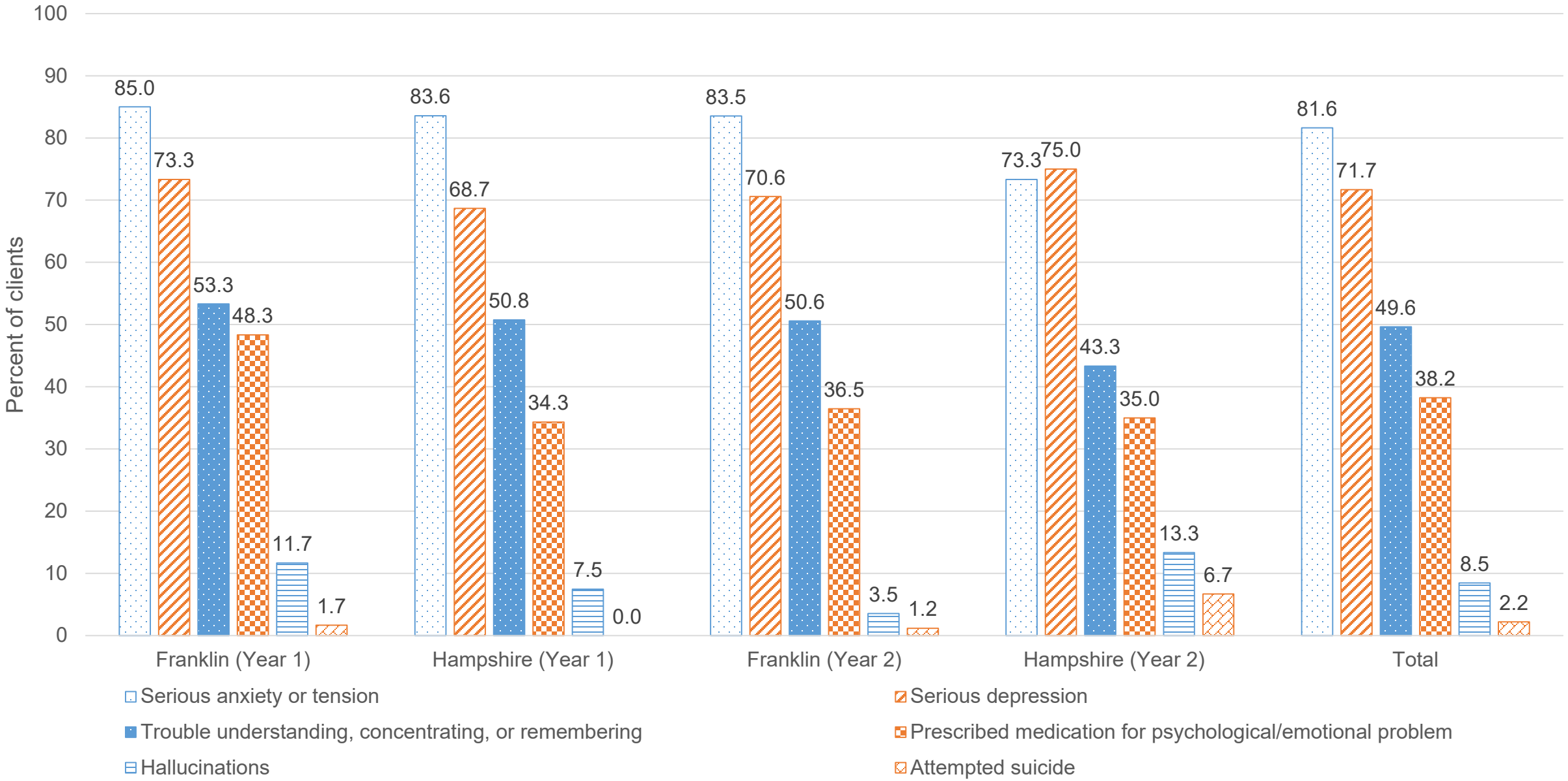
Alcohol or drug use caused giving up important activities



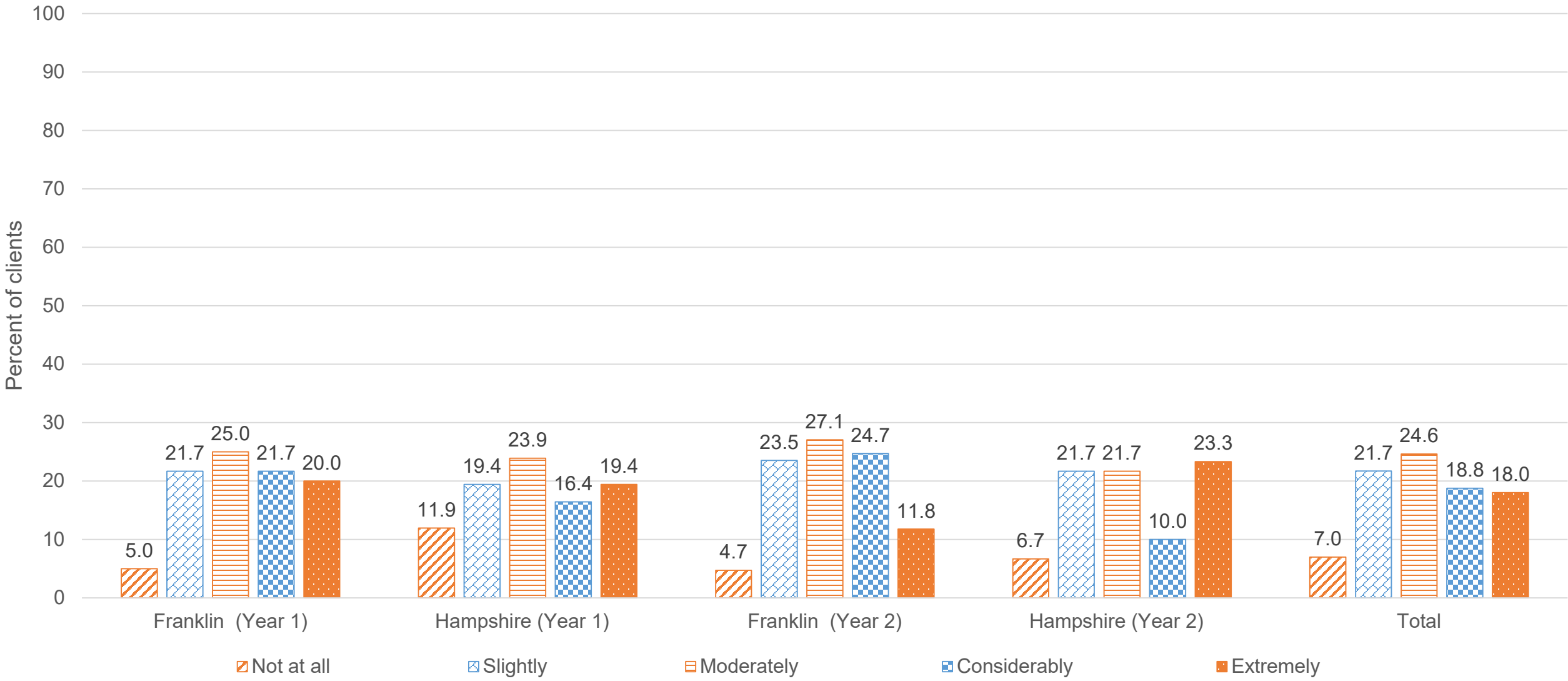
Alcohol or other drug use caused emotional problems



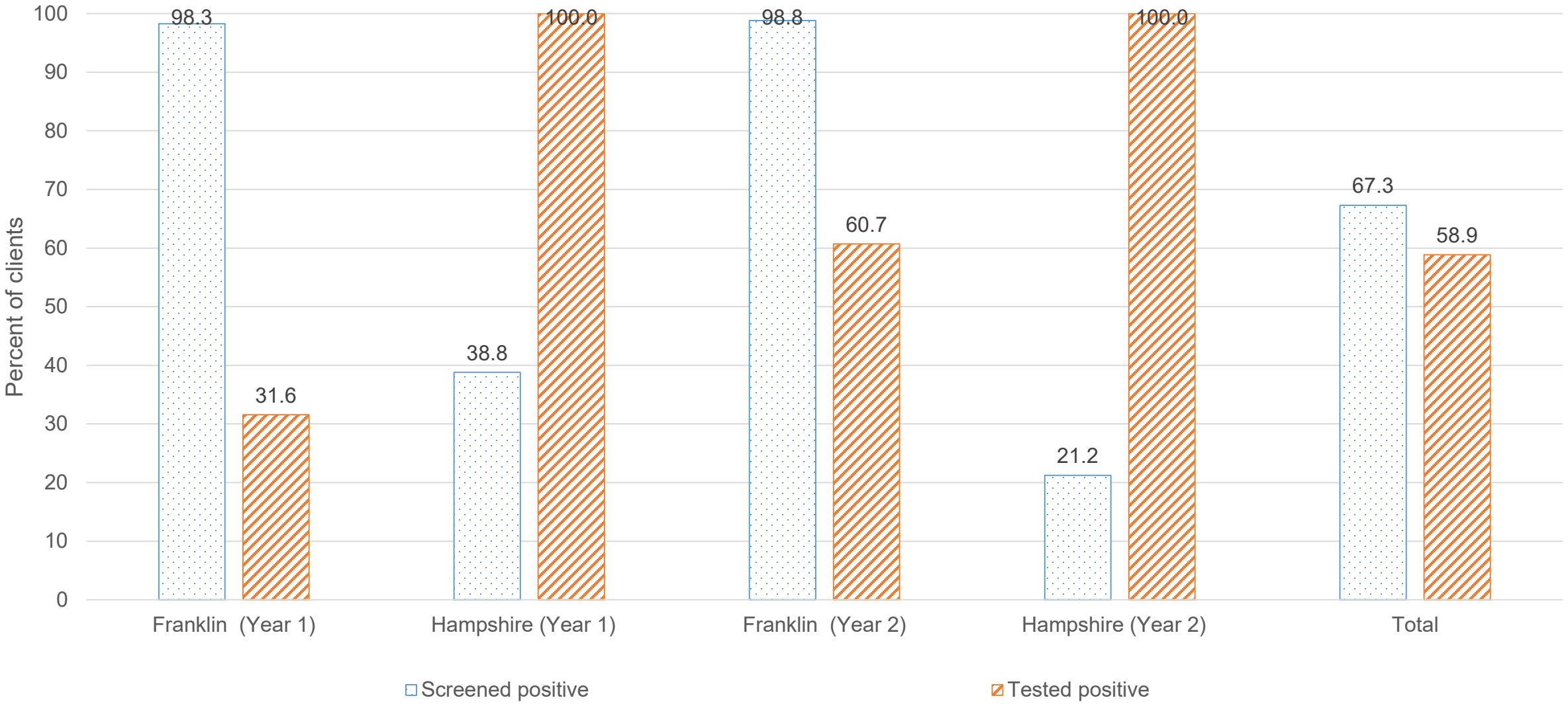
Mental health symptoms



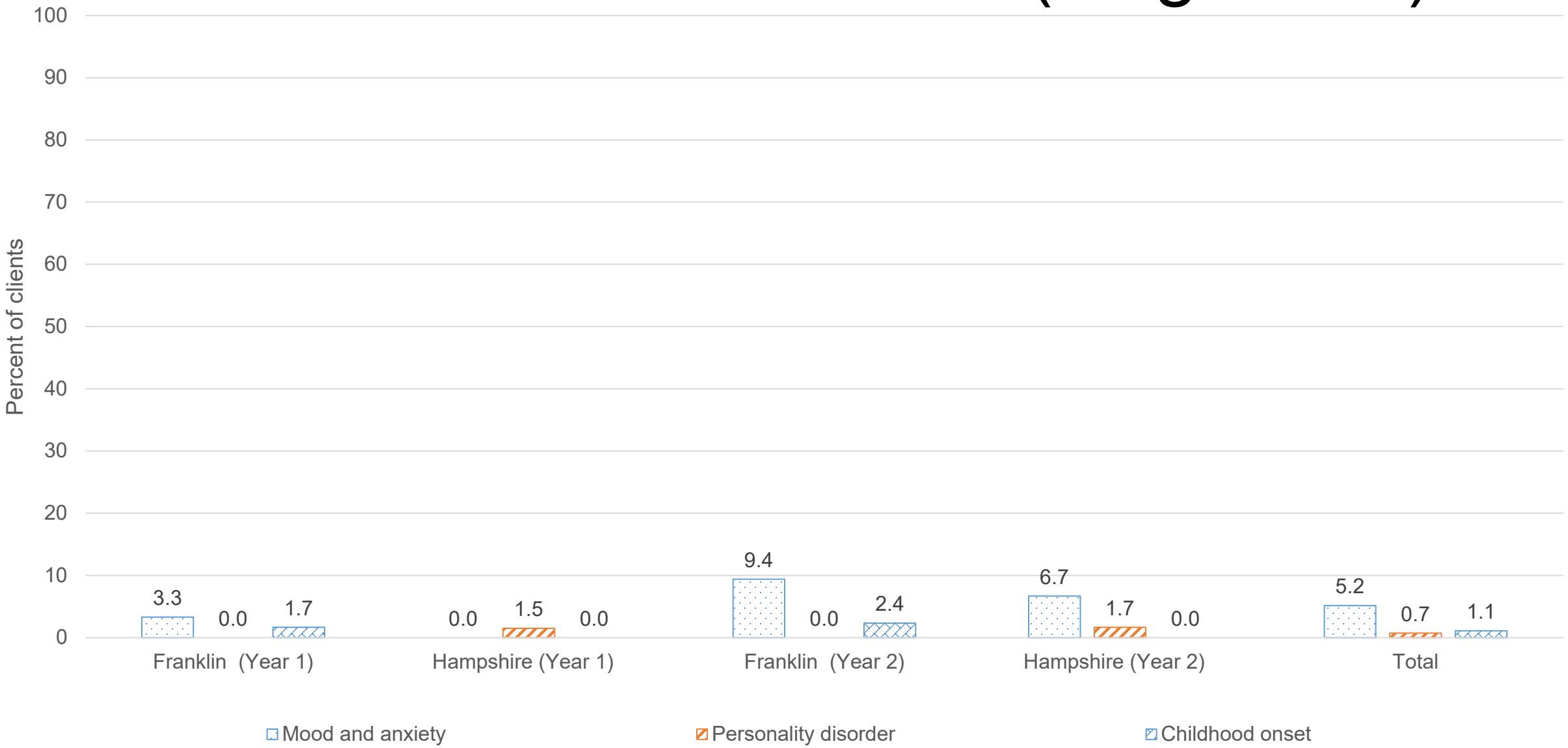
Psychological or emotional problems



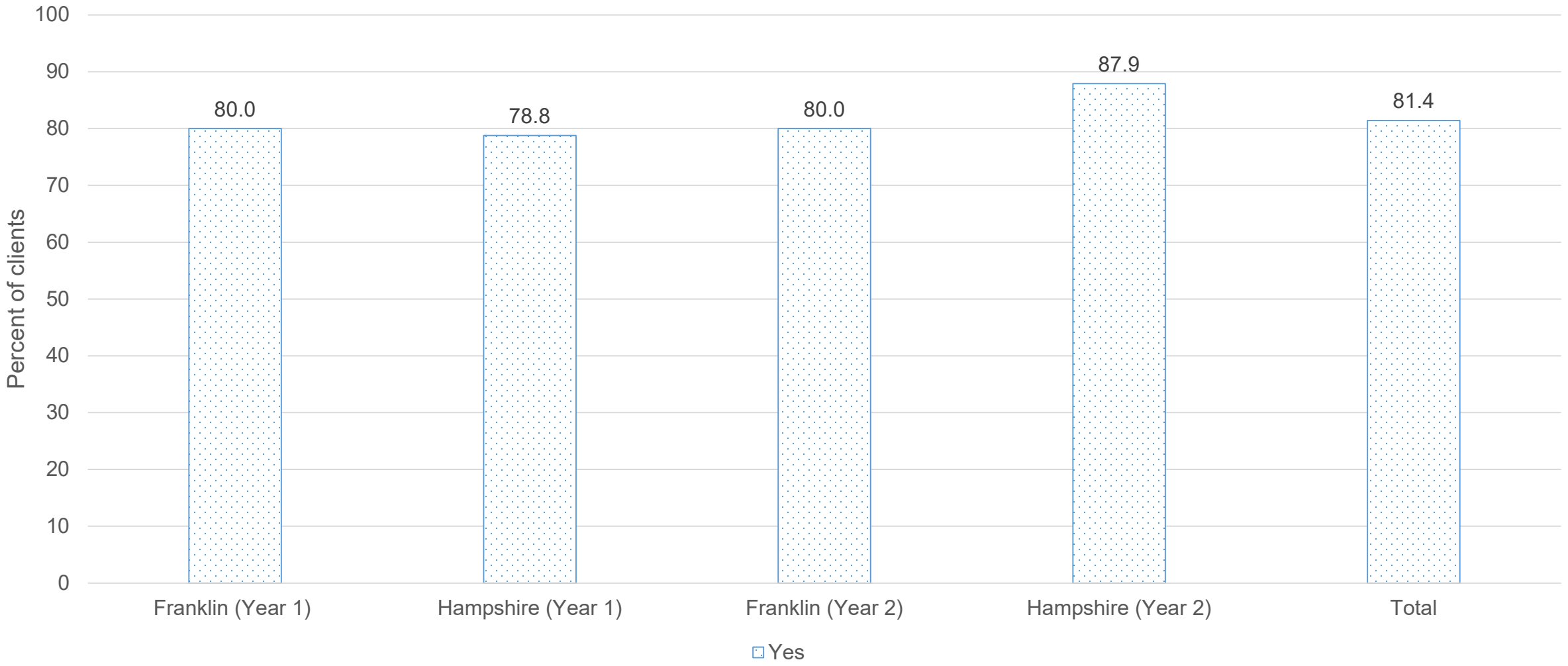
Co-occurring illness



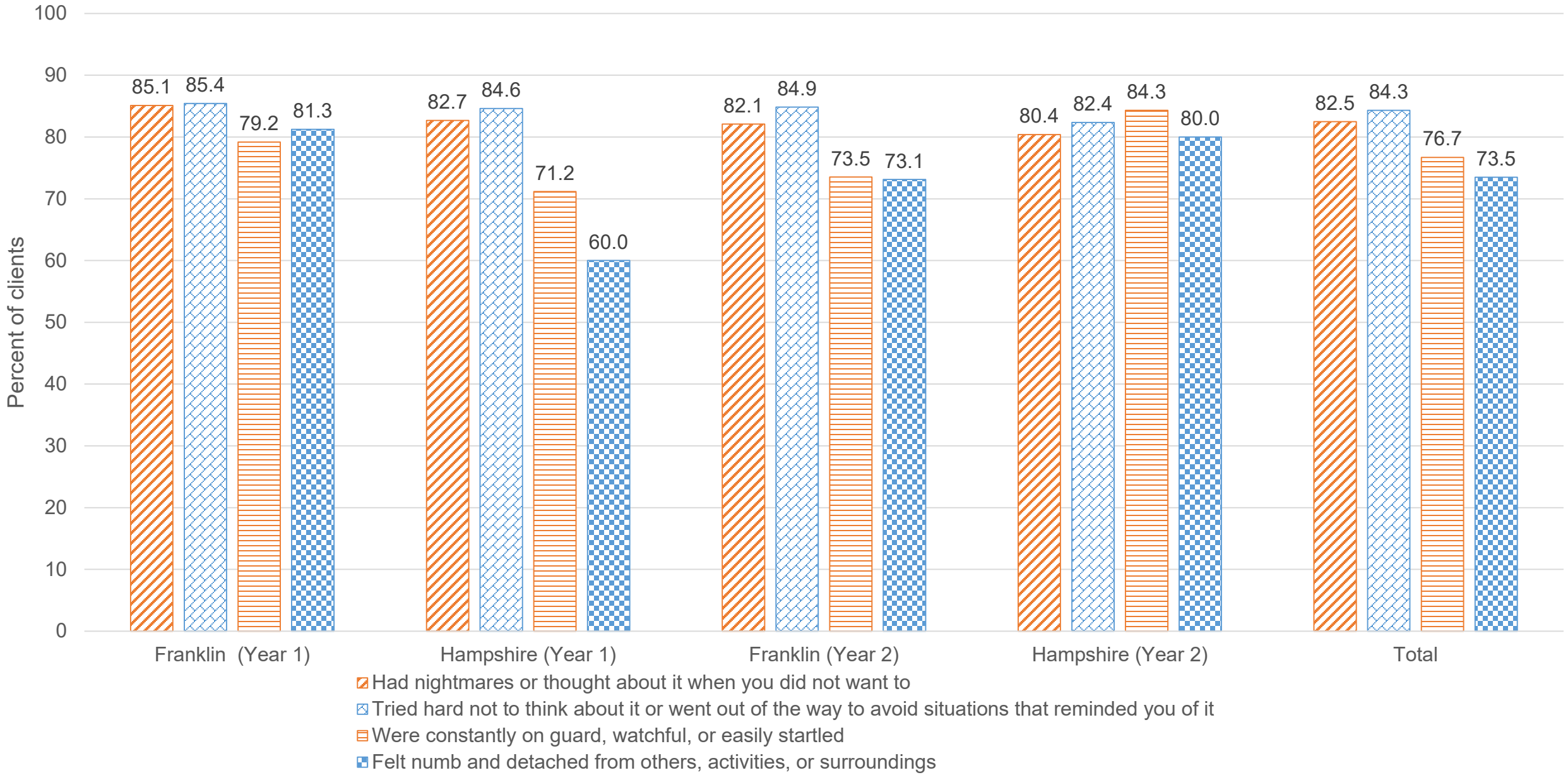
Mental health conditions (diagnosed)



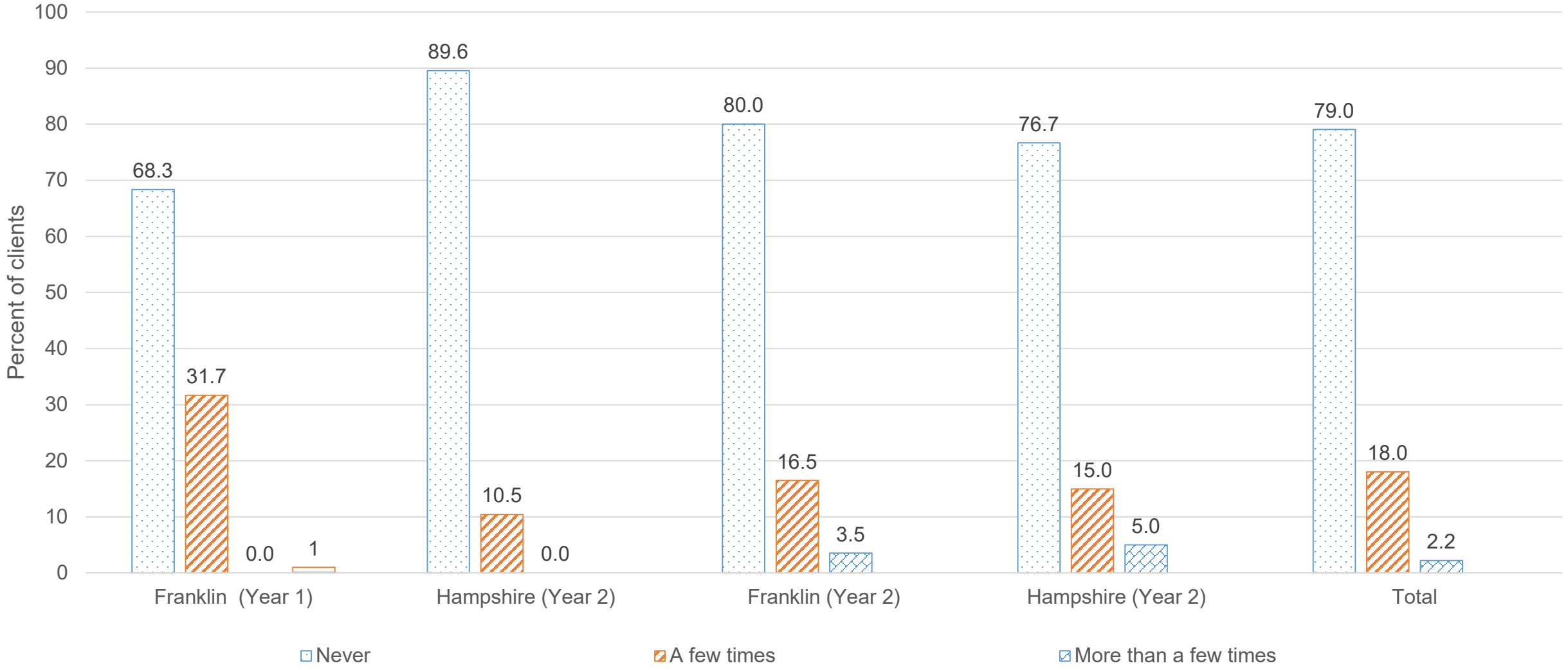
Ever experienced violence or trauma in lifetime



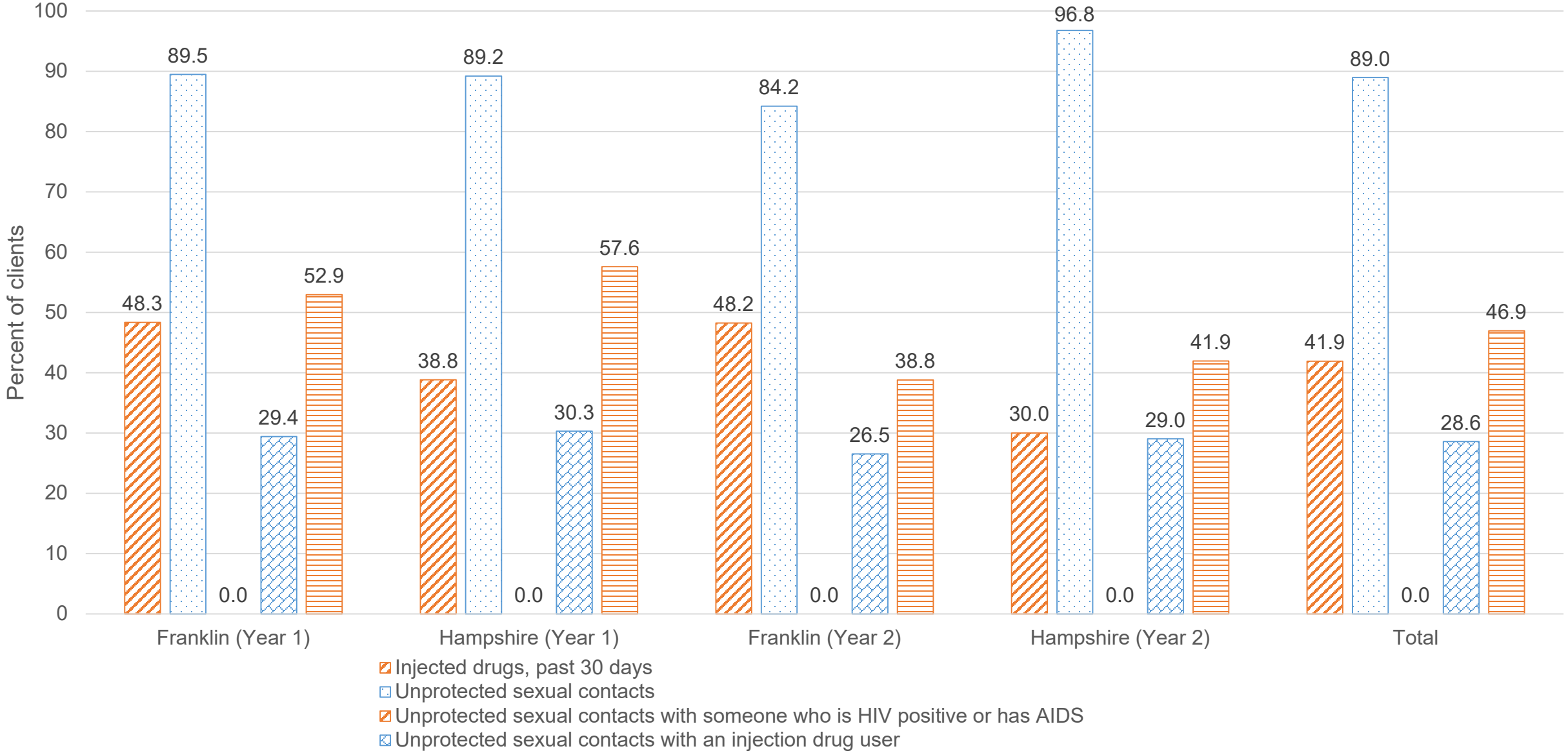
Effect of exposure to violence and trauma, in lifetime



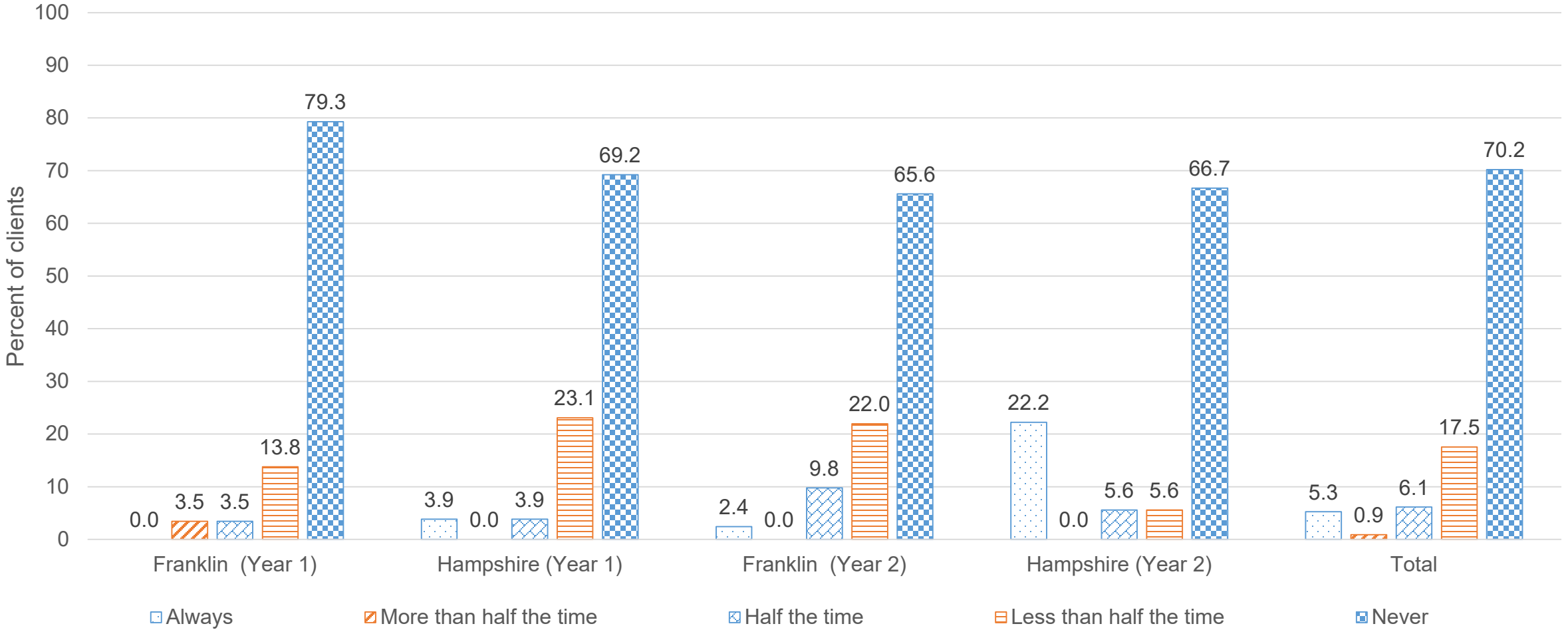
Hit, kicked, slapped, or otherwise physically hurt



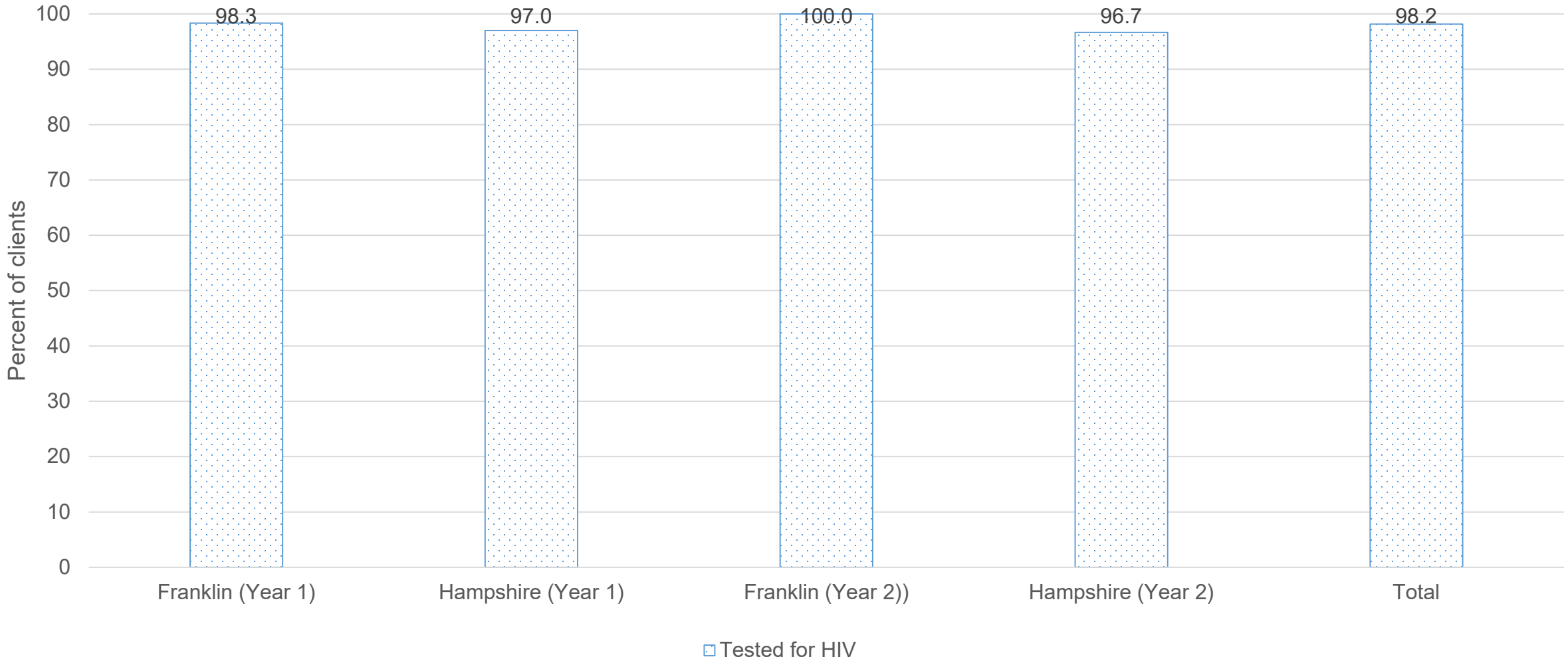
HIV risk behavior



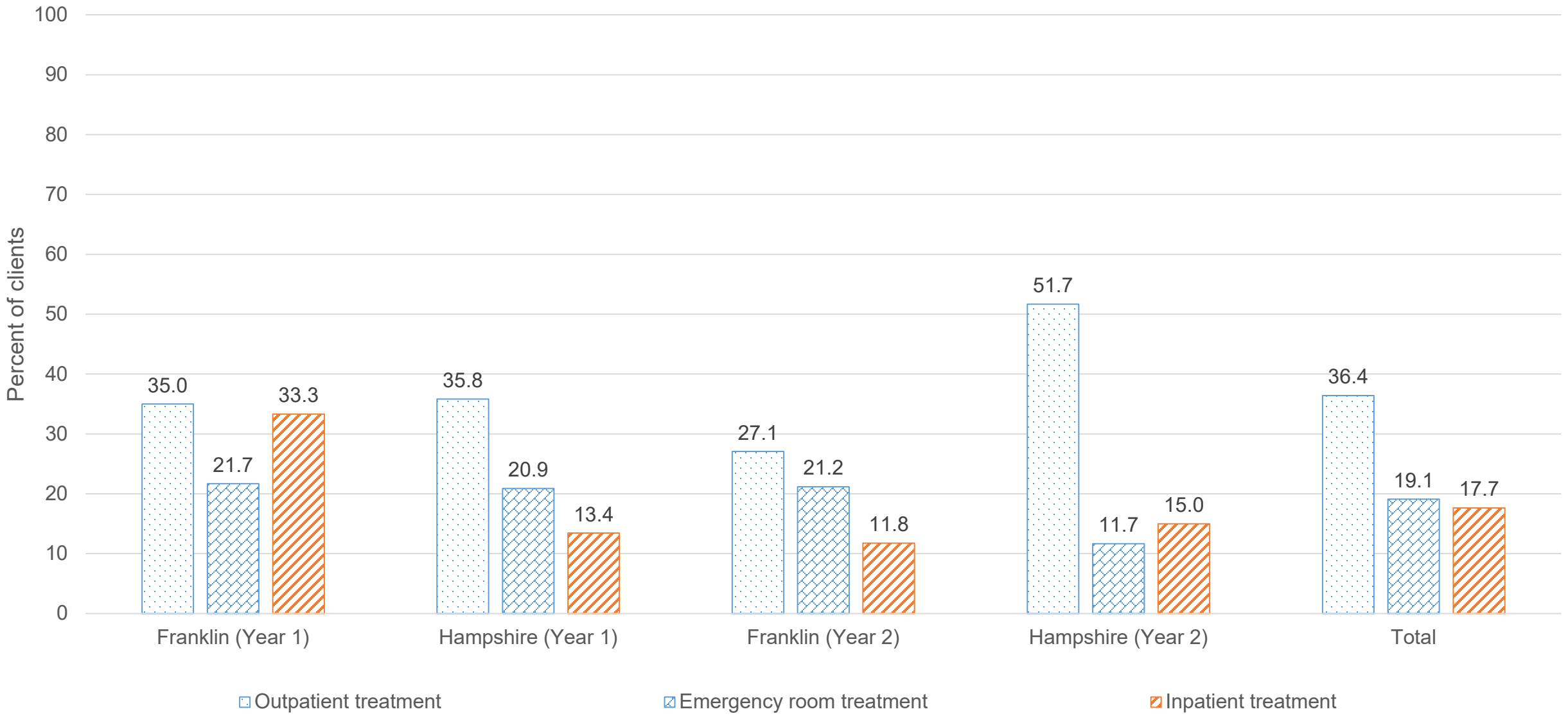
Used a syringe/needle, cooker, cotton, or water that someone else used



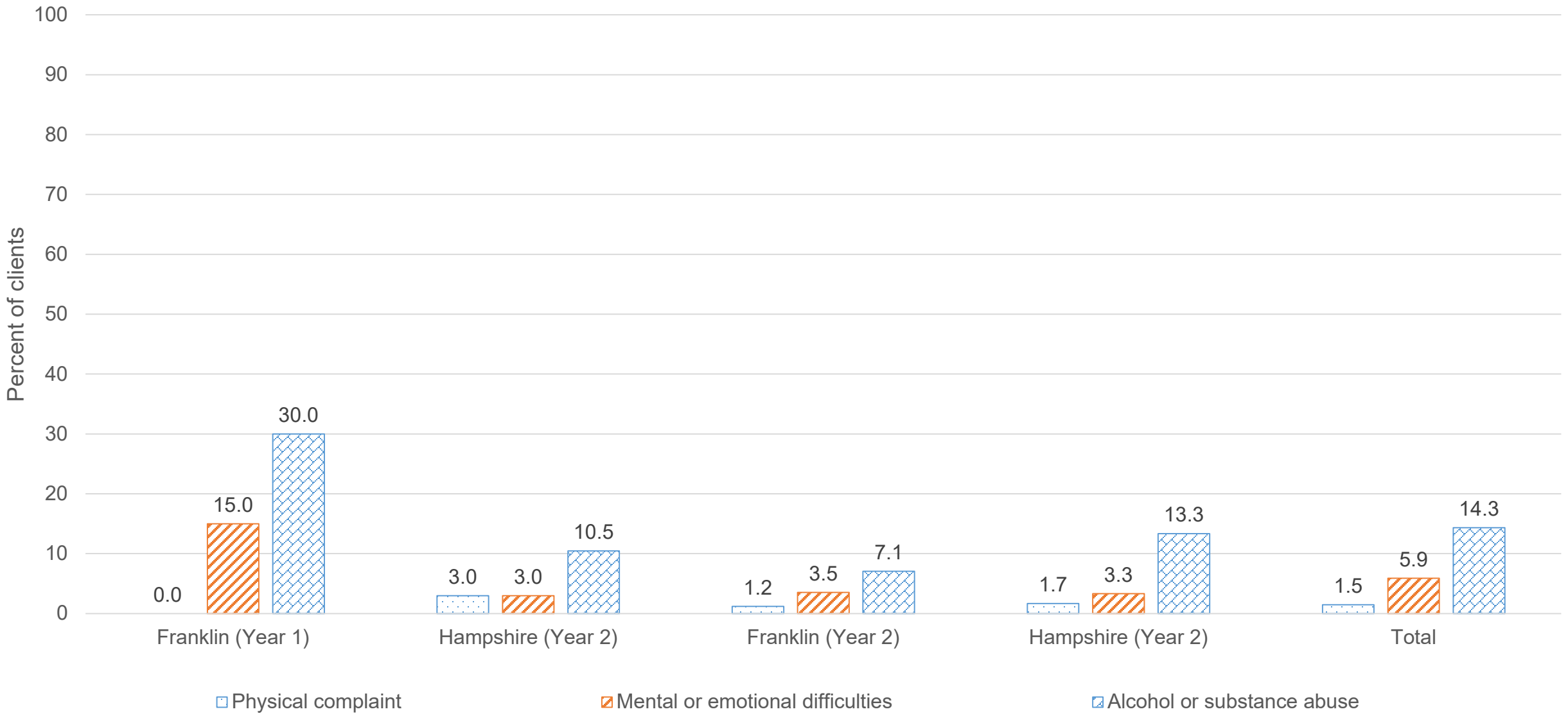
HIV testing status



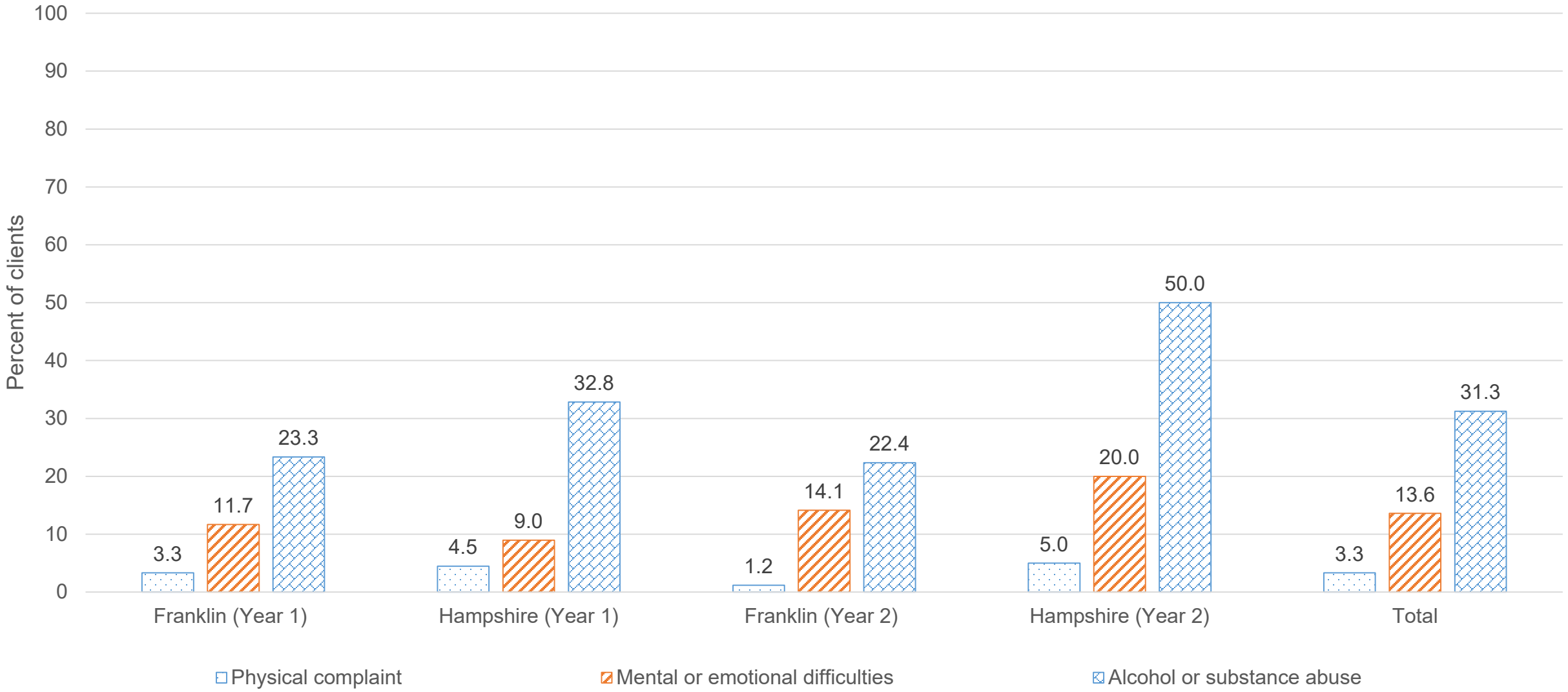
Health services utilization, past 30 days



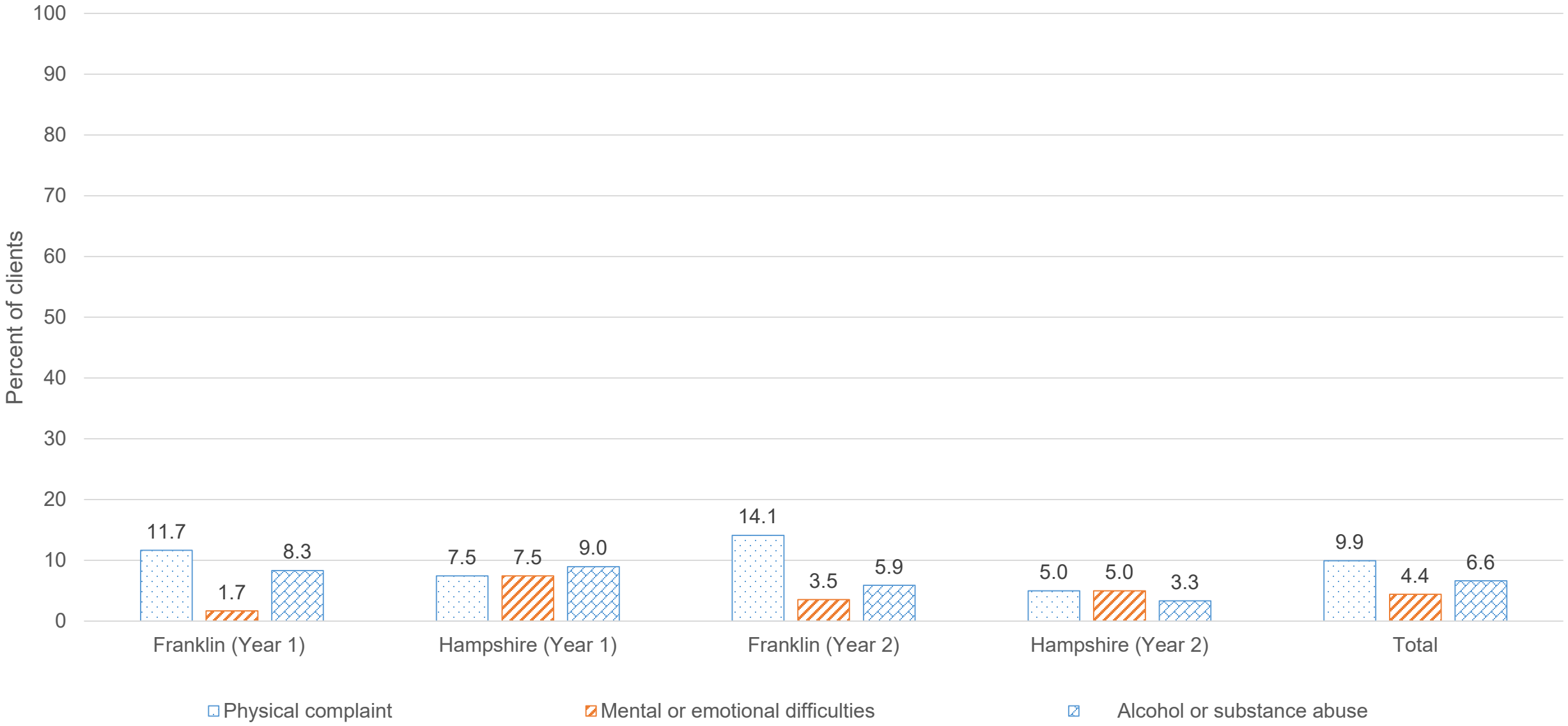
Reason for inpatient treatment



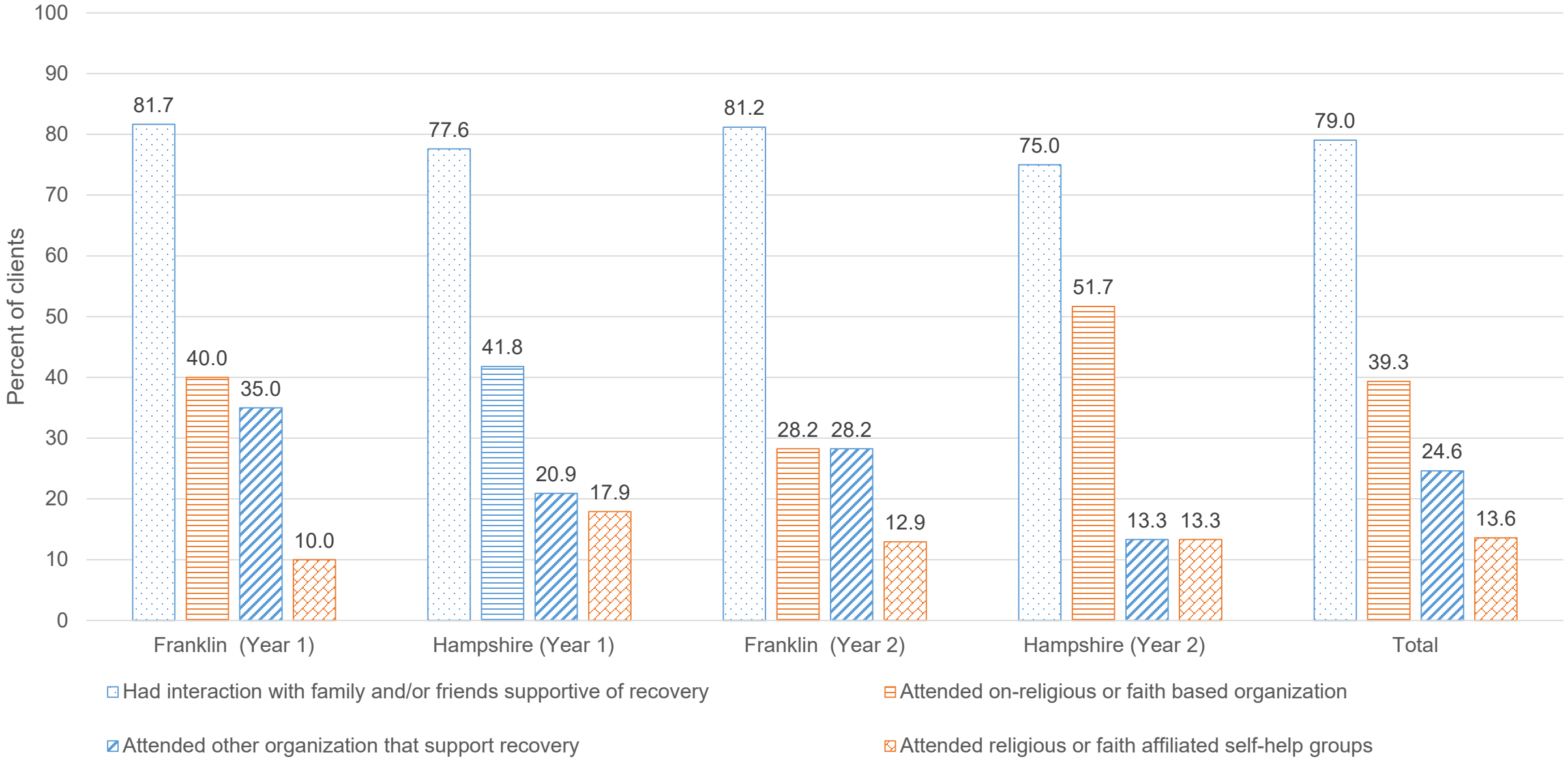
Reason for outpatient treatment



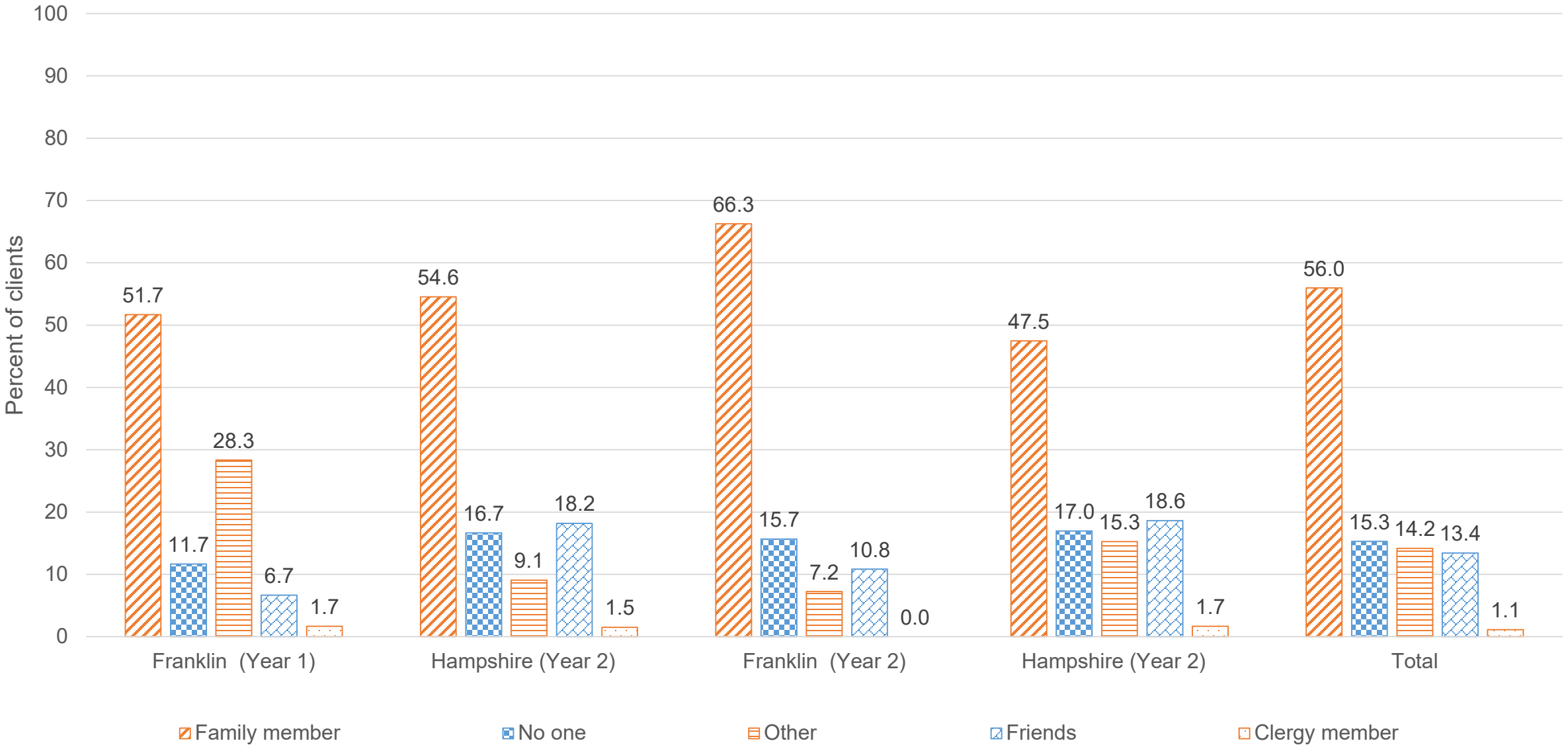
Reason for emergency room treatment



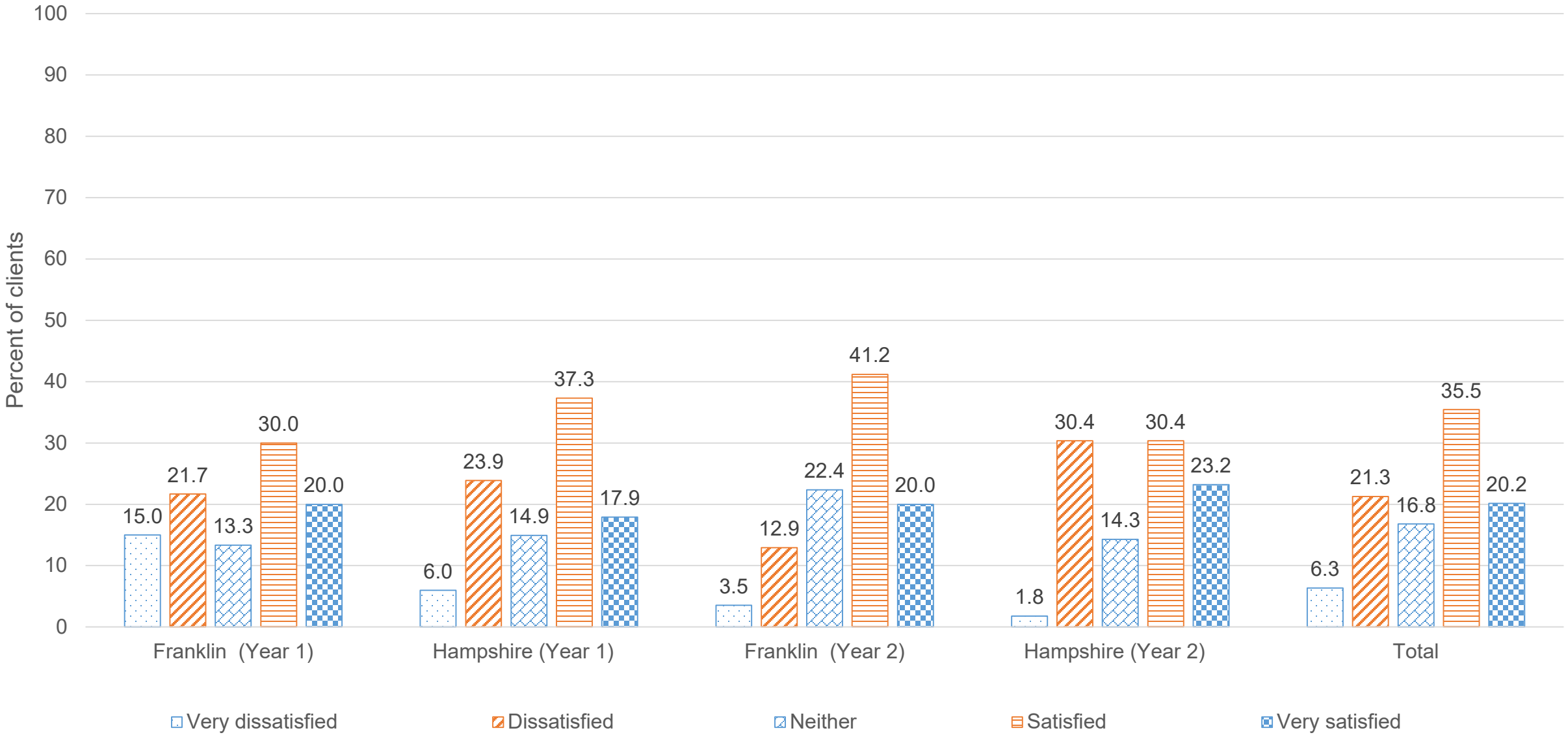
Recovery support



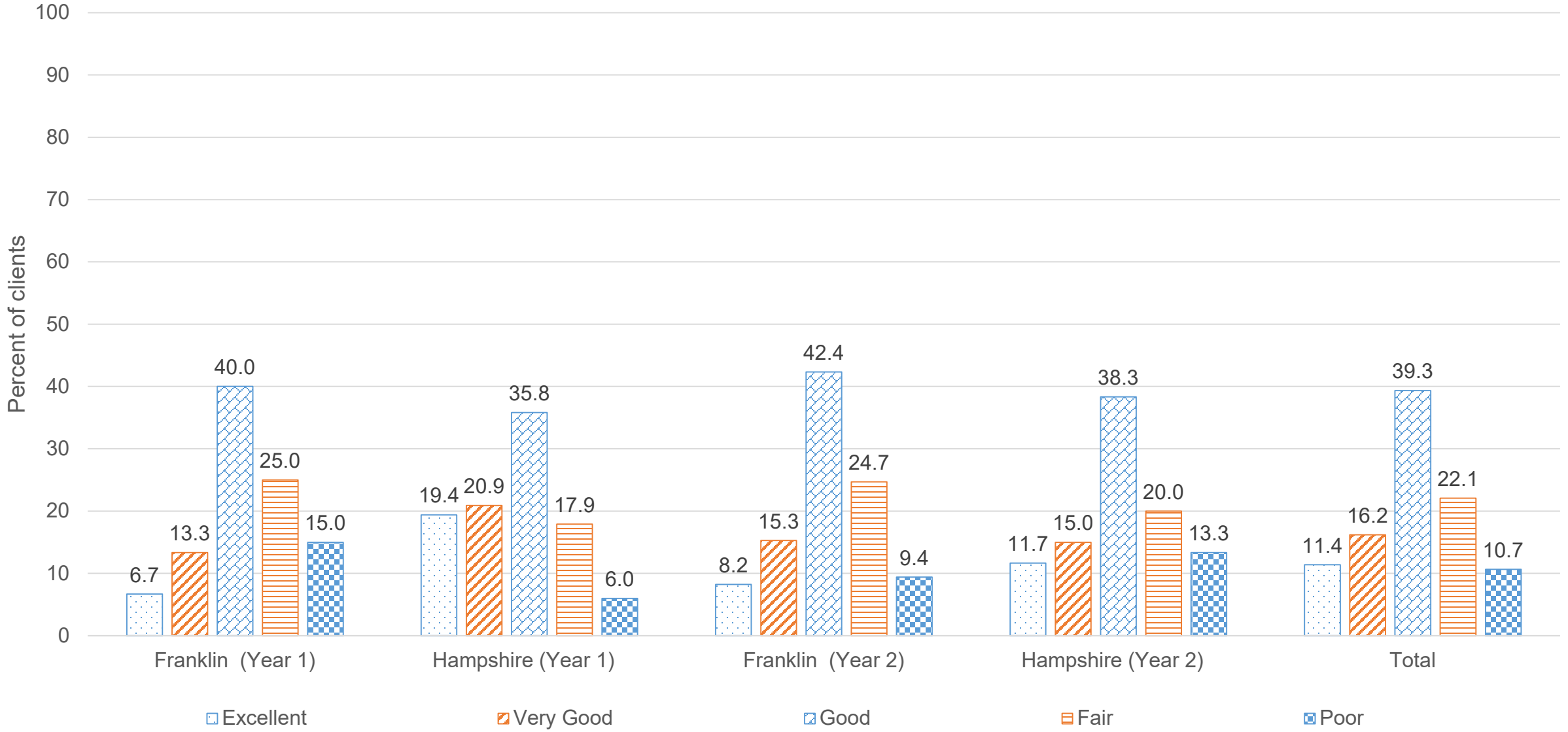
Source of support when having trouble



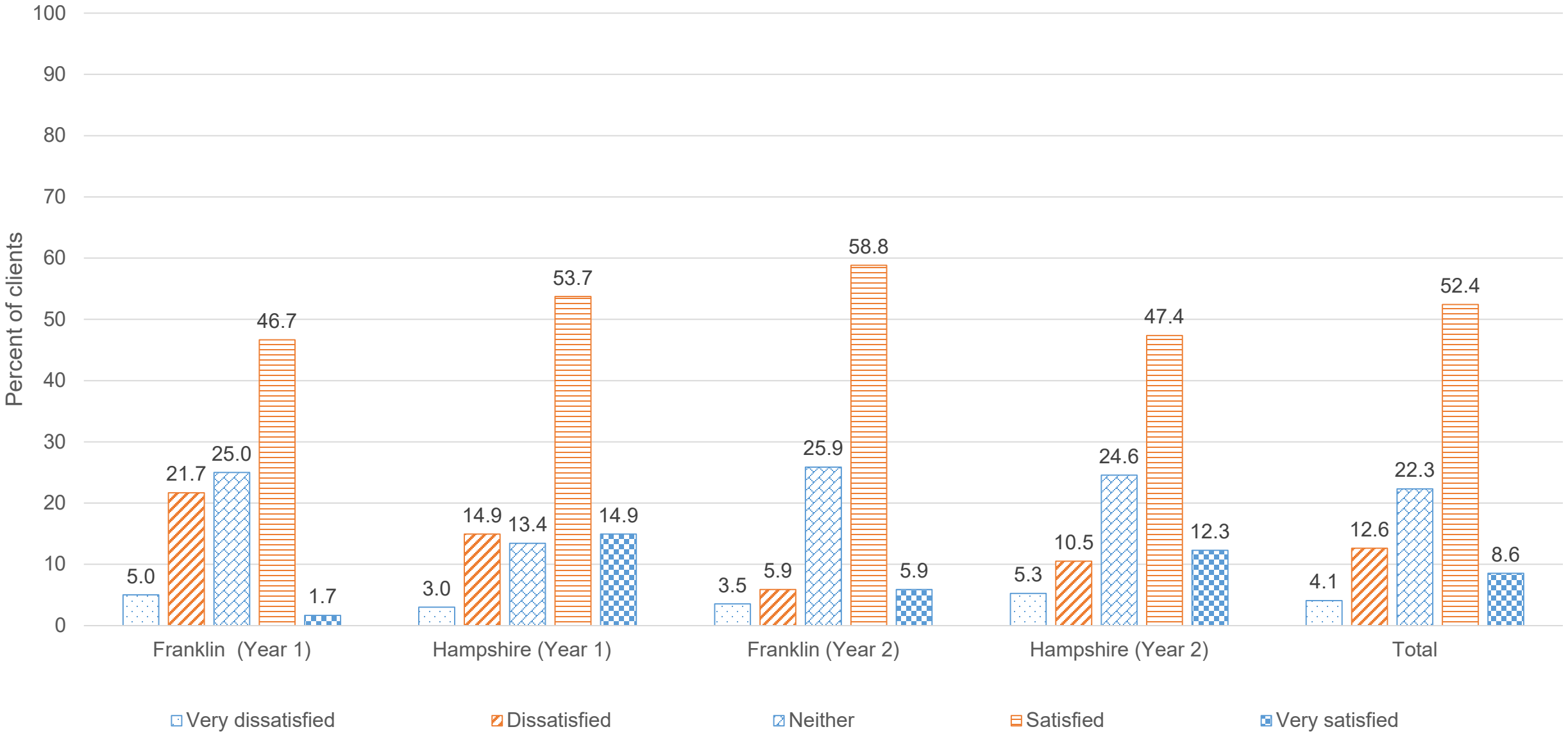
Satisfaction with personal relationship



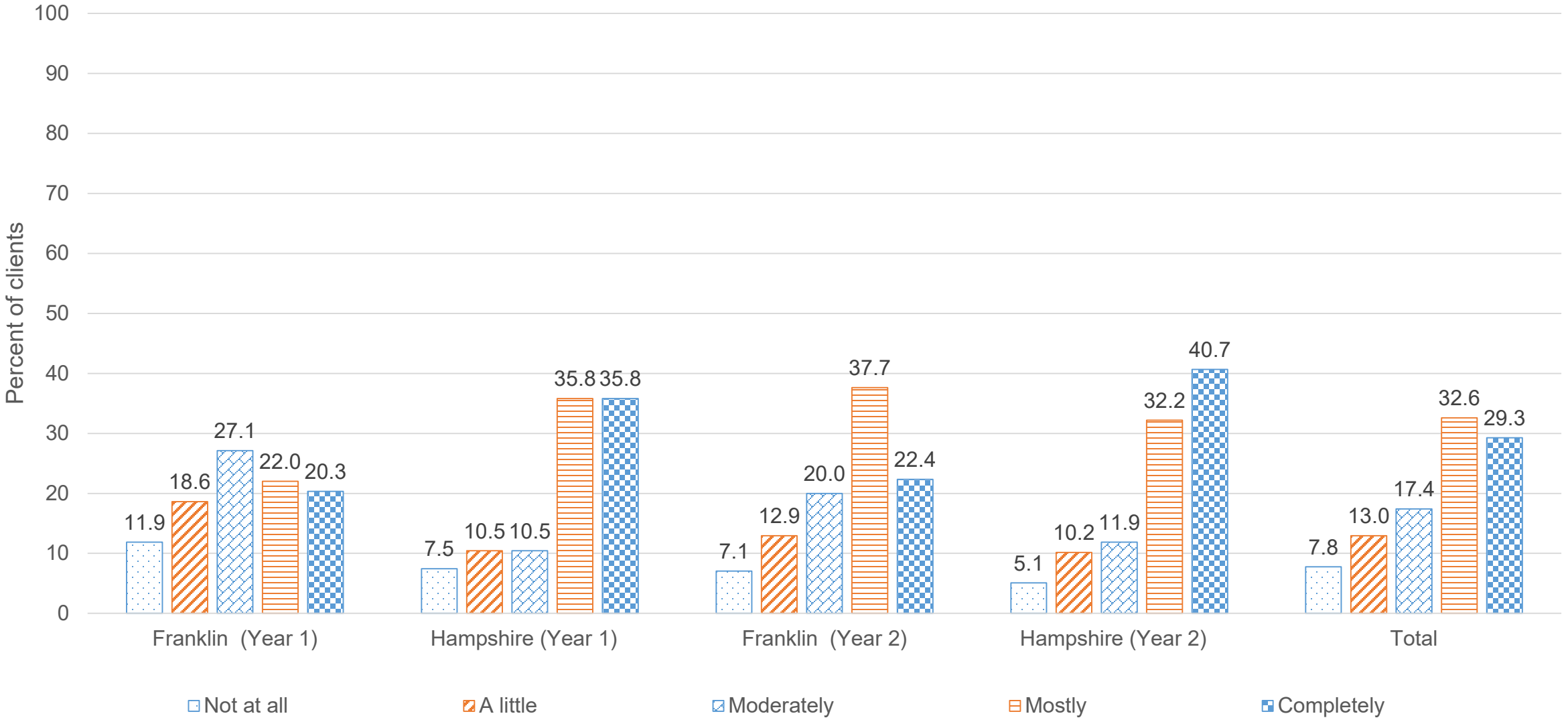
Perceived overall health



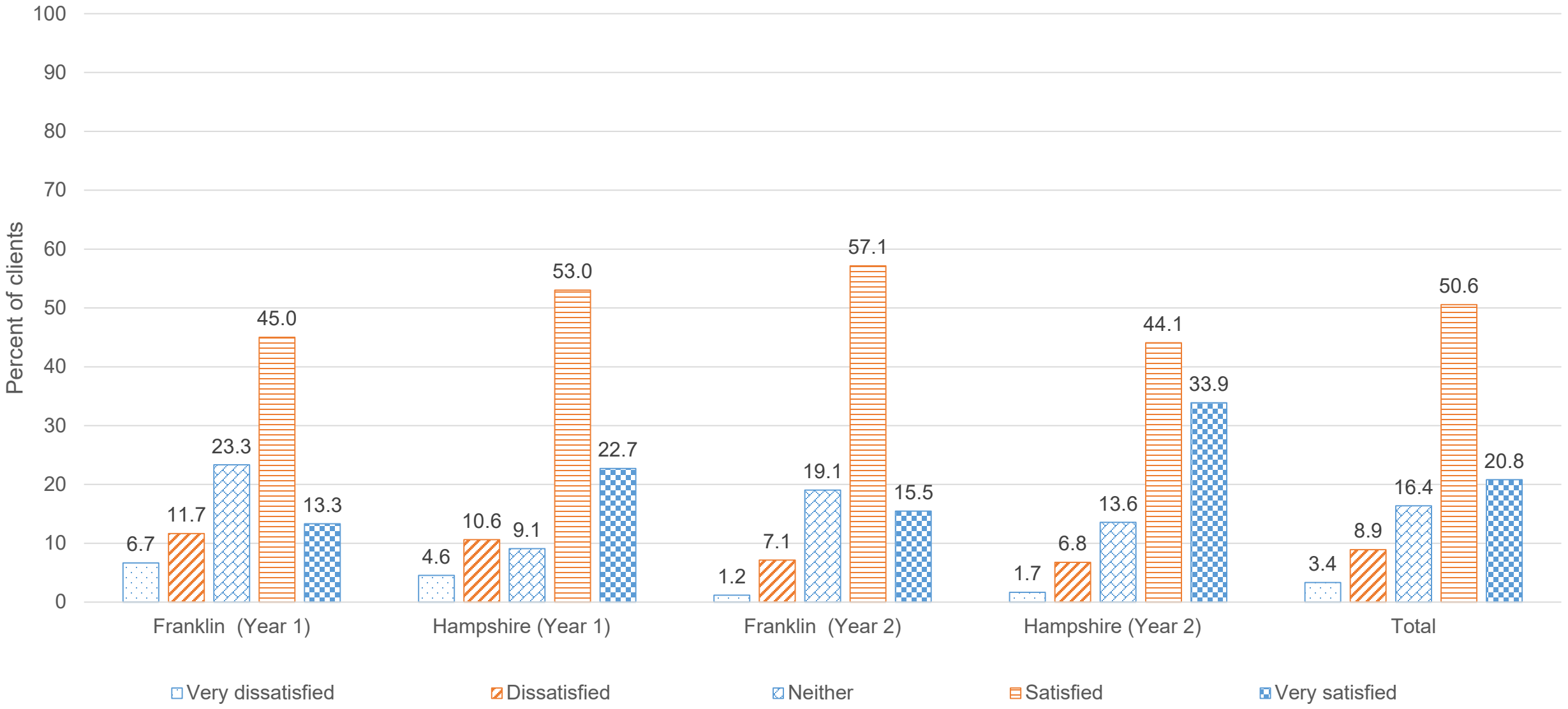
Satisfaction with health



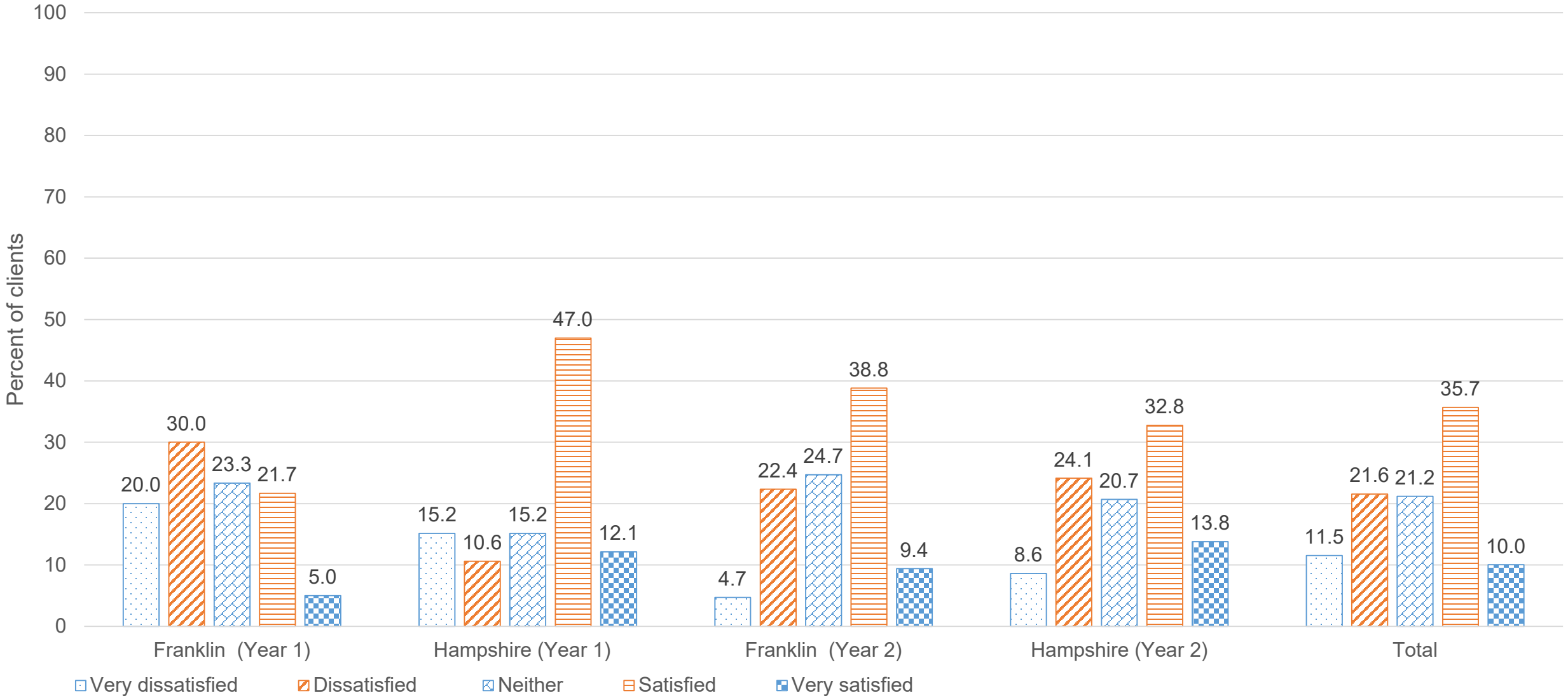
Has enough energy for everyday life



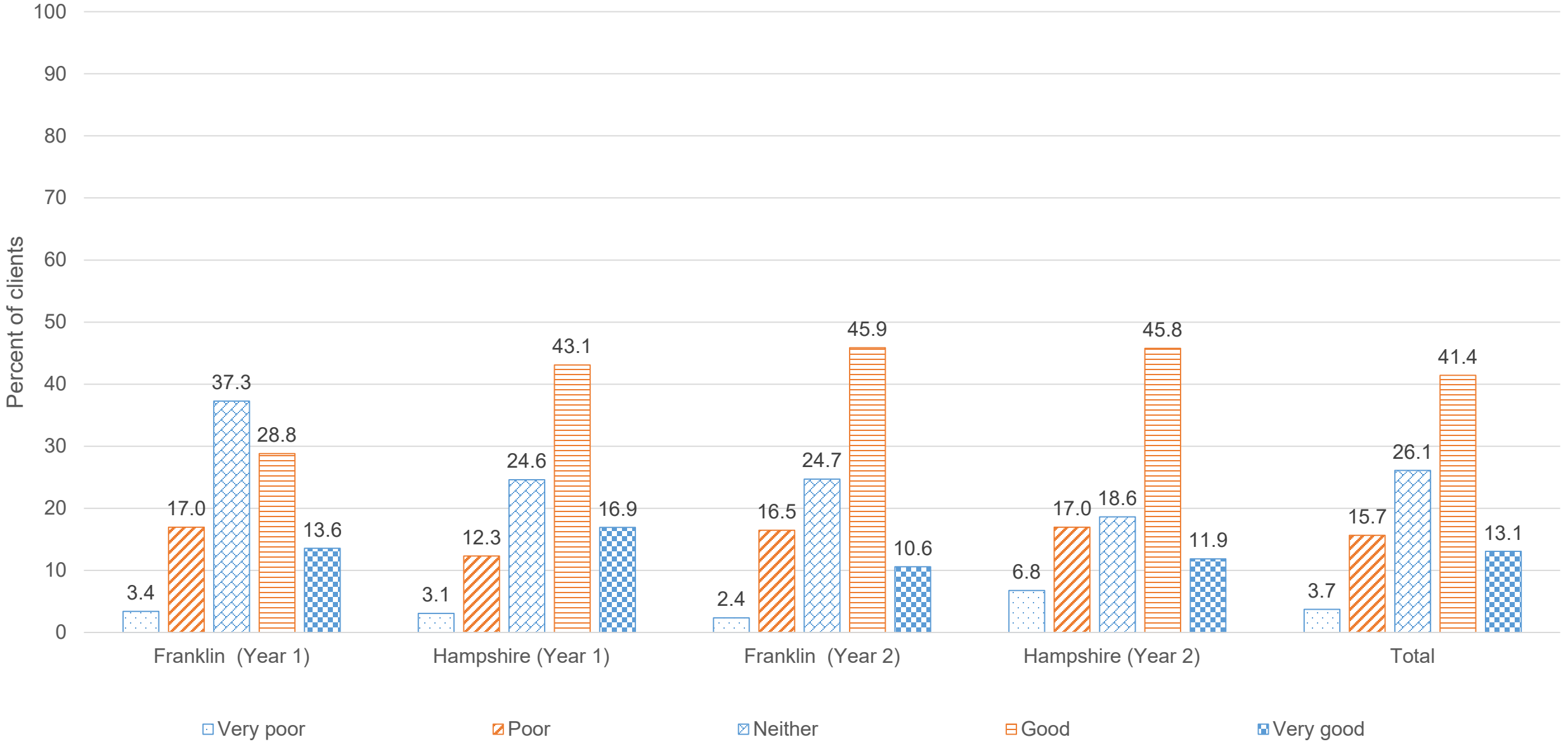
Satisfaction with ability to perform everyday activities



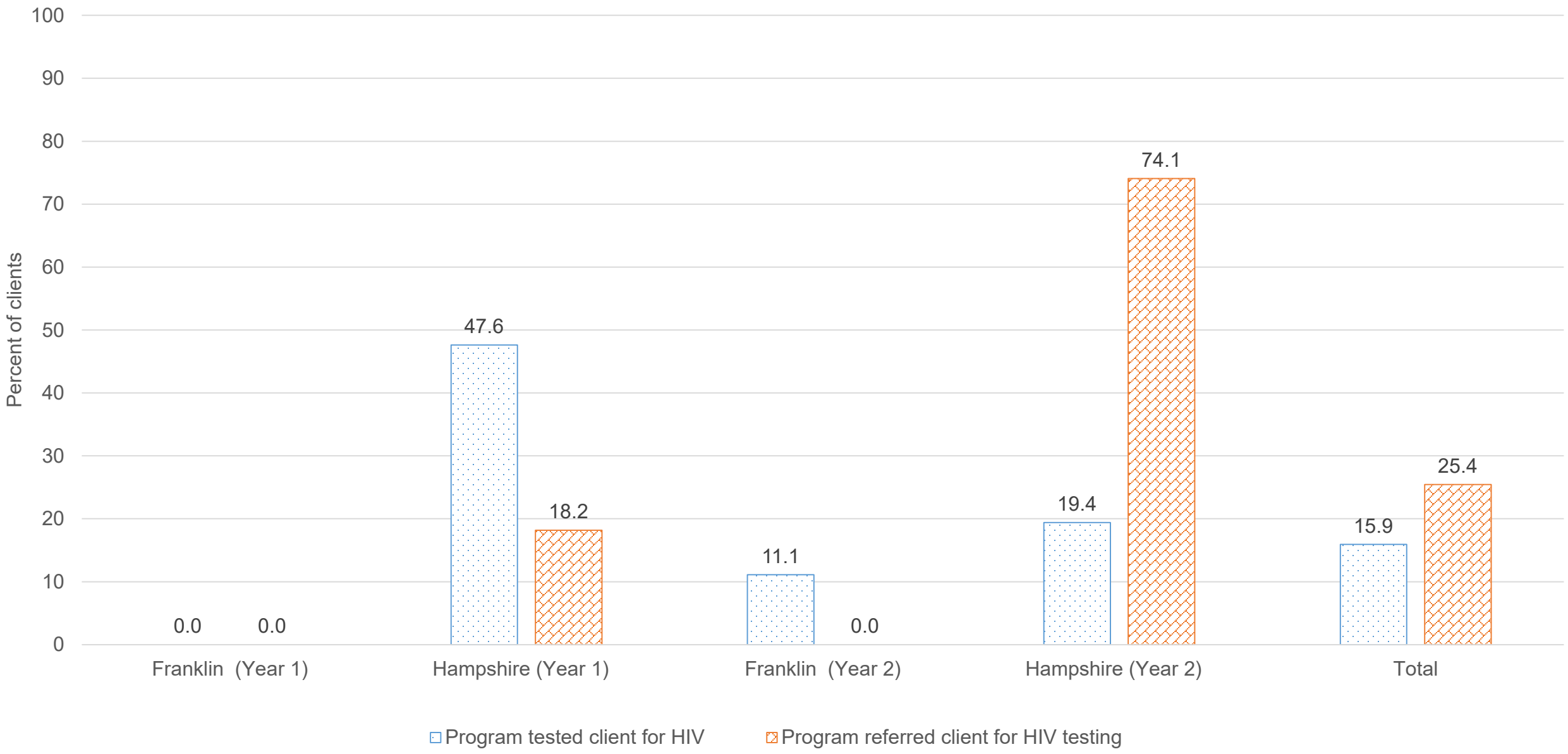
Satisfaction with self



Quality of life

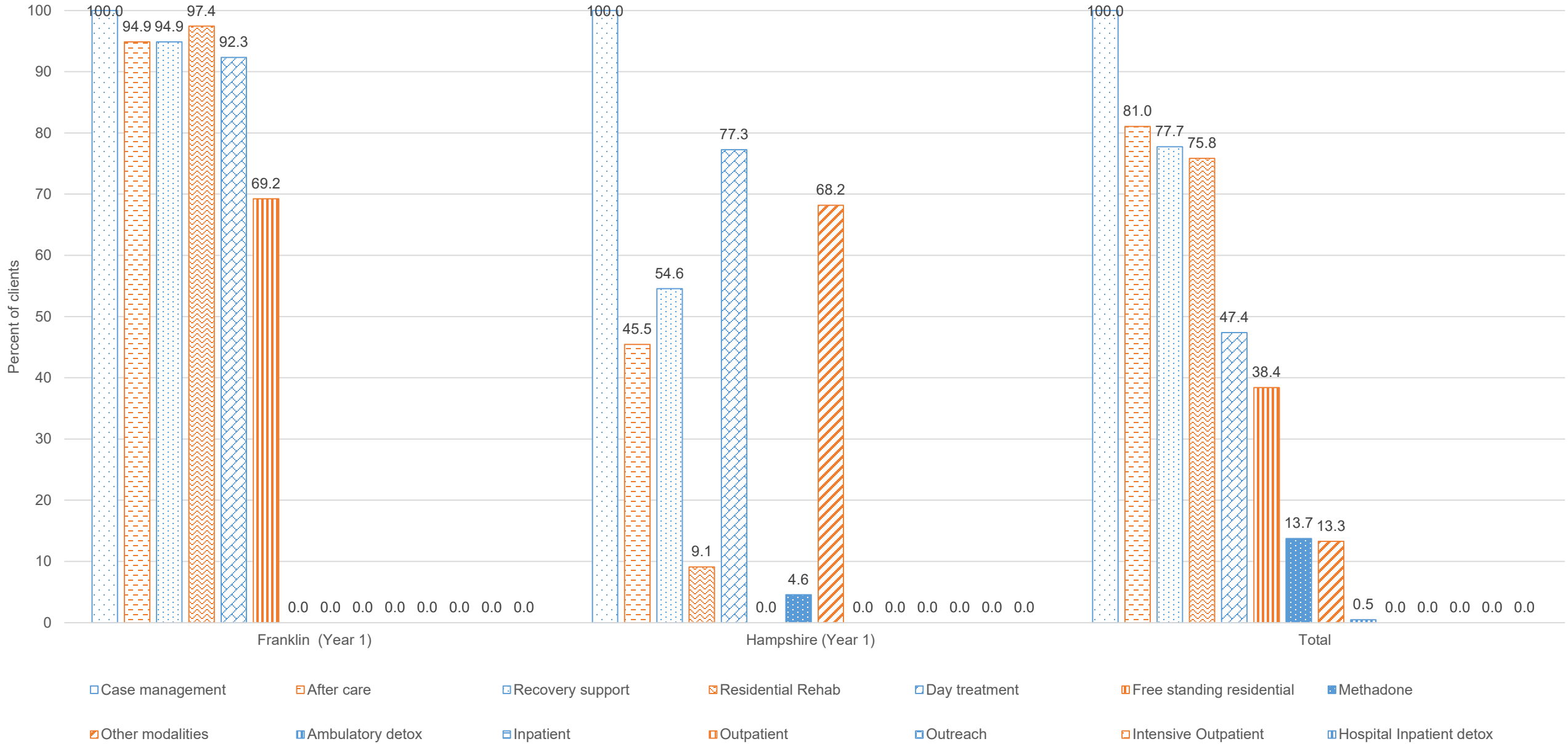


Discharge services, HIV testing



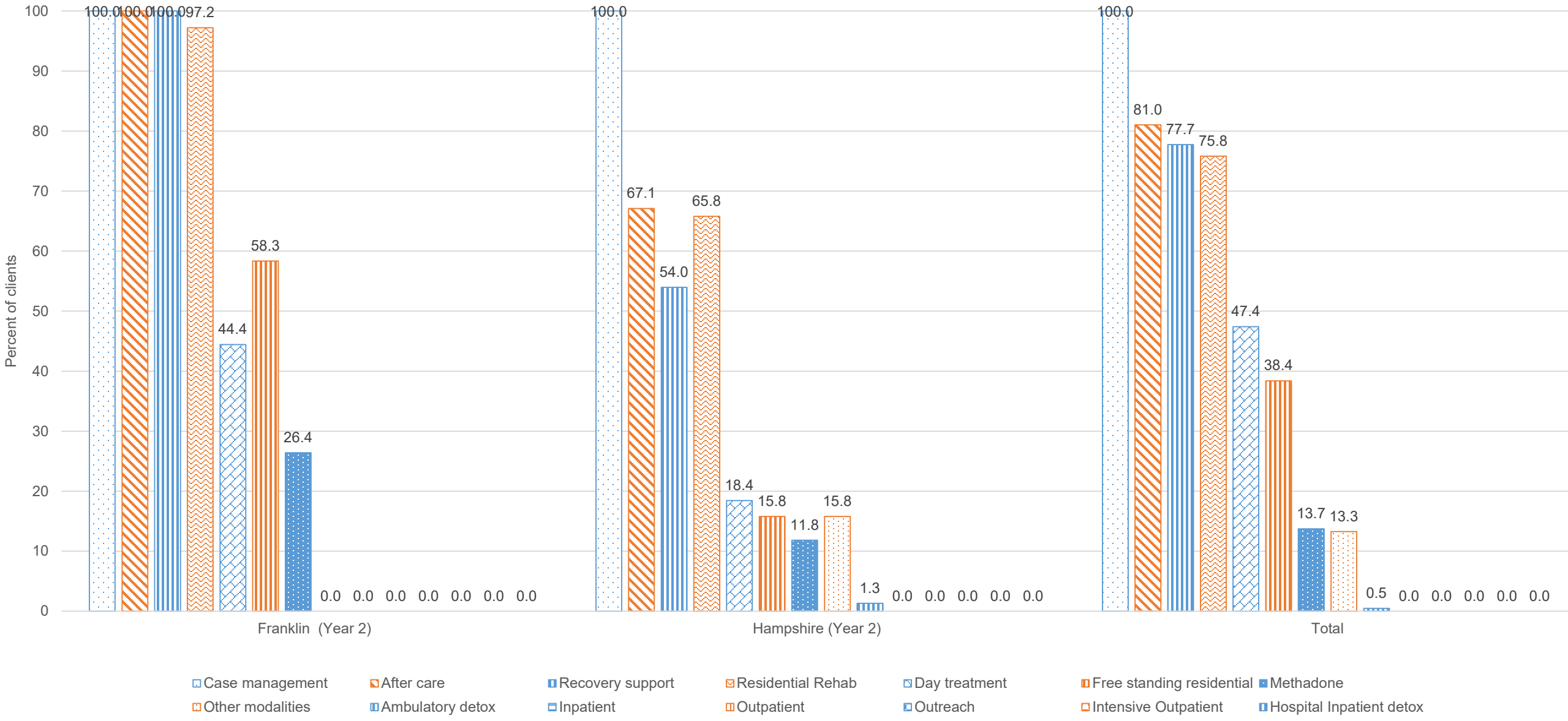
Discharge services, modality

Year 1



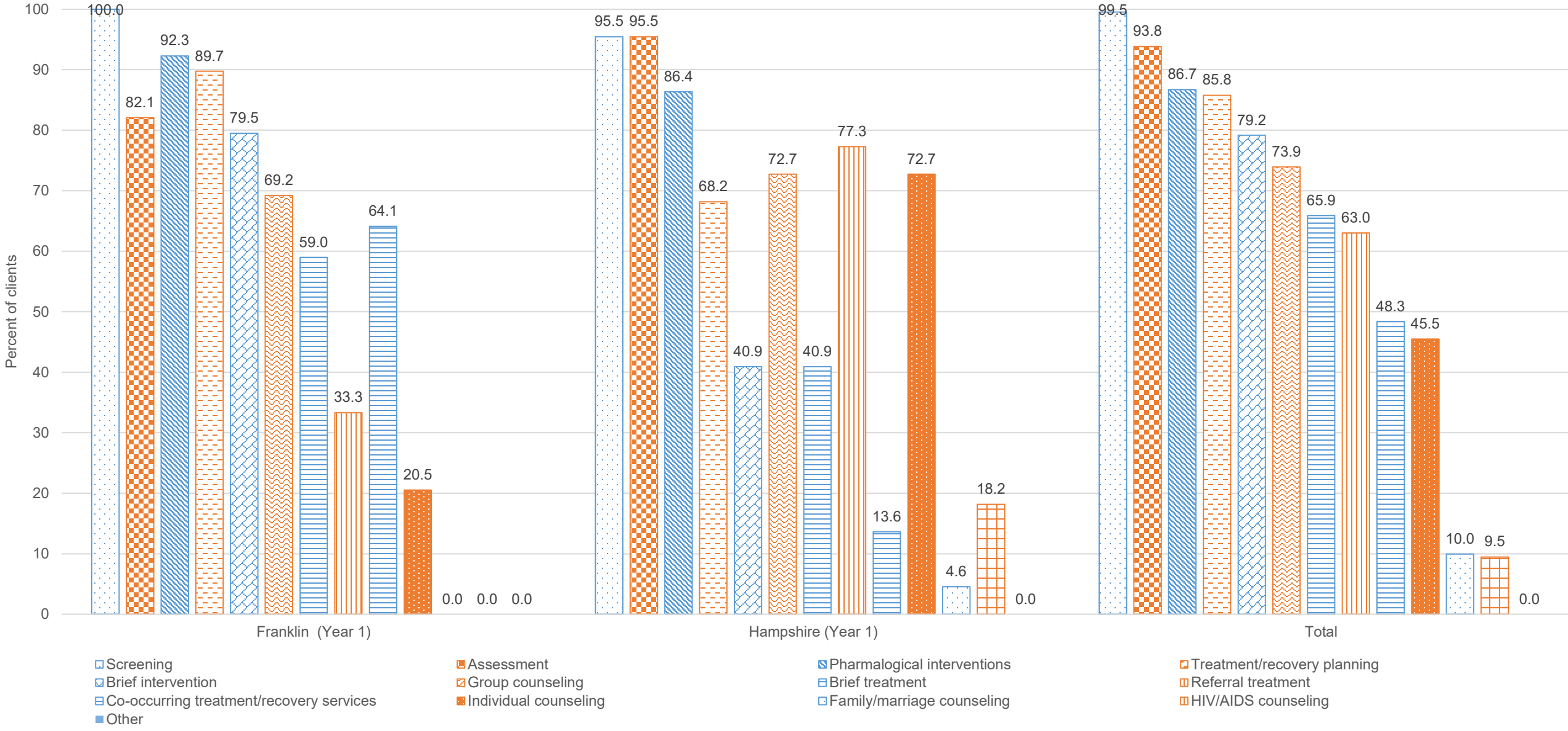
Discharge services, modality

Year 2



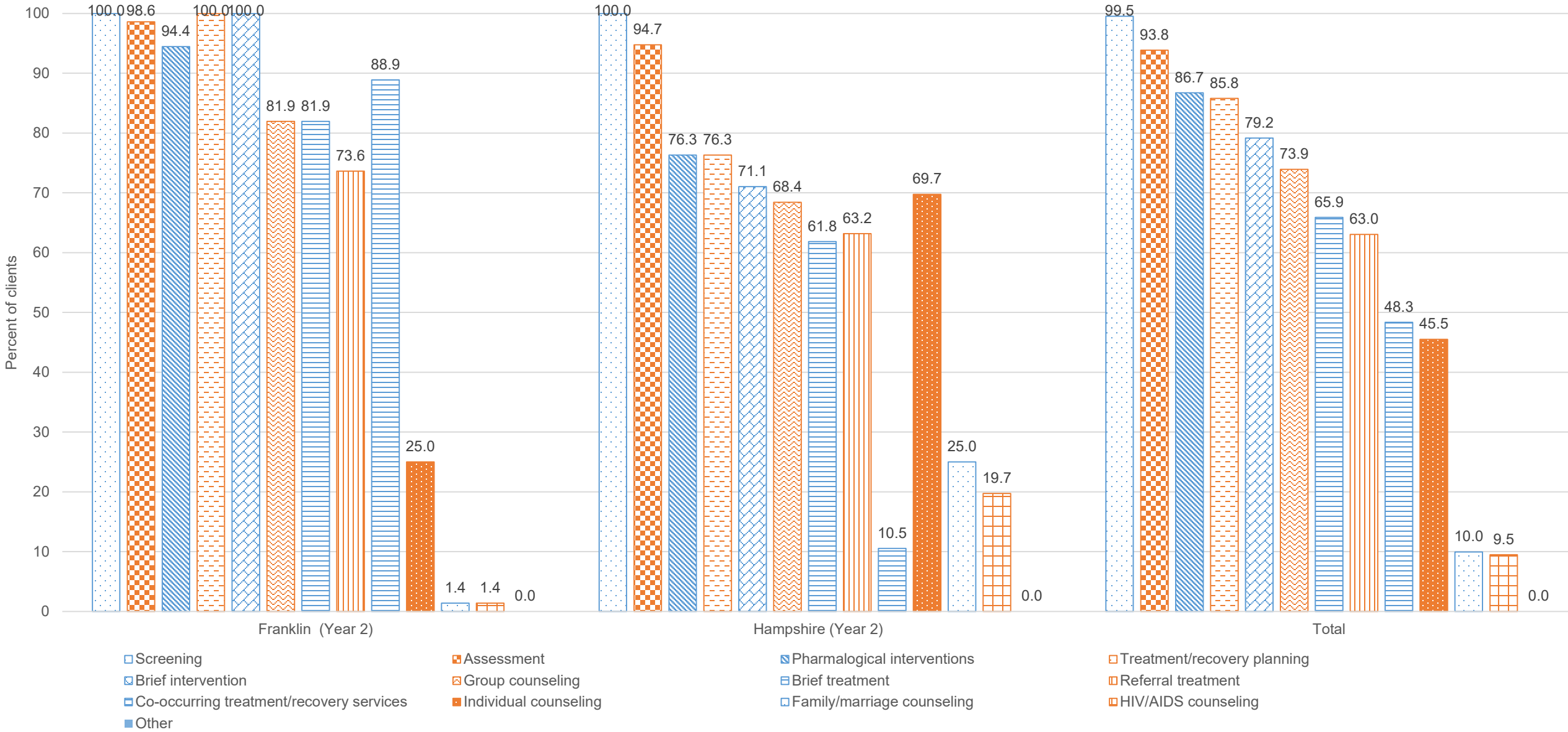
Discharge services, treatment

Year 1

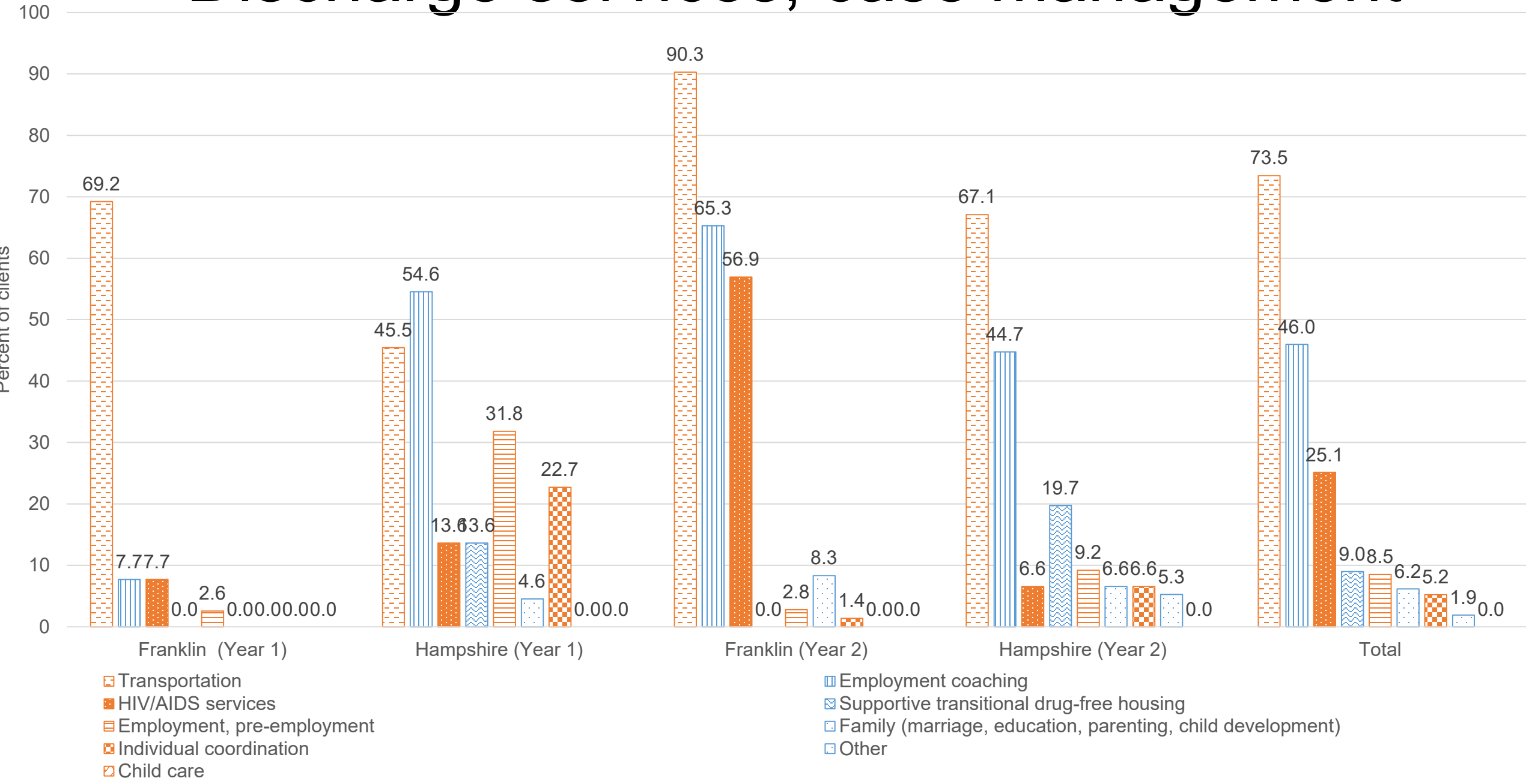


Discharge services, treatment

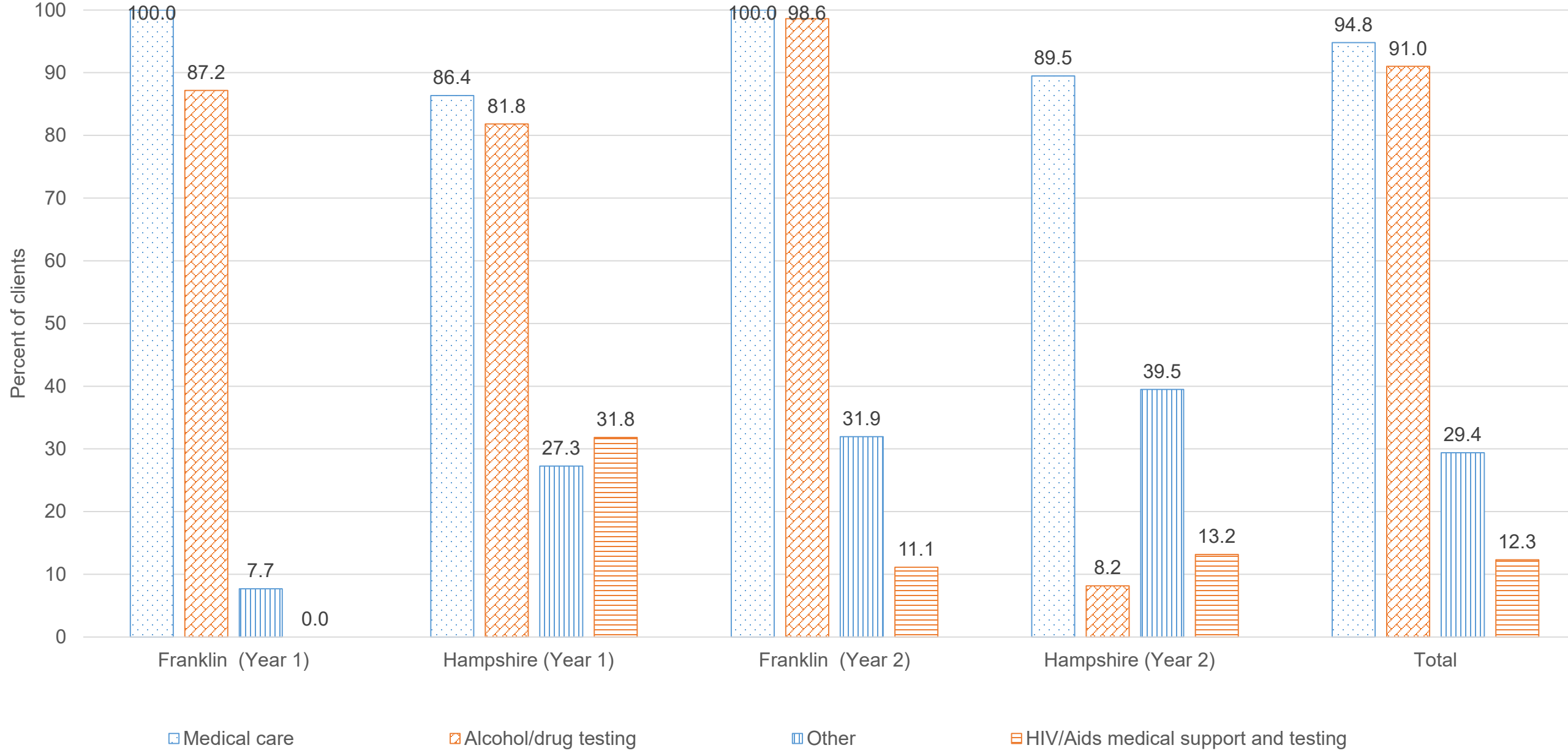
Year 2



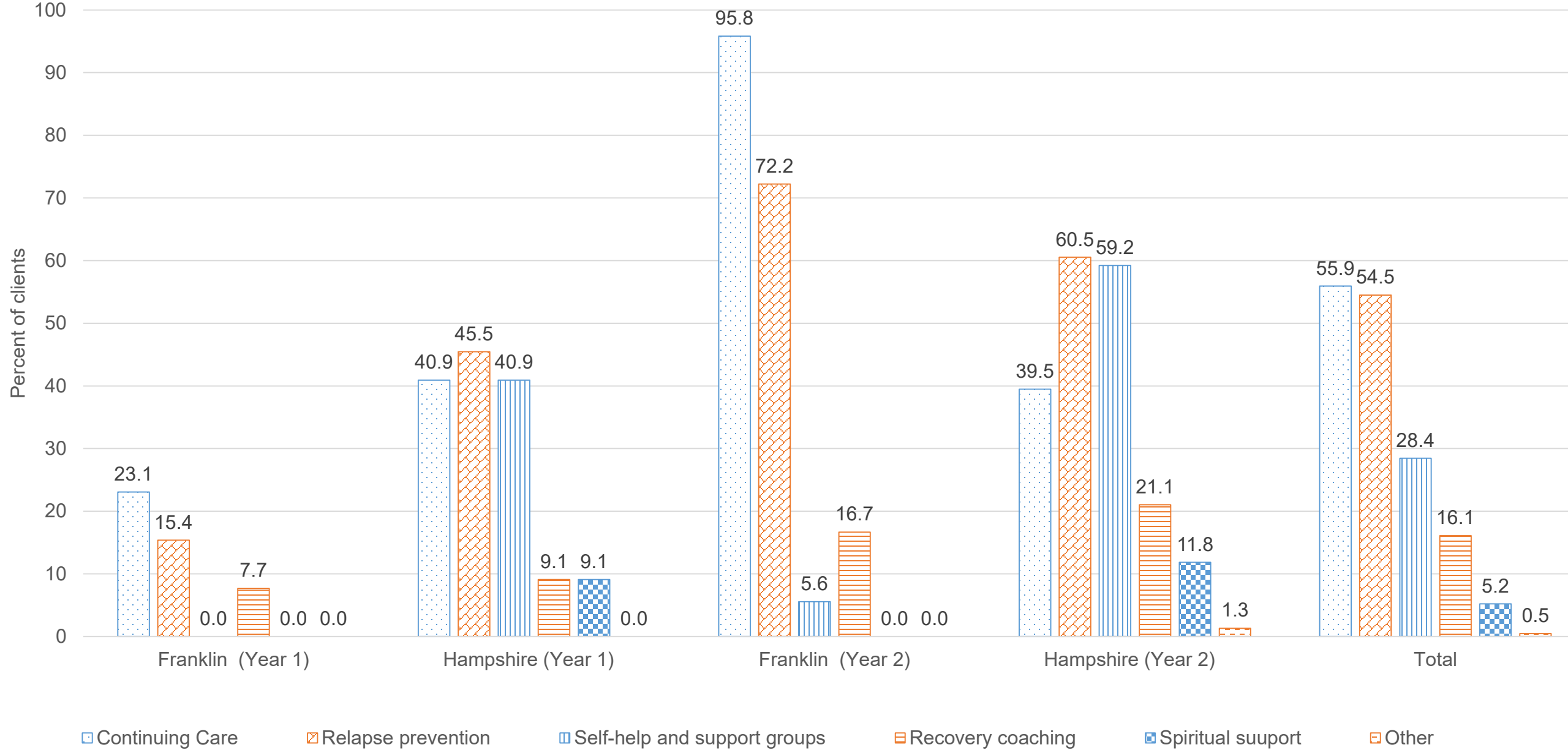
Discharge services, case management



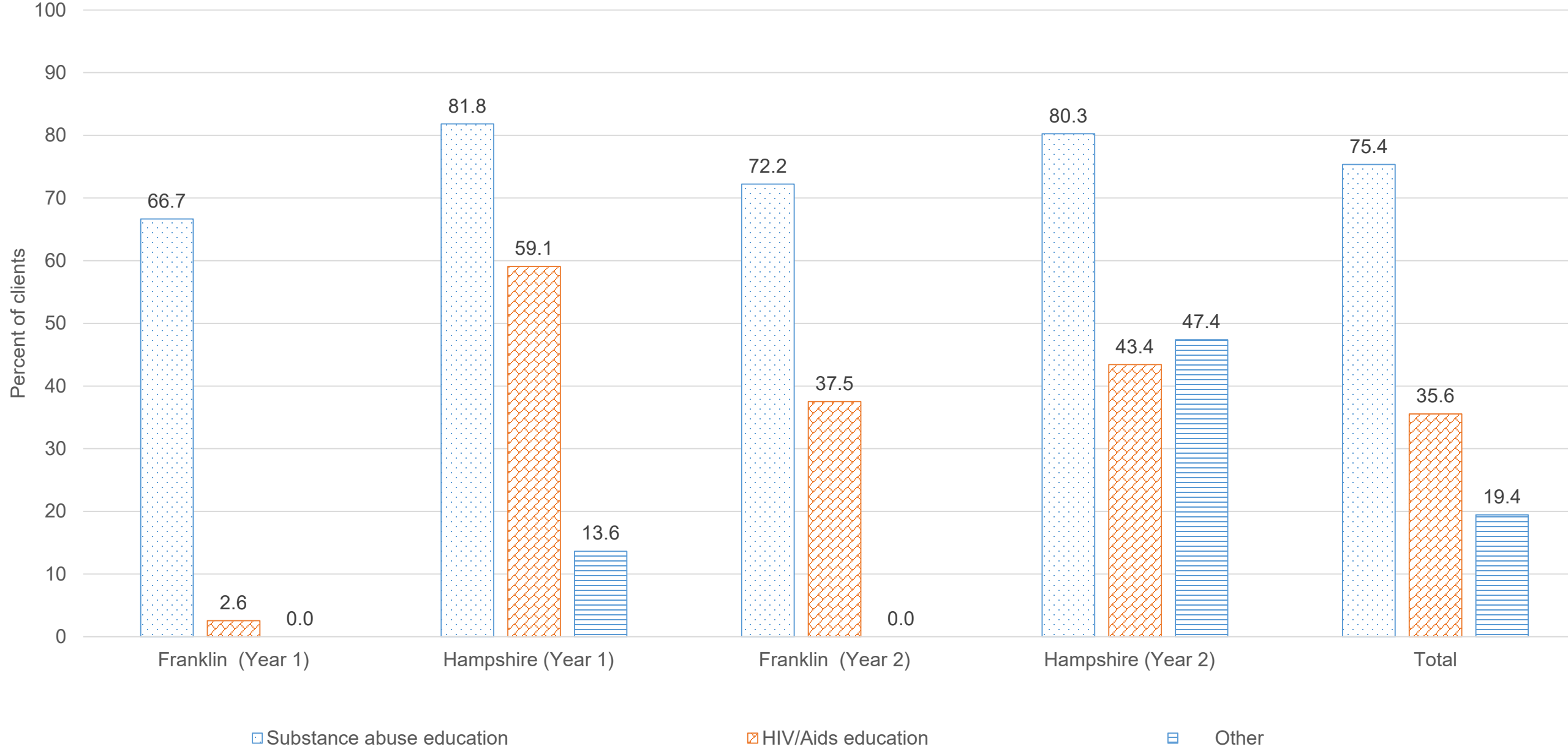
Discharge services, medical



Discharge services, after care



Discharge services, education



Discharge services, peer-to-peer support