Evaluation of the Hampden County Public Health Model of Correctional Health Care

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Evaluation of the Hampden County Public Health Model of Correctional Health Care

Executive Summary

Background

With the marked growth in prison and jail populations over the past two decades, the fields of corrections and health care have come to realize the extent to which chronic and infectious diseases and mental illness are concentrated in correctional populations and the public health opportunity this presents. These circumstances are particularly important and challenging for jails where the number of individuals passing through and returning to the community is even higher than in prisons. This population generally has limited access to health care when they are in the community and engage in risky behaviors at a higher rate than the general population. Because of this, the need and potential exist to engage them in medical care both during incarceration and after release in order to diminish the progression and spread of disease, and to shift health care utilization from more expensive and intensive emergency room and hospital care to prevention, self-care and primary care.

To address the needs of this seriously at-risk population, the Hampden County Correctional Center (HCCC), four community health centers, and the Massachusetts Department of Public Health developed a cooperative “public health model of correctional health care” that emphasizes five key elements: early detection, effective treatment, education, prevention, and continuity of care. HCCC is a medium-security facility that houses about 1,800 pre-trial and sentenced inmates and serves the Springfield-Holyoke metropolitan area of western Massachusetts with a population of about 500,000. A key feature of the Hampden County model is that physicians and case managers are “dually-based”—they work both at the jail and at community health care centers. This, together with discharge planning, is intended to promote substantial continuity of care for inmates with serious and chronic medical conditions.

Study Purposes

The evaluation of Hampden County’s public health model of correctional health care was funded through grants from the National Institute of Justice, the Centers for Disease Control and Prevention, and the Center on Crime, Communities, and Culture of the Open Society Institute. The study’s goals were to assess whether this coordinated model of care achieves significantly beneficial health outcomes for inmates after release compared to the traditional structure where jails and community clinics are staffed with separate sets of providers who often do not communicate, including changes in health care utilization (e.g. decreased emergency room visits and hospital admissions and increased use of primary care), reductions in high-risk behaviors, and reductions in recidivism. In addition, the study sought to characterize the health status and health care in this population with chronic disease and mental health problems that passes through HCCC, and to identify facilitators and barriers to engagement in primary medical and mental health care.

Methodology

To be eligible for the study, an inmate had to have been admitted to HCCC and released to the community between April 5, 2000 and September 16, 2001 and have a serious chronic medical or
mental health condition as defined by health services staff. A qualifying medical condition is one that would typically require chronic medication or at least three visits per year to a medical provider; a qualifying mental illness was an Axis 1 diagnosis of schizophrenia, major depression, or bipolar, anxiety, or post-traumatic stress disorders. A total of 336 individuals were recruited into the study and 200 of these were released to the community during the study period.

Data sources included participant interviews and data from jail medical records and administrative files. Trained interviewers at HCCC conducted in-person baseline interviews generally 3-5 days after admission. Two follow-up interviews were conducted by telephone approximately 30 days and six months following the participant’s release from jail. Three quarters (76 percent) of the 200 participants released to the community completed at least one of the follow-up interviews, while just over half (52 percent) completed both. Retention rates at 30 days and six months were both more than 60 percent.

We used descriptive statistics to analyze frequencies and absolute changes for all outcomes. In addition, we used multivariate models to estimate the effects of participation in the HCCC interventions on health utilization and health status post-release. This was essentially a dose-response approach in which we hypothesized that inmates who received more services at the jail would have more positive health outcomes than those who received less services. Since this study did not employ an experimental design or have a comparison group, our approach relied on instrumental variables to provide consistent estimates of treatment effect in the face of selection bias.

Conclusions

*Health-Related Characteristics of the Population*

- As might be expected given the eligibility criteria, study participants were in relatively poor physical and mental health, but also received higher than expected levels of health care in the 6 months prior to incarceration (68 percent medical care, 80 percent mental health care—some of it perhaps during previous incarcerations) and relatively high rates of health insurance coverage (76 percent).

- The most prevalent medical conditions were hepatitis C (26 percent of released group), asthma (20 percent), hypertension (18 percent), and HIV/AIDS (10 percent).

- The most prevalent mental health diagnoses were depression (41 percent) and bipolar disorder (8 percent).

- Smoking, substance abuse, high-risk sexual practices, and violence (perpetration and victimization) were also prevalent among participants.
Satisfaction With Health Services (30-Day Follow-Up)

- 58 percent of respondents rated HCCC health services as “good”, “very good”, or “excellent”; 77 percent gave these ratings to medical care in the community post-release; and 69 percent gave them to community mental health care.

- 74 percent reported having “some,” “a lot,” or “complete” trust in jail health staff, and 82 percent gave these ratings to community medical services.

Linkage With Community-Based Health Care (30-Day Follow-Up Unless Otherwise Noted)

- 53 percent of respondents with medical problems and 36 percent with mental health problems left the jail with an appointment to see a provider in the community.

- 65 percent kept their first medical appointment and 70 percent kept their first mental health care appointment.

- Reasons for not keeping appointments included lack of transportation or childcare, scheduling conflicts, illness, drug or alcohol problems, and forgetting.

- 55 percent of those with medical problems and 61 percent of those with mental health problems either kept their first appointment or saw a provider in the community without an appointment arranged at HCCC.

- Commonly cited barriers to seeking care in the community included inability to pay (38 percent) and lack of transportation (48 percent).

- Housing instability and unemployment were not cited as major barriers but were common among respondents—26 percent spent at least one night homeless in the 6 months post-release and 67 percent were jobless at 6 months.

- Facilitators to seeking care in the community included having appointments scheduled before release (cited by 92 percent of those with appointments), having dually-based providers (69 percent), and the health education provided in the jail (82 percent).

Health Status and Health Care Utilization (6-Month Follow-Up)

Absolute Changes

- The proportion of respondents reporting “excellent,” “very good,” or “good” health increased from 46 percent at baseline to 66 percent at 6-month post-release, while those reporting “fair” or “poor” health declined from 54 percent to 34 percent (p<.0006); the proportion of respondents who reported being bothered substantially by emotional problems declined from 66 percent at baseline to 43 percent at 6-months post-release (p=<.0001).
• 48 percent of participants reported improved physical health from baseline to 6-months post-release, while 47 percent reported improved mental health; during the same interval, 23 percent reported worsened physical health and 20 percent reported worsened mental health.

• There were several significant changes in health care utilization in the six months prior to incarceration compared to the six months after release. The percentage admitted to a hospital declined from 27 percent to 13 percent (p=.005); the percentage of respondents with a medical problem who saw a primary medical provider also declined from 68 percent at baseline to 56 percent at 6-month follow-up (p=.02)—however this change was not in the hypothesized direction. The percentage who went to the emergency room also declined from 50 percent to 38 percent, but it was not significant.

• For those with mental health problems, none of the changes reached statistical significance, but there were some changes in the hypothesized direction. The percentage going to an emergency room and admitted to a hospital declined, however the percentage seeing a provider in the community also declined.

• In parallel with our analyses of the proportion of participants seeking care we looked at the mean number of visits per day in the community pre- and post-release. There were two statistically significant changes, a decrease in the number of hospital admissions among participants with medical problems (p=.02) and the number of visits to a provider among participants with mental health problems (p=.02) (contrary to our hypothesis). The rest of the changes were in the hypothesized direction but did not reach statistical significance.

• These findings generally reflect positive changes, although they are difficult to interpret because patients’ individual diagnoses and treatments at HCCC might influence changes between pre-incarceration and post-release care in various ways and directions. Moreover, many of the participants in the study had been in HCCC before and might have received health services there previous to the index incarceration.

Effects of the Intervention On Health Outcomes

• Changes from baseline to 6-month follow-up in health status and health care utilization in the community were modeled based on how much of the five core services the inmate received during incarceration: physician visits; mental health provider visits; case management services; discharge planning; and a post-release appointment for care.

• Participants in the study appeared to receive the five core jail health services less commonly than was expected. This may be related perhaps to their individual medical or mental health conditions and perhaps to problems with record keeping and data collection.

• Multivariate modeling revealed a mixed statistical relationship between changes in health status and health care utilization and participation in the interventions at HCCC.

  ➢ For participants with medical problems, there was a statistically significant association between participation in the interventions and increased post-release physician visits (even more likely if the participant had an appointment).
For participants with mental health problems, there was a statistically significant association between participation in the interventions and increased post-release visits to mental health care providers, but the interventions had no effect on use of emergency rooms in this group.

Participation in the interventions was statistically significantly related to decline in self-reported health status among participants with medical and mental health problems.

An important positive finding was that, for participants with medical problems, having an appointment with a provider in the community before they left HCCC was a statistically significant predictor of increased participation in primary medical care post-release. The strength of this relationship increased with the level of the participant’s trust in HCCC health care providers. The making of appointments may be the most important, cost-effective, and replicable portion of the HCCC model; it may be a marker for completing some basics of case management that may not have been recorded in the medical record, since the clients must have received some discharge planning at the jail in order to have an appointment made.

The mixed relationships detected between participation in the interventions and the outcomes of interest may reflect generally small sample sizes (that made effects more difficult to detect), the use of the instrumental variable approach to control for selection bias, lower than expected participation in the interventions, newly diagnosed health problems (that may have produced the decreases in self-reported health status) as well as variations in the actual need for post-release care. In the end, those who received appointments may have been those most in need of post-release care and those most likely to receive it.

Recidivism

Analysis of criminal history records in light of participation in the health care interventions at HCCC revealed no relationship between recidivism (whether defined as rearraignment, reconviction, or reincarceration) and intensity of participation in the interventions.

Tobacco Use

HCCC is a smoke-free facility so inmates are generally forced to abstain from smoking while incarcerated there. However, very few of the participants in the study who smoked at baseline were able to remain smoke-free six months after release (2 percent).

Alcohol and Drug Use

Drug education and treatment are offered at the jail and the health staff refer inmates to post-release treatment in the community as needed, but substance abuse treatment is not a distinct component of the public health model for correctional health care.

There was a statistically significant (p=<.0001) decrease in the percentage of participants reporting having had a drink in the past 30 days from baseline (79 percent) to follow-up (37 percent). At follow-up participants reported drinking on fewer days per week and on days
that they drank had fewer drinks. Over half decreased the number of days per week that they 
drank (52 percent) while only one tenth increased the number of days (11 percent). Almost 
two thirds decreased the number of drinks per day that they drank (63 percent).

• There was also a statistically significant (p=.0001) decrease in the percentage of respondents 
reporting the use of hard drugs (defined as powdered cocaine, crack, heroin, illegal 
prescription, and “party” drugs) in the thirty days prior to the interview from 50 percent at 
baseline to 20 percent at six-month follow-up. In parallel with the pattern of alcohol use, 
drug users shifted their consumption to lower levels of use—the group using 1-2 days per 
week increased from 21 percent to 27 percent (p=.01) and the group using every day or 
almost every day (6-7 days per week) showed a statistically significant (p=.0001) decline 
from 65 percent to 42 percent.

• Eighty percent of study participants reported having ever participating in alcohol or drug 
treatment and many had attended multiple types of programs at baseline. Participation in 
alcohol treatment stayed the same from baseline to six month follow-up (about 36 percent), 
but there was a statistically significant decline in participation in drug treatment after release 
(from 36 percent to 16 percent). This reduction could reflect need for, or availability of, 
services, especially in light of the significant decline in the percentage of clients reporting 
hard drug use.
Chapter One

The Hampden County Public Health Model of Correctional Health Care

1.1 Introduction

With the marked growth in prison and jail populations over the past two decades, the fields of corrections and health care have come to realize the extent to which chronic and infectious diseases and mental illness are concentrated within the correctional system and the public health opportunity this presents.\(^1\)\(^2\) This is particularly important and challenging for jails where the number of individuals passing through and returning to the community is much higher than in prisons. This population generally has limited access to health care when they are in the community and engage in risky behaviors at a higher rate than the general population. Because of this, the need and potential exist to engage them in medical care both during incarceration and after release in order to diminish the progression and spread of disease, and to shift health care utilization from more expensive and intensive emergency room and hospital care to prevention, self-care and primary care.

1.1.1 The Hampden County Correctional Center and Community Served

The Hampden County Correctional Center (HCCC) is a medium security correctional center located in western Massachusetts. HCCC serves Hampden County and metropolitan Springfield-Holyoke whose population is about 500,000.

The facility houses 1800 inmates; both detainees awaiting court appearances and sentenced prisoners. About two thirds are pre-trial detainees at intake with the ratio reversing by discharge. Roughly a third of inmates remain three days or less, one-third for 4–90 days, and another one-third for 91 days to 2 years. About seventy-five percent of the jail population resides in four neighborhoods of the county—each of which has a community health center. Conversely, over 1 percent of the health centers’ primary neighborhoods populations is in the jail at any given time and 4 percent pass through annually. HIV rates are high in these neighborhoods and higher within the facility: 5.5 percent seropositivity in men and 8.8 percent in women at entry in 1996.

1.1.2 Hampden County Public Health Model of Correctional Health Care

To address the needs of this seriously at-risk population, the Hampden County Correctional Center (HCCC), four community health centers, and the Massachusetts Department of Public Health developed a cooperative “public health model for correctional health care”.\(^3\) The public health

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model arose out of a philosophy that recognizes that the jail is an integral part of the community, that those incarcerated are only temporarily displaced members of the community, and that incarceration presents an opportunity to benefit the health of these individuals, their partners and families, and the communities to which they return. The public health model features five major elements:

1. early detection and assessment of health problems;
2. prompt and effective treatment at a community standard of care;
3. disease prevention programs;
4. comprehensive health education; and
5. continuity of care in the community via collaboration between HCCC health services department, community health centers, and other local health care providers.

The model as implemented at HCCC includes these key features:

- At admission, inmates with serious chronic medical conditions are assigned to one of four health care teams based upon their residential zip code. Each HCCC health care team comprises 1–2 physicians, a primary nurse, a nurse practitioner, and a case manager. The physicians and case managers are “dually-based”, working part of the week at the jail and part of the week at a community health center—with the majority of the physicians’ time in the community—the primary nurse and nurse practitioner are based only in the jail.

- HCCC has entered into contracts with local community health centers, mental health care, dental care and optometry vendors to deliver services on site and in the community.

- There is a daily triage system where nurses and mental health clinicians go directly to inmates’ living quarters to assess health status, deliver care, and respond to non-emergency complaints.

- Robust inmate health education is provided, especially for infectious diseases, including HIV and hepatitis peer education, substance abuse treatment, and disease management/self-care for patients with chronic disease.

- Discharge planning and follow-up is promoted using the dually-based health care providers to deliver continuity of care after inmates are released from jail.

It is important to note that the full model (dually-based provider teams, case management, discharge planning, and arrangement of post-release appointments) is generally only available to inmates with serious or chronic medical conditions, although other inmates in need of short-term attention to medical issues may be eligible on a case-by-case basis. In general, inmates with mental health problems do not receive services from dually-based provider teams. Rather, they are referred by their HCCC mental health discharge planner to appropriate post-release mental health services in the community.

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Many of the elements of this public health model of correctional care already exist in particular jail and prison facilities around the nation and are increasingly being implemented. Correctional institutions may use some of the elements of the model in varied ways based on local resources.6

1.1.3 Study Funding and Purposes

In September 1999, Abt Associates and HCCC were funded to evaluate the public health model of correction health care. Abt received funds from the National Institute of Justice, U.S. Department of Justice; HCCC and Abt Associates both received funds for evaluation from the Center on Crime, Communities and Culture of the Open Society Institute, and HCCC received funding from the Centers for Disease Control and Prevention.

This longitudinal client-level evaluation was undertaken to:

- Characterize the health status (including substance use) and health care utilization patterns of HCCC inmates and releasees with serious chronic medical and mental health problems

- Assess whether participation in health services at HCCC creates significant benefits in health care utilization after release, including:
  - increased primary care visits,
  - decreased emergency room visits,
  - decreased hospital admissions, and
  - decreased smoking rates.

- Identify facilitators and barriers to releasees’ engagement in primary health care after release from HCCC.

- Assess whether participation in the model interventions contributes to reduced recidivism after release.

1.2 Health Services at the Hampden County Correctional Center

This section provides a description of the services offered at the jail in the order that they are offered to incoming inmates. Program elements specific to the public health model of correctional health care are noted. Table 1.1 provides an overview of staff providing services through the model, the types of inmates eligible to work with each one, and where they are based.

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6 This model is also available to some inmates from the state prison system, although these inmates were not included in this study. State Department of Correction (DOC) inmates who will return to the greater Springfield area can be transferred to HCCC within six months of discharge through a special contract. HCCC is the only facility in the state that has such a contract with the DOC. The discharge planning process for these inmates is overseen by staff at HCCC and enhanced by the proximity to their home communities. Up to 300 state prison inmates come to HCCC each year to complete the final months of their sentences.
Table 1.1

Staffing Model for Public Health Model of Correctional Health Care

<table>
<thead>
<tr>
<th>Provider</th>
<th>Population Served</th>
<th>Dually-Based?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>All inmates with an identified need assigned to team.</td>
<td>Yes</td>
</tr>
<tr>
<td>(1-2 per team)</td>
<td></td>
<td>½ day per week at the jail. 4½ days per week at the community health center.</td>
</tr>
<tr>
<td>Primary Nurse</td>
<td>All inmates assigned to team.</td>
<td>No</td>
</tr>
<tr>
<td>(1/2 FTE per team)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>All inmates assigned to team.</td>
<td>No</td>
</tr>
<tr>
<td>(1 per team)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case Manager</td>
<td>All HIV-positive inmates and chronically ill as needed / resources available assigned to team.</td>
<td>Yes</td>
</tr>
<tr>
<td>(1 per team)</td>
<td></td>
<td>3 days per week at the jail. 2 days per week at the community health center.</td>
</tr>
<tr>
<td>Discharge Planning Nurse (1 at jail)</td>
<td>All inmates with chronic medical conditions on all 4 teams (especially those requiring post release institutionalization or home care).</td>
<td>No</td>
</tr>
<tr>
<td>Mental Health Discharge Planner (1 at jail)</td>
<td>All inmates with mental health conditions on all 4 teams.</td>
<td>No</td>
</tr>
</tbody>
</table>

1.2.1 Health Screening and Assessment

Upon entering HCCC, inmates undergo several levels of assessment and evaluation from the preliminary screening conducted at booking to a more detailed health assessment conducted by nursing and mental health staff.

Initial Health Screening (At Booking)

Intake and booking staff are trained to conduct an initial health screening. At the time of booking, these trained correctional officers conduct a preliminary health screening that includes a suicide risk assessment. The screening focuses on the inmates’ behavior, mental state, and appearance.

If the admitting correctional officer judges the patient to be severely injured or ill, he or she may refuse admission to HCCC and direct the arresting officer to transport the patient immediately to the nearest emergency room. Arrestees with acute conditions are not accepted into HCCC until they are medically cleared at the local hospital and appropriate medical information is returned to the jail. Booking staff immediately notify the health services staff of any inmate with an obvious illness or injury or who is demonstrating suicidal, violent, or unusual behavior.

Initial Health Assessment (At Booking)

Once the booking staff completes their initial screening, a medical assistant performs the initial components of the health assessment, including screening for TB symptoms, collection of blood
samples, and further assessment of acute needs. Then the inmate is sent to the health services department for further evaluation by the intake registered nurse.

**Complete Health Assessment (At Booking)**

In the health services department, registered nurses conduct a thorough health assessment of all inmates. This screening consists of inquiry into:

- Current illness and health problems including sexually transmitted diseases and other infectious diseases.

- Dental problems.

- Mental health problems, (e.g., psychiatric disorders, seizures). Anyone who is suicidal, violent or who demonstrates unusual or bizarre behavior is referred to the mental health services staff for further evaluation (if there are no other acute medical needs). A key assessment is whether an inmate needs to be placed on continued or frequent observation. If so, the inmate is admitted to the HCC inpatient mental health unit. If not, the inmate proceeds to the orientation unit, and less urgent mental health needs are referred to mental health services for scheduled evaluation.

- Use of alcohol and other drugs (including type of drugs used, mode of use, amounts used, frequency, date or time of last use, and history of any problems after ceasing use).

- Past and present treatment and hospitalization for mental disturbance or suicide.

- Other indicators of increased risk of suicide.

- Possibility of pregnancy for female inmates.

Inmates also receive:

- A directed nursing physical assessment.

- Laboratory testing including a complete blood count, liver transaminase, urinalysis, syphilis testing, and other STD testing and chest x-rays as needed.

- Screening for tuberculosis (symptoms, PPD, ± CXR), diabetes (urine, symptoms), STD symptoms, and chlamydia—unless under 30 years old without other risk factors—(urine, PCR).

**Physical Examination (Day 3)**

A further history and physical examination are conducted by a nurse practitioner usually on the third day after admission. This assessment covers all areas of health needs including acute and chronic diseases, health history, major systems review, vital signs, a physical exam, and a review of laboratory results. All female inmates are tested for pregnancy and they receive a pelvic examination with Pap smear and cultures. Voluntary testing for HIV is offered to all inmates; HIV counseling and testing is provided by a staff member at designated times in the health services unit.
**Oral Screening (Day 3)**

Initial oral health screening is done as part of the health assessment; it is repeated during the physical examination by the physician or nurse practitioner who has been properly trained and designated by the dentist. The screening includes visual observation of the teeth and gums, noting any obvious or gross abnormalities requiring immediate referral to the dentist. Based on the preliminary screening, a comprehensive oral health examination is conducted for inmates with dental health problems. Follow-up treatment and appointments are scheduled as needed.

**1.2.2 Medical Treatment**

Medical care is provided on the residential units as well as at the health clinic.

**Triage System for Complaints Arising After Admission**

HCCC uses a triage system for treating mild-to-moderate, non-emergency health complaints and requests for care. Triage and treatment of minor illnesses are provided by nurses directly in the inmates’ housing units. This triage system, known as sick call to the security staff and inmates, provides treatment for minor illnesses and allows nurses to evaluate which inmates, if any, need to be seen in the clinic. Nurses conduct triage equipped with a portable cart containing over-the-counter medication, supplies, and equipment. Carts are kept locked when not in use and a list of supplies are maintained as part of the central supply. To maintain confidentiality, all “living pods” are equipped with a private room for use by the nurse during triage.

This feature of bringing care directly into the inmates’ living quarters is a much appreciated component of the HCCC public health model of correctional health care. Inmate illnesses and mental health problems are detected early and treated promptly, resulting in prevention of more severe problems. On-site triage contributes to a quiet and calm correctional environment where inmates feel that their physical and mental health care needs are met. An additional benefit is that safety for inmates and staff is enhanced. Triage allows for inmates to be seen in the environment in which they live. The system helps to break down barriers between nursing staff, inmates, and correctional officers and increases the support and interaction between the clinical and correctional personnel. Because sometimes correctional officers can be uncertain about whether or not an inmate’s health complaints are “real” and of a serious nature, having the nurse and mental health clinician make daily rounds is a source of staff support and cooperation.

Following the evaluation, the nurse determines whether the problem is:

- a minor illness, which can be treated in the pod utilizing standard protocols;
- more serious, requiring further assessment in the health clinic; or
- urgent, requiring immediate attention in the health clinic.

**Health Clinic**

Inmates with chronic medical issues are seen as needed at health services by the dually-based provider teams described in section 1.2.4. Ongoing care is scheduled with the primary nurse, nurse practitioner, or physician similar to procedures in a community health center but with more of the
care being provided by the primary nurse and nurse practitioner than is typical in many office practices.

### Disease-Specific Program Features

Although the Hampden County program intends to promote holistic medical care, there are numerous components of the health services that focus on specific diseases.

**The HIV program** includes voluntary counseling and testing, education (particularly peer education), and case management. The health program is structured such that HIV care is part of other care, in order to maintain confidentiality—often a challenging goal in corrections—and thus promote patients’ willingness to disclose their HIV status, receive counseling and testing, and participate in treatment. This is achieved through the use of physicians who are generalists with substantial HIV experience and case managers and discharge planners who are not limited to HIV.

**The hepatitis program** follows the same general structure as that for HIV. Particular features include checking a liver transaminase at intake, promoting voluntary counseling and testing (not yet integrated with the HIV counseling and testing), and vaccination for hepatitis B for all inmates under 30 years old (or if found not to be immune) and for hepatitis A for all inmates with evidence of liver disease.

**Peer education: HIV/AIDS and hepatitis.** The jail’s HIV/AIDS Coordinator has developed and manages a group peer education and outreach team comprised of inmates trained in HIV and hepatitis transmission, risk reduction, partner communication skills, and community resources. The peer educators, all of whom are sentenced inmates and some of whom are HIV-positive, are trained to provide education, outreach, support and referrals for other inmates. The peer educators design and deliver group presentations, provide informal individual education, and serve as a resource for sentenced inmates in the residential towers. Special attention is devoted to topics of concern to the inmates, including HIV transmission risks in jail and in the community, negotiating with drug-using and sexual partners, co-infection with Hepatitis C, and risk reduction through condom use, community needle exchange programs, drug abuse treatment programs and abstinence. The availability of HIV counseling and testing services within HCCC and in the community is emphasized and inmates are encouraged to make use of these services as appropriate.

**The tuberculosis program** makes a particular effort to treat all appropriate persons with latent tuberculosis infection who will have the opportunity to complete treatment within jail, often utilizing the newer short-course regimens. Continuity of TB care focuses on a linkage agreement with the state tuberculosis clinic. (Latent tuberculosis infection was not considered one of the chronic conditions that triggered referral to this study and has been assessed in separate study.)

**Diabetes** (primarily type 2) is also treated within the same public health model. The educational and exercise program for diabetes is notable. About a quarter of the patients identified as diabetic are diagnosed at the jail, frequently as a result of health education about the symptoms.

**Disease-specific patient education:** HCCC dedicates significant resources to individual and group educational activities for inmates with diabetes, HIV/AIDS, and, to a lesser degree hepatitis, asthma, hypertension, and other chronic diseases. The full-time Nurse Educator meets with inmates one-on-one to provide detailed instruction in disease causes, risks for complications, ongoing management, medication schedules and behavioral changes to achieve adherence to treatment regimens. Group education is delivered on a weekly basis; sessions are generally one and one half hours in length, and provide additional self-care education, time for follow-up questions, group discussion, and peer support for ongoing disease management. The Nurse Educator is available for consultation after an inmate has been released as part of follow-up care and may also meet with the inmate’s family members to discuss the illness. Both of these functions have been particularly helpful for diabetic patients. A weekly support group for HIV positive inmates is also facilitated and typically includes a substantial educational component.
1.2.3 Health Education

A significant goal of the model is for inmates to return to their communities better educated about disease prevention and disease management than when they came to jail. At HCCC, several features of the health education components of the model are noteworthy. Two dedicated full-time staff—a Health Educator and an HIV Educator—plan and deliver health education to inmates. Health education is also incorporated into routine nursing and physician visits, and staff and volunteers from outside community service agencies such as AIDS service organizations and a local women’s health clinic provide additional personnel for health education and prevention programs.

Health education begins during the inmate orientation period and is delivered through a variety of methods including one-on-one education, group education, and educational resource materials. Group and individual educational programs are delivered in the inmates living quarters and in the clinic. The inmates often suggest topics for the classes and health educators develop programs to address these concerns.

Security staff is also provided with health education as part of the ongoing staff education schedule. Without the help, assistance, and support of the correctional officers, most of the educational programs would not be possible. HCCC is fortunate in that the security staff is supportive of educational efforts and sets a healthy tone for the inmates.

Education about communicable diseases and risk factors for HIV, hepatitis C, STDs and TB are incorporated into inmate orientation at HCCC. During the 72-hour orientation period, new inmates are informed of all facility rules, policies, and operations, including how to use the health services department while in the facility and the health education programs that are available.

Given the diversity of the inmate population, the health educators design and develop programs and materials that will be culturally and linguistically appropriate. Special attention is paid to developing health education tools that do not require advanced literacy skills for comprehension. Educational materials such as videos, brochures, posters and pamphlets are available in English and Spanish. The health services staff include educational information in all clinical encounters and refer inmates to particular groups and more intensive one-on-one education based on specific needs and health issues.

1.2.4 Continuity of Care Services

The discharge planning process for inmates with chronic medical and mental health conditions involves assessment, development of a discharge plan, referral to appropriate community resources, advocacy for clients, and scheduling and preparing for initial health care appointments once released. It also often involves addressing the vocational, housing, and financial assistance needs of inmates, including applications for governmental support programs (e.g., Medicaid, Social Security), and monitoring the legal processes of parole, probation or day reporting status.

Case management is a multi-step process, which ensures coordination of medical, and specialty care and access to a range of appropriate medical, psychosocial, and social services for the client and
family and which promotes and supports the independent functioning of the client and family.\textsuperscript{7} In the jail setting, it also includes discharge planning. The social case management program at HCCC arose from expanding the HIV case managers’ responsibility to include persons with other chronic medical conditions and basing their duties on an inclusive definition of case management as delineated by Indyk\textsuperscript{8}, Piette\textsuperscript{9} and others. According to Indyk and colleagues, “there are core functions of an HIV case manager … based on the multiple challenges faced by persons affected by HIV, the case manager must be able to rely on skills and a knowledge base that encompasses sensitivity to the psychosocial issues of drug use, chronic illness, poverty and discrimination.” Piette and colleagues emphasize that “more weight is placed on the experience of case managers with populations affected by HIV than with academic or theoretical training in social case management.”\textsuperscript{10}

**Team Approach**

To date, the most successful staff structure at HCCC has been a team approach with dually-based case managers and physicians and jail-based primary nurses and nurse practitioners, this group accesses the expertise of the discharge planner and mental health discharge planner as needed. Incoming inmates are assigned to one of four health care teams based on their zipcode, and all are eligible for mental health and general discharge planning services.

**Medical Staff**

Each team is assigned 1-2 physicians who come into the jail for half a day per week and are based at one of four designated community health centers or other community medical provider (e.g., the hospital) for the rest of the week. One primary nurse and one nurse practitioner are assigned to each team and are based at the jail full time; they provide the majority of the medical care.

**Case Management**

The case managers are based at the jail three days per week and at one of the community health centers for the other two days. Case managers begin working with clients when a need is identified, typically near intake, and continue to provide case management during incarceration and in the community after discharge from HCCC, including linking clients to medical and some non-medical services in the community. Historically, the case manager position served HIV-positive inmates only, but the responsibilities were expanded (during the early period of the evaluation project) to include other chronic medical conditions. This expanded model resulted in the added benefit of increased confidentiality of HIV status, because receiving services from a case manager was no longer exclusively seen as indicative of HIV-positive status. HIV-negative inmates are referred to case management based on need balanced with resources. However, the capacity is insufficient to case


manage all patients within health services even with the program enhancements discussed in section 1.3. First priority continues to be the patients with HIV, and inmates with a shorter length of stay are less likely to receive case management.

**Discharge Planning**
The discharge planning nurse is jail-based only but interacts with numerous community agencies and resources including the courts, placement facilities, and medical care providers. The discharge planning nurse typically manages care for inmates with complex medical needs including those requiring placement in skilled nursing facilities, nursing homes, and hospitalization. The discharge planning nurse also serves as the health services department liaison with the HCCC classification department. Referrals to the discharge planning nurse can come from any member of the health care teams, correctional officers, counselors, or from the inmates themselves. The discharge planning nurse begins working with the patient at the time that need is identified and seems most appropriate, whether at intake or closer to discharge.

<table>
<thead>
<tr>
<th><strong>After Incarceration Support Services</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>As part of an ongoing facility-wide program, HCCC provides After Incarceration Support Services (AISS) to inmates and releasees. This set of services is provided to all discharged inmates regardless of health status, and offers another mechanism for follow-up and support for inmates. While the Health Services Department oversees health needs, the AISS program focuses on education, job training, employment, family support, and reintegration.</td>
</tr>
</tbody>
</table>

### 1.2.5 Mental Health

Mental health services are provided by a contracted, non-profit vendor, Behavioral Health Network. This provider delivers on-site outpatient and inpatient services at the jail of the health services department. The mental health services staff includes psychiatrists, social workers, clinicians, administrators, and program managers. Outpatient services are provided during business hours and there is a small inpatient unit for 24-hour care.

The methods of delivering mental health care mirror those of other clinical care. The triage and sick call system previously outlined are also utilized to provide mental health services in the inmates’ housing units. Mental health clinicians are assigned to housing towers and respond to inmate requests and staff referrals for counseling. Clinicians see the inmates in the environment where the behavior occurs and where the stressors are more evident than in the health services department. Emergency mental health needs are met on-site within an hour while non-emergency services are provided under the triage system.

A dedicated mental health discharge planner who is jail-based only and does not continue working with patients after release, meets with sentenced inmates several times in the three-month period prior to release, and with those pre-trial inmates identified as high-need. Inmates are connected to a mental health provider in their community that is accustomed to working with the community health centers. The model calls for inmates to leave the facility with five days worth of medications, a prescription for replenishment of medications, and an appointment with an identified mental health provider in the community of return. The discharge planner arranges the first post-release appointment to maintain continuity of care, though this has not been achievable for all those receiving some discharge planning.
To date however, the dually-based team structure has not been fully realized, primarily due to the different structure of mental health care service delivery in the community. Efforts are underway in the community health centers to increase mental health services that could, among other things, permit implementing the dually-based team structure.

### Regional Evaluation and Stabilization Unit (ESU)

One notable feature of the mental health services at HCCC is the Evaluation and Stabilization Unit (ESU). This 13-bed inpatient program on the grounds of HCCC provides intensive, short-term psychiatric evaluation and treatment on a regional basis. Patients are also referred from the three other smaller county jails in the region. The typical stay is less than 14 days.

### 1.3 Program Enhancements for Clinical Services and Evaluation

The Hampden County model had been in place for several years prior to this study but without the full complement of staff envisioned in the model: jail-based primary nurse and nurse practitioner, and community and jail-based physician and case manager. Grants from the Centers for Disease Control and Prevention (CDC) and the Center on Crime, Communities and Culture of the Open Society Institute supported several personnel to complete these teams and enhance clinical services. These enhancements included:

1. Two full-time case managers, bringing the total to up to 3.5 FTEs. This allowed the focus to broaden from HIV case management, which had been the sole role of the existing case manager funded through the Massachusetts Department of Public Health HIV program, to include case management for other chronic medical problems (e.g., hepatitis, diabetes, cardiovascular disease.)

2. One additional full time health educator from March 2000 through February 2002.

3. One full-time information system specialist, beginning in January 2000, improved HCCC’s ability to obtain and work with data from the old (now unsupported) electronic medical record and assist with the transfer to a more modern “user-friendly” system.

### Related Evaluation Studies and Presentations

Over the course of the study period for this evaluation, HCCC and Abt Associates were engaged in several other program evaluations including:

- Assessment of effectiveness and economic analysis of urine-based and other algorithms for screening for chlamydia and for partner services to partners of those infected. (Conducted by HCCC, Massachusetts Department of Public Health, CDC, and Boston University School of Medicine.)
- Assessment of screening for and treatment of latent tuberculosis infection outcomes. (Conducted by HCCC.)
- Economic analysis of HIV treatment services. (Conducted by HCCC and Abt Associates.)
- Economic evaluation of the HIV counseling and testing program. (Conducted by HCCC and CDC.)

During the evaluation study period, members of the HCCC and Abt Associates research teams made a number of presentations on study design and results. These are listed in appendix 1. Reports and findings are available on request from the authors.
Chapter 2

Methodology and Data Sources

2.1 Study Design

2.1.1 Objectives

We undertook this prospective study to examine the health status, health utilization, and health risk behaviors of inmates and releases of the Hampden County Correctional Center (HCCC) with chronic serious medical and/or mental conditions and to assess the effects of HCCC’s public health model on selected health-related outcomes in the community after release. We also sought to understand patients’ perceptions of the health services they received in jail and in the community and to identify barriers and facilitators to health services utilization in the community. These evaluation findings can be used to inform correctional and public health policies and health interventions targeting this vulnerable population.

2.1.2 Criteria for Admission to the Study

All HCCC inmates who met the following criteria were eligible to participate in the study:

1. They were admitted to from HCCC in the study recruitment period (April 5, 2000 through September 16, 2001). Only those also released before September 16, 2001 were included in the final study sample.

2. They were identified by HCCC staff as having a serious chronic medical or mental condition. A qualifying chronic medical condition was defined as a physical problem that ordinarily requires regular medication or at least three visits a year to a medical practitioner. Qualifying mental health conditions included Axis 1 diagnoses of schizophrenia, major depression, and bipolar or post-traumatic stress disorders. The distribution of the medical and mental health conditions of the study participants are summarized in section 3.4.

3. They had been in the community (not incarcerated) for at least three of the six months prior to the index incarceration (the incarceration during which they were recruited for the study). The reason for this stipulation was to insure comparability on items at baseline (asking about the six months prior to incarceration) and a comparable six-month follow-up period post-release. Thus, participants who were not in the community for at least a full three months prior to their index incarceration were not eligible for the study. (At the beginning of the study, participants were required to have been in the community for five of the six months prior to the index incarceration but this criterion was relaxed to three months during the last six months of the study recruitment because of the need to increase enrollment. Rates of health care utilization, using the number of days not institutionalized as the denominator were used in the regression model to account for differences across the study sample.)
The study goal was to offer participation to all qualifying inmates. A total of 336 individuals were initially recruited into the study, and of these, 200 were released into the community during the study period and referred for follow-up. Study recruitment procedures are detailed later in this chapter and the characteristics of the members of the recruited samples are summarized in chapter 3.

2.1.3 Outcome Measures

Primary Outcomes
The study investigated changes in the following primary outcomes:

- health services utilization in the community, with the hypothesis that participation in the HCCC public health model interventions would lead to an increase in primary care visits in the community and a decrease in hospitalization and use of emergency rooms for medical or mental health problems after release; and

- self-reported health status (using a standard self-assessment scale), with the hypothesis that participants would perceive their health to be improved following participation in the interventions.

Intermediate Health-Related Outcomes and Mediating Factors
We also examined intermediate health-related outcomes and mediating factors, including:

- the proportion of patients who attended a pre-scheduled community follow-up appointment or who saw other health care providers in the 30-days after release;

- patients’ perceptions of and satisfaction with health care services in jail and in the community; and

- barriers to and facilitators of obtaining health care in the community.

Secondary Outcomes
In addition, we explored the following secondary outcomes, which are not directly addressed by the core HCCC public health model interventions:

- cigarette smoking, with the hypothesis that HCCC’s smoking prohibition and smoking cessation programs may encourage decreases in smoking;

- recidivism, hypothesizing that the HCCC public health model may have broader salutary effects for participants that may result in decreased recidivism.

Substance Use
Finally, we examined patterns of alcohol and illicit drug use and participation in treatment among study participants in the period before their index incarceration and post-release. However, because reduction of substance use is not an explicit aim of the HCCC model, we did not explore the relationships between participation in the interventions and changing rates of substance use.
2.2 Data Sources and Data Collection Methodology

Data sources included participant interviews and data from the jail medical records and administrative files. Trained interviewers at HCCC conducted in-person baseline interviews generally 3-5 days after admission to jail, using an instrument with over 200 questions. Subjects were asked questions about their situation in the 30-day or 6-month period prior to admission. Two follow-up interviews were conducted over the telephone approximately 30 days and 6 months after the inmates were released from jail.

The analyses of primary health-related and smoking outcomes were based on a comparison of survey responses in the intervals before admission to jail and six months after release from jail. Data for the intermediate health outcomes and mediating factors come primarily from the 30-day post-release interviews.

HCCC administrative data provided information about clinical diagnoses and the types and frequency of health services utilization in the jail. In addition, for the separate analysis of recidivism, we used the official criminal history records of the Massachusetts court system.

2.2.1 Analytic Approach For Primary Outcomes

First we tabulated the levels and changes for the final and intermediate outcomes, and then we used regression models to estimate whether or not the HCCC intervention partly accounted for those changes. Inferences were based on a dose-response approach. That is, other things equal, we hypothesized that inmates who participated in HCCC health services at a higher rate would have greater post-release changes in their health-specific behaviors than would inmates who participated in HCCC health services at a lower rate. Five variables intervention captured that dose response:

1. Visits with medical doctor or mental health care provider (number of visits);
2. Meetings with a case manager (number of meetings);
3. Receipt of discharge planning (yes or no);
4. Receipt of case management (yes or no); and
5. Whether a pre-release arrangement of a post-release medical or mental health primary care appointment in the community was set up (yes or no).

Validity challenges—specifically selection bias—arise as a result of using a dose-response approach to evaluate the HCCC intervention. Individuals who participated in the HCCC interventions may have had different outcomes from nonparticipants for reasons inherent to the participants themselves rather than to the effect of the interventions (e.g., differences in their motivation or in their actual
need for services). As detailed in chapter 4, we used an instrumental variable approach\textsuperscript{11,12} to meet this validity challenge.

To explain this solution, let equation [1] represent the relationship between an outcome variable (Y), a control variable (X), and an intervention variable (V):

\[ Y = X\beta + V\gamma + e \]

where $\beta$ and $\gamma$ are parameters and $e$ is a random error term. Given that $V$ represents the intervention, the parameter vector $\gamma$ represents the \textit{treatment effect}. We seek an unbiased estimate of this treatment effect. When the intervention variable $V$ is correlated with the error term $e$ —as it would be if an omitted third variable like motivation is correlated with both $V$ and $e$ —then $\hat{\gamma}$ will be biased. This is selection bias.

One way to deal with selection bias is to identify a new variable $W$ that is highly correlated with $V$ but is uncorrelated with $e$. If we use $W$ in place of $V$ in equation [1], then $\gamma$ will be unbiased. To get this variable $W$, a practical approach is to estimate the regression:

\[ V = Z\alpha + u \]

where $Z$ is a variable that does not appear in [1], $\alpha$ is a parameter, and $u$ is a random error term. Then:

\[ W = Z\hat{\alpha} \]

To estimate the treatment effect, we next estimate the regression:

\[ Y = X\beta + W\gamma + e \]

Applying this approach requires two steps. The first step is to estimate equation [2] to get the instrument (W). The second step is to estimate equation [4] to get the estimated treatment effect ($\hat{\gamma}$).

performance score), \(^{14}\) respondents’ self-reported interest in receiving help for their condition, and time spent in jail. Time spent in jail is especially important. It plays a significant role in explaining exposure to these interventions, because the longer one is in jail, the more likely he or she is to have received a large dose of the intervention. Because we had no reason to believe that time spent in jail by itself would affect post-release health-related behaviors, time spent in jail is an identifying variable, appearing in equation [2] but not in equation [4]. Having an identifying variable is crucial to the application of the instrumental variable approach, so the fact that people spent varying lengths of time in jail was critical to drawing valid inferences about treatment effectiveness.

Second, there are multiple versions of equation [4], one for each of the outcome variables: post-release medical and mental health visits to primary care providers and emergency rooms and hospital admissions, and self-reported physical health. These regressions are non-linear, based on negative binomial and logistic regressions. Each regression accounted for the baseline value of the outcome measure, the length of the follow-up period, and a few other control variables (see chapter 4).

Although the use of instrumental variables can help overcome validity challenges arising from selection bias, the instrumental variable approach is no panacea. This approach can result in the loss of statistical power because a prediction of \( V \) is used in place of the true value of \( V \). This loss is minimized by the availability of a good identifying condition, but we cannot fully overcome the loss of power. The problem of statistical power was exacerbated by the small sample sizes, which have a further complication in that estimated standard errors have asymptotic justification, which might be questioned for some parts of this study. Ignoring the problem with asymptotic justification, the low statistical power means, in essence, that our assessment of treatment effects faced a stringent standard of proof.

### 2.3 Recruitment and Data Collection

#### 2.3.1 Recruitment Into the Study

Study recruitment was conducted from April 5, 2000 through September 16, 2001. The final study sample (n=200) comprised inmates with chronic medical or mental health problems admitted to and released from the jail during this period who conducted the baseline interview. Newly admitted inmates are processed through the administrative intake center and come to the medical area for placement of a TB skin test and the other intake evaluation activities described in section 1.2. They then remain in a separate orientation and classification area for three days until the TB test is read. On day three, inmates who are not bailed out or otherwise released come to the medical unit for a physical examination and clinical evaluation.

Table 2-1 shows the number of individuals referred to the study, interviewed at baseline, released, interviewed at 30 days post-release and interviewed at 6 months post-release.

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\(^{14}\) The Karnofsky Performance Scale Index allows patients to be classified as to their functional impairment. The lower the Karnofsky score, the worse the survival for most serious illnesses.
Table 2.1

Number of Individuals Referred to the Study, Interviewed at Baseline, Released, Interviewed at 30 Days Post-Release and Interviewed at 6 Months Post-Release

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referred to Interviewers</td>
<td>576</td>
</tr>
<tr>
<td>Completed Baseline Interview</td>
<td>336</td>
</tr>
<tr>
<td><strong>Released (Eligible For Follow-Up)</strong></td>
<td>200</td>
</tr>
<tr>
<td>Completed 30-Day Follow-Up Interview</td>
<td>124</td>
</tr>
<tr>
<td>Completed 6 Month Follow-Up Interview</td>
<td>131</td>
</tr>
</tbody>
</table>

At this point, the nurse practitioners who conduct the physical examinations were asked to identify inmates with qualifying chronic medical conditions for the study and to record a Karnofsky level of functioning score. A qualifying chronic condition was defined as a physical problem that ordinarily requires chronic medication or at least three visits a year to a medical practitioner. At this time, inmates were also evaluated by a psychologist for qualifying mental health conditions including Axis I diagnoses of schizophrenia, major depression or bipolar or post-traumatic stress disorders. Inmates with a qualifying medical or mental condition were referred to one of the two bilingual interviewers specifically trained to recruit study subjects and administer baseline interviews for the study. The final study criteria was that inmates had spent at least five of the six months prior to the index incarceration in the community, this being determined at the time of recruitment into the study; this criteria was relaxed to three of the prior six months during the last six months of the study.

2.3.2 Baseline Interview

The research interviewer explained the study and made clear the voluntary nature of participation. Willing participants signed an informed consent form, several forms granting access to medical records, and a form permitting contact for study follow-up after release from the facility. Inmates were interviewed individually in a private setting using a twelve-page paper instrument containing 210 questions (baseline, 30-day and six month instruments are included in appendix 2); additional information was obtained from the inmate’s records in the jail data management system. If more inmates were identified than could be interviewed during the morning physical exam intake period on a particular day, these inmates were called back to the medical unit over the next several days. The completed baseline interviews were double entered into an EpiInfo6 database to assure accuracy of data entry.

2.3.3 Referral for Post-Release Follow-up Interviews

Inmate discharge lists were checked weekly to identify study participants leaving the facility. To be eligible for referral for follow-up interviews, the released inmates had to have completed a baseline interview, signed the informed consent forms, been confirmed as having an eligible chronic medical or mental health condition, and have been discharged to the community (rather than transferred to a prison or other facility). As part of the referral for community follow-up, the electronic medical record database and paper medical record were reviewed to document up to two chronic medical conditions and any mental condition identified at any point during the inmate's stay. The number and type of contacts with medical staff were recorded from the medical records into the EpiInfo6 database.
at this time also. A list of the eligible released inmates was sent to Abt Associates every Friday for 
follow-up interviews in the community. The data necessary for follow-up in the community were 
sent to Abt Associates in a secure coded Excel file: these data were: name, age, contact information, 
study ID number, jail admission and release date, up to two physical and one mental health diagnoses, 
and whether the participant had been released with medication for any condition.

2.3.4 Follow-Up Interviews

Follow-up interviews were conducted at 30 days and six months after release. Study participants 
were contacted for the 30-day interview from May 2, 2000 through October 16, 2001. The window 
period for the one-month interview was three to five weeks after the index release (the release from 
the incarceration during which the subject was enrolled in the study). Study participants were 
followed for the six-month interview from November 17, 2000 through May 3, 2002. The original 
window period for the six-month interview was five to eight months after the index release. 
However, in March 2001, the window was opened, so that subjects could be contacted for the six-
month interview at any point until the study ended. This choice was made to increase study retention. 
As discussed in chapter 3, three quarters of released inmates completed one of the follow-up 
interviews and over half completed both. We controlled for the resulting variation in length in the 
follow-up period (length of the index incarceration) by calculating the rate of in-jail and post-release 
service utilization and using this figure in the models, this is described in more detail in section 4.3.

The 30-day interview was 25 pages long and contained 82 questions; the six-month interview was 42 
pages long and contained 147 questions (both interviews included skip patterns that allowed the same 
question to be asked to subjects released under different circumstances, both instruments may be 
found in appendix 2).

Administration of the Follow-Up Interview

Both follow-up interviews were conducted using computer-assisted telephone interviewing (CATI) 
technology. To take part in the interview, participants called a toll-free 800 number that they were 
given when they enrolled in the study and was included in all materials sent to them during the study 
period. Interviewers also used the information gathered on the locator form to try to contact the 
participant. It was not possible to use CATI or computer-assisted personal interviewing (CAPI) 
technology to administer the baseline interview as it was conducted at the jail where the study 
subjects would not have been able to use the telephone to call in and it would not have been feasible 
to have a designated computer for the interviewers to use. The CATI system was programmed and 
administered by the Abt Associates Survey Department using instruments developed by the research 
team.

Abt Associates operates a telephone center in Hadley, Massachusetts. The center answered calls for 
this study seven days a week (Monday-Friday 9AM-9PM, Saturday 11AM-5PM and Sunday 12 
Noon–9PM). Fifteen interviewers were trained to administer the 30-day interview and 13 
interviewers were trained to administer the six-month interview. Two Spanish speaking interviewers 
were trained to administer both interviews.
Abt Associates uses the Research Machine (often referred to as the “Bellview” system), an integrated system, for its CATI surveys. The Research Machine was developed by Pulse Train Technology Ltd. in Guilford, England and introduced in 1976. This computer-assisted survey system provides a comprehensive package of capabilities, including questionnaire authoring, interview administration, automated sample and call management, sophisticated edit-checking capacities and computer-assisted data entry in a state-of-the-art system capable of a wide variety of data capture tasks.

CATI has advantages over paper and pencil interviews in that it can incorporate data about the individual respondent from outside sources (e.g., from a screener question, previous interviews, sample frame files, etc.). Such data are often used to drive skip patterns or define customized “text substitutions” (e.g., subjects with different criminal justice profiles). For longitudinal surveys such as this one, data from previous interviews may be used to anchor additional data collection (e.g., mental health, medication adherence).

CATI conducts checks of allowable values before proceeding to subsequent questions. When a question fails an edit check, the interviewer is presented with one of a variety of methods for reconciling the response, including: an error or warning message, instructions for the interviewer to probe, a structured probe itself with instructions for the interviewer to modify the entry as needed, a structured probe designed as a separate question with its own data field for entry of the new response or the automatic presentation of help screens providing the interviewer with information and definitions that will help to reconcile the respondent's answer. The Bellview system provides data security at a number of levels; each user is assigned a unique user name, password and rights that are consistent with their duties.

CATI eliminates the need for a two-part data collection and data entry process, thereby reducing data cleaning time. Since CATI is a telephone system where the subject can call in or be called by the interviewer, the amount of time required for field tracking of study subjects is reduced. We employed up to three “trackers” at a time to track and locate subjects who could not be reached by telephone for the interviews. These trackers were from the communities that the study participants lived in and had connections to both the target population and to the service providers in the area, including drug treatment centers, clinics and the jail. An Abt Associates field manager provided training and supervision, and coordinated with the telephone center to provide the names of subjects to be tracked and their locator information. Thirty-day interview subjects were referred to trackers seven days after they were referred to the telephone center, and both the trackers and the telephone center would attempt to locate the subject simultaneously until the study window closed. Six-month interview subjects were referred to trackers for follow-up if the telephone center was unable to locate them. Subjects were tracked for the six-month interview through the end of the study. Trackers attempted to locate the subject by going to the addresses given on the locator forms for themselves and their contact people. If nobody was home, they left form letters asking the subject or contact person to call the tracker or the telephone center. Trackers were equipped with cell phones so that if subjects were found, they could call in and conduct the interview on the spot.

Incentives

Participants received incentives for completing each of the two follow-up interviews. A gift certificate to a large local mall (the Holyoke Mall at Ingleside) was mailed to the participant after each interview was completed. Participants received a $20 gift certificate for the 30-day interview and a $30 gift certificate for the six-month interview (for the first three months of follow-up there was no incentive given for the 30-day interview). In addition, subjects were sent a $5 phone card with
reminder letters sent out 10 days after release (for the 30-day interview) and four months after release (for the six-month interview).

**Tracking and Locating Study Participants**
Several outreach strategies were employed to stay in contact with study participants and to keep the evaluation in their minds.

- Study subjects received a wallet-sized card with information about the study (telephone center telephone number and hours of operation, reminder about the incentives, space for the baseline interviewer to write in the follow-up interview dates) when they enrolled in the study at the jail.

- Study subjects were mailed a $5 phone card and a reminder letter at the time of their release (for the 30-day interview) and four months after release (for the six-month interview). At five months after release (at the time that the study window opened) they were sent another reminder letter about the six-month interview.

- A reminder letter with the date of the six-month interview and the call-in information was included with the gift certificate for the completion of the 30-day interview.

- At every point of contact, participants were advised to update their contact information if they moved or changed telephone numbers by calling or leaving a message on the telephone center answer machine.

The Abt Associates research and survey staff collaborated with the HCCC research team to find study participants after release. Every week the Abt Associates Survey Department sent the HCCC research staff a list of names of the subjects whose windows were open for either the 30-day or six-month interview. This list was checked against HCCC’s current inmate database to see if any study participants were back in jail. If one was at the jail, the jail-based research staff attempted to have the subject come to the health services department and call the telephone center at a prearranged time to complete the interview. The research team decided not to use the dually based case managers to contact the subjects at the health center if they came in for services as it was determined that this would mingle the intervention with the evaluation, biasing the results. It was also seen as a burden to the case managers to facilitate evaluation activities on top of their existing program duties.

**Barriers to Locating Subjects For Follow-Up Interviews**
We encountered many barriers to finding subjects for post-release interviews. After release subjects were often homeless or had unstable housing, so it was difficult for the telephone center or the trackers to locate them, and they did not have the resources to call in to conduct the interviews. Often this instability was associated with drug and alcohol use, and this also made it hard to contact subjects, or prevented us from being able to interview subjects who were not sober when we reached them and then did not call back. Many study participants were re-incarcerated at HCCC and other facilities during the follow-up period. When the telephone center or a tracker was informed by a contact person that a subject was incarcerated, we would contact HCCC and attempt to arrange an interview there. However, it was almost always impossible to set up the interview for inmates incarcerated at other facilities, and even at HCCC, inmates were frequently released or transferred.
before the interview could be arranged. Some subjects could not be reached because they moved out of the area after being released from jail.

In some cases the study subjects (or their contacts) did not trust the telephone center or the tracker and did not wish to be part of a study. Some may not have wanted to participate in a project associated with the jail, since they wanted to forget about that experience and move on. Others were just not interested in being part of an evaluation that they had signed up for at intake to the jail months before.

### Confidentiality

We took several steps to preserve the confidentiality of study participants. The study was called the Community Health Survey in all communication with participants so that no one would be able to connect the follow-up interviews with the jail, incarceration or any particular health condition (especially HIV/AIDS). In addition, the follow-up interview questions were written in such a way that the subject would not have to use language in his or her responses that would violate confidentiality if another person could overhear the interview (i.e., the subject would not have to say anything related to jail, incarceration, or specific medical conditions). When interviewers or trackers attempted to contact study participants or their contact people, they never included any references to the jail, incarceration, or any medical conditions in the messages and materials they left.
Chapter 3

Characteristics of Study Samples

In this chapter we describe the recruitment of the baseline sample at the Hampden County Correctional Center (HCCC) and compare the characteristics of inmates identified as eligible for the study, actually interviewed at baseline, and those reached for post-release follow-up. We also compare the characteristics of those who participated in post-release follow-up interviews with those who were lost to follow-up.

3.1 Description of the Group Referred to the Study

The group of inmates with chronic medical and mental health conditions eligible for study follow-up was not totally representative of all newly admitted inmates with these conditions. There are several reasons for this. Approximately thirty percent of the inmates left HCCC before the day three physical examination and therefore were not available to be evaluated and recruited, and the consistency of referrals by the nurse practitioners varied somewhat over time.

As indicated in Table 3.1, among the 576 inmates identified by the nurses and referred to the HCCC research interviewers, 336 conducted the baseline interview and 240 did not. There were several reasons that eligible inmates were not interviewed, some refused to participate, a few were too sick or considered too dangerous to be interviewed, and some that were missed on busy mornings ended up being discharged before they could be interviewed. Among the 336 who were interviewed, there were other factors that prevented them being referred for the follow-up interviews, some were not

| Table 3.1 |
|---|---|

| Outcomes for Inmates Referred to the Study Interviewers (n=576) |
|---|---|---|
| Referred to Study | 578 | 100.0 |
| Interviewed at Baseline | 336 | 58.3 |
| Referred For Follow-Up Interviews | 200 | 34.7 |
| Still Incarcerated At Study End | 89 | 15.5 |
| Not Released to Community | 25 | 4.3 |
| Eligible (Not Referred For Follow-Up) | 11 | 1.9 |
| No Qualifying Condition | 11 | 1.9 |

| Not Interviewed at Baseline | 240 | 41.7 |
| Less Than Three Months On Street | 112 | 19.5 |
| Refused to Participate | 54 | 9.4 |
| Released Before Baseline Interview | 53 | 9.2 |
| Safety/Illness Issue | 21 | 3.6 |
discharged directly back to the community, others remained incarcerated at the cut-off date for the follow-up cohort of October 16, 2001, and, the most common reason, many did not meet the “time on the street” criterion (i.e., that they spent at least three of the six months prior to their index incarceration in the community). Ultimately, 200 of the inmates who were interviewed at baseline were referred to Abt Associates for follow-up in the community after discharge.

### 3.2 Comparison of the Groups Identified For Study Referral, Interviewed at Baseline, and Referred For Study Follow-up

In Table 3.2 (columns 1-3) the frequency distributions for six descriptive variables are compared for the groups of inmates who were identified with a qualifying chronic medical or mental health condition, interviewed at baseline, and referred for follow-up interviews (final study sample); because they are routinely recorded in the jail data management system, these data are available on inmates who did not complete the baseline interview. Columns 4 and 5 of the table indicate the interviewed and referred rates by these basic descriptive variables and include tests for statistical significance of differences.

There were several variables for which statistically significant differences among groups were found. The significant difference in distribution by sex in the interviewed group was due to the fact that there are a smaller number of female inmates at the jail than males; to address this issue we made a special effort to recruit females for the study. Length of stay was another significant variable with those with short stays (less than 30 days) less likely to participate in the study, and those with the longest stays (over 91 days) less likely to qualify for referral for follow-up. Inmates with expected stays of less than 30 days were less likely to agree to be interviewed or left before an interview could be completed. Inmates still incarcerated at the referral cut-off date are included in all identified and interviewed categories but could not be referred after the cut-off date. This led to an accumulation of longer stay inmates who were not referred for follow-up. The difference in referral for follow-up by race disappears when controlling for length of stay since race was strongly related to length of stay as well as to referred status. There was a significant (p=0.0001—data not shown) relationship between race and length of stay, with whites having the shortest stays, Hispanics the longest, and blacks intermediate.

### 3.3 Description of the Group Interviewed at Baseline

The frequency and percentage distribution for sixty-one key variables is presented in columns 1 and 2 of tables A3.1-8 (see appendix 3) for the 336 inmates who were interviewed at baseline. Variables at the margin are based almost always upon the full sample. Indented variables are based on a sub-group from the previous question at the margin (these questions are embedded in a skip pattern). As might be expected given the study eligibility criteria, the baseline sample appeared to be in relatively poor physical and mental health. However, they reported surprisingly high levels of participation in health care. Although we are unable to quantify this, it is likely that some of the respondents’ health care occurred during earlier periods of incarceration at HCCC. Respondents also reported relatively high rates of health insurance coverage. Smoking, substance use, sexual risk factors, and violence (both perpetration and victimization) were prevalent in this group.
### Table 3.2
Comparison of Basic Descriptive Characteristics of Newly Admitted Inmates With Chronic Conditions Who Were: Identified (n=576), Interviewed (n=336), and Referred for Follow-Up (n=200)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Identified (1)</th>
<th>Interviewed (2)</th>
<th>Referred (3)</th>
<th>Interviewed/Identified (58.3%) (4)</th>
<th>Referred/Interviewed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>90.8</td>
<td>88.4</td>
<td>89.0</td>
<td>X² = 5.59</td>
<td>56.8</td>
</tr>
<tr>
<td>Female</td>
<td>9.2</td>
<td>11.6</td>
<td>11.0</td>
<td>X² = 0.18</td>
<td>59.9</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-34</td>
<td>47.9</td>
<td>49.1</td>
<td>47.0</td>
<td>X² = 0.46</td>
<td>X² = 0.88</td>
</tr>
<tr>
<td>35-69</td>
<td>52.1</td>
<td>50.9</td>
<td>53.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>29.2</td>
<td>28.6</td>
<td>34.5</td>
<td>X² = 0.27</td>
<td>57.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>53.5</td>
<td>53.3</td>
<td>46.5</td>
<td></td>
<td>51.7</td>
</tr>
<tr>
<td>Black</td>
<td>17.5</td>
<td>18.2</td>
<td>19.0</td>
<td></td>
<td>41.4</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretrial</td>
<td>67.5</td>
<td>68.2</td>
<td>66.0</td>
<td>X² = 0.14</td>
<td>X² = 1.06</td>
</tr>
<tr>
<td>Sentenced</td>
<td>32.5</td>
<td>31.8</td>
<td>34.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Length Of Stay</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;31 Days</td>
<td>23.4</td>
<td>19.8</td>
<td>24.5</td>
<td>X² = 12.83</td>
<td>X² = 41.90</td>
</tr>
<tr>
<td>31-90 Days</td>
<td>18.8</td>
<td>21.7</td>
<td>29.5</td>
<td></td>
<td>47.4</td>
</tr>
<tr>
<td>91+ Days</td>
<td>57.8</td>
<td>59.2</td>
<td>46.0</td>
<td></td>
<td>76.6</td>
</tr>
<tr>
<td><strong>Health Center Team</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighborhood</td>
<td>24.7</td>
<td>24.4</td>
<td>25.5</td>
<td>X² = 4.36</td>
<td>X² = 0.49</td>
</tr>
<tr>
<td>Brightwood</td>
<td>27.8</td>
<td>25.6</td>
<td>24.5</td>
<td></td>
<td>53.8</td>
</tr>
<tr>
<td>Holyoke</td>
<td>27.1</td>
<td>26.8</td>
<td>27.0</td>
<td></td>
<td>57.7</td>
</tr>
<tr>
<td>Southwest</td>
<td>20.5</td>
<td>23.2</td>
<td>23.0</td>
<td></td>
<td>66.1</td>
</tr>
</tbody>
</table>

* Significant values in bold type.

### 3.3.1 Self-Assessed Health Status

Fifty three percent of baseline respondents rated their health as poor or fair, 39 percent experienced moderate or severe physical pain, 34 percent had little or no help available to them from family or friends, and 61 percent were “quite a bit” or “extremely bothered” by emotional problems. For the six-month period prior to incarceration, 40 percent reported physical limitations on usual activities and 41 percent reported limitations due to emotional or mental health problems.

### 3.3.2 Health Care Utilization

Among the interviewed inmates, 69 percent had received medical care in the six months prior to incarceration and 29 percent of these saw a doctor 3 or more times. Eighteen percent of respondents
were admitted to the hospital and 42 percent received care at an emergency room in the six months prior to incarceration. Medicaid paid for 66 percent of respondents’ last medical care visits.

3.3.3 Mental Health Care

Fifty-eight percent of the sample reported ever having been diagnosed with or treated for a mental health condition. Among this group, 65 percent received care in the six months prior to incarceration and 47 percent of these had seven or more visits to mental health care providers, 26 percent had received overnight mental health care, and 29 percent went to the emergency room for a mental health problem. Medicare paid for 87 percent of respondents’ last mental health care visits.

3.3.4 Cigarette Smoking

Over 81 percent of the respondents had smoked a cigarette (not including marijuana) in the thirty days before incarceration. Sixty-six percent of these smoked a pack or more a day and 76 percent wanted to quit smoking.

3.3.5 Alcohol Consumption

In thirty days prior to incarceration, 70 percent of respondents drank alcohol, with 61 percent drinking three or more days a week, and 76 percent drinking five or more drinks at a time. Sixty-eight percent of current and former drinkers had participated in an Alcoholics Anonymous or other 12-step program for their own drinking problem and 32 percent had participated in an inpatient treatment program.

3.3.6 Street Drug Use

In the 30 days prior to incarceration, 44 percent of respondents smoked marijuana, 30 percent used crack cocaine, 25.3 percent used powdered cocaine, 35 percent used heroin, and 9 percent used another street drug. Fifty-three percent used any hard drug (powdered or rock cocaine, heroin, illegal prescription drugs or “party” drugs) in the thirty days prior to incarceration, with 77 percent of these using the drug three or more days per week. The primary drugs of choice for those ever using drugs were heroin (32 percent), marijuana (27 percent), and crack cocaine and alcohol (both 15 percent). Thirty-four percent of respondents reported ever injecting drugs, 19 percent in the 30 days prior to incarceration, and 58 percent of drug injectors had shared needles.

3.3.7 Sexual Behavior

In the six months prior to the interview, 32 percent of male respondents had two or more sex partners and 46 percent of these reported using a condom in the last thirty days. Some 65 percent of the sexually active had combined drinking or drugs with sex, 19 percent had sex with a member of the opposite sex that they did not know well, 59 percent claimed to have discussed safe sex with a partner, 24 percent used a condom because a partner asked them to, and 44 percent convinced a partner to use a condom.

3.3.8 HIV Testing

Seventy-seven percent of respondents had had an HIV test at some point in the past, with 13 percent of them reporting a positive test. Among those who were not tested or tested negative, 52 percent felt
they had no chance of getting infected, and 64 percent were less worried about HIV than other problems.

3.3.9 Violence

Physical violence was common in this group with 28 percent reporting that they had ever hurt someone else and 29 percent reporting ever being hurt by someone else. Forty-five percent were physically hurt as a child by a caretaker, while 13 percent reported being sexually abused as a child.

3.3.10 Living Situation

Prior to incarceration, 17 percent of the respondents were living alone and another 4 percent were homeless.

3.3.11 Education and Employment

Essentially half of the respondents had completed less than a high school education, while 18 percent had additional education beyond high school. Only 39 percent reported having a full time job before incarceration.

3.3.12 Educational/Training Programs

There was considerable interest expressed in participation in the following programs either in jail or in the community: 45 percent were interested in HIV prevention, 42 percent in disease management, 50 percent in anger management, 54 percent in adult education, 61 percent in job training. Regarding after treatment incarceration programs: 42 percent were interested in smoking cessation programs and 64 percent in substance abuse treatment.

3.4 Description of the Group Referred for Post-Release Interviews

Two hundred study participants—the final study sample—were released during the study period and referred for post-release interviews. Table 3.3 presents a summary of the nature of the health condition of individuals in the final study sample based on assessments made at the time of the baseline interview. Over 80 percent had a qualifying physical condition, nearly half had a qualifying mental health condition, and over a quarter had both a physical and mental health condition.

<table>
<thead>
<tr>
<th>Type of condition</th>
<th>Percentage of Baseline Sample with Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical health condition</td>
<td>162 (81%)</td>
</tr>
<tr>
<td>Mental health condition</td>
<td>93 (47%)</td>
</tr>
<tr>
<td>Dually diagnosed (physical and mental health condition)</td>
<td>55 (28%)</td>
</tr>
</tbody>
</table>
Table 3.4 presents the qualifying chronic medical conditions of study participants. A majority of participants in the study had either hepatitis C, asthma, or hypertension. Hepatitis C was the most prevalent physical disease among study participants, with over a quarter of participants infected.

<table>
<thead>
<tr>
<th>Medical Condition</th>
<th>Number of Participants with Diagnosis</th>
<th>Percentage of Baseline Sample with Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis C</td>
<td>51</td>
<td>26%</td>
</tr>
<tr>
<td>Asthma</td>
<td>39</td>
<td>20%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>35</td>
<td>18%</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>19</td>
<td>10%</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>15</td>
<td>8%</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>14</td>
<td>7%</td>
</tr>
<tr>
<td>Gastro-intestinal</td>
<td>13</td>
<td>7%</td>
</tr>
<tr>
<td>Seizure disorder</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td>Cardiovascular (except hypertension)</td>
<td>7</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>7%</td>
</tr>
</tbody>
</table>

Note: Total is greater than 162 because up to 2 diagnoses could be recorded per participant.

Table 3.5 summarizes the qualifying mental health conditions of study participants. Among this group almost half had a depressive or anxiety disorder, either diagnosed before admission or while in jail.

<table>
<thead>
<tr>
<th>Mental Health Condition</th>
<th>Number of Participants with Diagnosis</th>
<th>Percentage of Baseline Sample with Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>82</td>
<td>41%</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>16</td>
<td>8%</td>
</tr>
<tr>
<td>Adjustment Disorder</td>
<td>8</td>
<td>4%</td>
</tr>
<tr>
<td>Anxiety Disorder</td>
<td>6</td>
<td>3%</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>Post-traumatic Stress Disorder</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>Psychosis</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note: Total is greater than 93 because up to 3 diagnoses could be recorded per participant.

### 3.5 Inmate Characteristics Related to Referral for Post-Release Interviews

For all but a few of these variables, the inmates referred for follow-up were similar to the inmates interviewed at baseline who were not referred for follow-up. Therefore, only the significant differences are discussed below.
The frequency and percentage distribution for the key descriptive variables for the 200 inmates referred for follow-up are indicated in columns 3 and 4 of tables A3.1-8 in appendix 3. Column 5 of table A3.1 lists the proportion of inmates referred for follow-up interviews in the community on sixty-one key variables from the baseline interview. Only a limited number of variables differed between inmates referred for follow-up and those not referred. Inmates were significantly more likely to be referred for follow-up if they: reported physical limitations on usual activities (p=0.04); had received medical care in the last six months (p=0.02); had been admitted to a hospital in the last six months (p=0.001); had ever received mental health care (p=0.006); had drunk alcohol in the last 30 days (p=0.07); had not used marijuana nor the less popular street drugs in the last 30 days (p=0.027, p=0.037); had ever injected drugs (p=0.03); lived alone or were homeless rather than living with other adults (p=0.01) at the time of arrest; and had expressed no interest in an HIV prevention program after release (p=0.03).

Overall, the inmates referred for follow-up tended to be more frequent users of medical and mental health care services and tended to engage more often in risky health behaviors. Given the large number of variables tested, about three of the significant tests may have occurred by chance alone—most likely those being near the borderline of statistical significance.

### 3.6 Characteristics of Respondents and Non-Respondents to the Follow-Up Interviews

Table 3.6 shows the study retention rates at follow-up. Despite the difficulties encountered in tracking and locating study participants for follow-up interviews, three-quarters of the sample of 200 (76 percent) completed at least one of the follow-up interviews, with slightly over half completing both (52 percent). Retention rates at 30 days and six months were both more than 60 percent. Almost two-thirds of the sample completed the 6-month follow-up interview (65.5 percent).

<table>
<thead>
<tr>
<th>Status</th>
<th>Released Eligibles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both 30-Day and Six-Month Interviews</td>
<td>104 (52.0%)</td>
</tr>
<tr>
<td>30-Day Interview</td>
<td>124 (62.0%)</td>
</tr>
<tr>
<td>Six-Month Interview</td>
<td>131 (65.5%)</td>
</tr>
<tr>
<td>Either 30-Day or Six-Month Interviews</td>
<td>151 (75.5%)</td>
</tr>
</tbody>
</table>

Tables A3.1-9 in appendix 4 present a comparison of characteristics of individuals who completed at least one follow-up interview and those who were lost-to-follow-up (i.e., completed neither follow-up interview). Over 200 characteristics were compared, including demographics, length of stay in jail, and baseline survey responses. Several statistically significant differences emerged. In the six months prior to incarceration, those lost to follow-up were more likely to have had one or more mental health visits (p=0.05); more likely to have paid with their last medical (p=0.048) or mental health (p=0.016) care visit with Medicare; more likely to live alone or be homeless (p=0.003); less
likely to be employed full-time (p=0.054); more likely to engage in riskier sexual behavior (have sex with a partner not well known) (p=0.001); and more likely to have ever had an HIV test (p=0.007).

Based on these differences, we can conclude that the lost to follow-up group may have had worse outcomes than group that participated in the follow-up interviews.
Chapter 4

Health Outcomes in the Community Post-Release

4.1 Thirty Days After Release: Satisfaction With Care, Linkage to Medical Care and Barriers and Facilitators to Accessing Services

A major goal of Hampden County’s public health model of correctional health care is to provide discharge planning, community linkages, and continuity of care for inmates and releasees with medical and mental health problems. For those with serious medical problems returning to the catchment areas of four participating community health centers, literal continuity of care (i.e., having exactly the same providers care for the patient at the jail and in the community afterwards) is provided through the health care teams dually based at the jail and these community health centers. For inmates with medical problems who are not returning to the service areas of the community health centers (a small percentage) and all inmates with mental health problems but no medical problem, jail staff provide linkages and referrals to appropriate community-based providers but there is currently no literal continuity of care.

In light of these goals, a set of key questions for the evaluation is whether or not inmates received these linkages while in the jail and whether or not they followed up on them in the community post-release. It is also important to understand the barriers to and facilitators of receiving community-based care. In addition, we wish to know whether receiving the interventions offered at the jail improved participants’ self-reported health status, increased their involvement with primary care post-release, and reduced their number of emergency room visits and hospital admissions.

This chapter reports on the analysis of the outcomes relating to self-reported health status and linkages with care in the community and utilization of health services post-release. First, however, we present data from the follow-up interviews regarding participants’ satisfaction with health services at HCCC and in the community after release.

4.1.1 Satisfaction with Care at HCCC

The 30-day interview respondents were asked to rate the quality of the health care services that they received in jail and their satisfaction with the jail health care providers (Table 4.1). The six-month interview respondents who received care during the follow-up period were asked to rate the quality of the health and mental health care services they received in the community and their satisfaction with the community health care providers (Table 4.2). The six-month interview group includes some individuals who completed the 30 day interview and some who did not.

Participants rated the quality of community health services higher than jail health services. Over three-quarters rated community health care and 69 percent community mental health care as “good,” “very good,” or “excellent” compared with 58 percent for jail health care. Open-ended questioning to elicit specific problems found the waiting time for services and the treatments prescribed as the most common complaints, and this was reported by a higher percent of respondents regarding in-jail care than community care.
Table 4.1

Rating of Quality of Jail Health Services and Trust in Jail Health Staff (n=97)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Jail Health Services</td>
<td>15.5%</td>
<td>26.8%</td>
<td>16.5%</td>
<td>22.7%</td>
<td>18.6%</td>
</tr>
<tr>
<td>Trust in Jail Health Staff</td>
<td>12.4%</td>
<td>12.4%</td>
<td>24.7%</td>
<td>32.0%</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

\[a\] 1 missing value.

Table 4.2

Rating of Quality of Community Health (n=61) and Mental Health (n=54) Services and Trust in Community Health Staff (n=61)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Community Health Services</td>
<td>3.3%</td>
<td>21.3%</td>
<td>27.9%</td>
<td>23.0%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Quality of Community Mental Health Services</td>
<td>11.1%</td>
<td>11.1%</td>
<td>37.0%</td>
<td>18.5%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Trust in Community Health Staff</td>
<td>3.2%</td>
<td>11.5%</td>
<td>23.0%</td>
<td>23.0%</td>
<td>36.1%</td>
</tr>
</tbody>
</table>

\[a\] 5 missing values.
\[b\] 2 missing values.

Trust in HCCC health care providers was also somewhat lower than in the community-based health workers. Just under three quarters of respondents reported having “some”, “a lot”, or “complete” trust in the jail health staff, compared to 82 percent of respondents’ trust in community health staff.

4.1.2 Linkages With Community-Based Health Care At 30-Day Follow-Up

Table 4.3 summarizes key findings from the 30-day follow-up interview relating to linkages to and utilization of health care in the community. This reveals that just over half of inmates with a medical condition received an appointment with a community-based medical provider before they left the jail (53 percent) and 40 percent received a supply of medications or a prescription for medications to take with them at release. Two-thirds of these patients reported keeping their first appointments with the community-based providers (65 percent). At the same time, some releasees who did not receive appointments before they were released did in fact see a provider in the community. Altogether, just over half of the releasees with medical problems either appeared for their first appointments with providers in the community that had been made while they were in the jail or saw providers to whom they had not been linked in the jail (55 percent) in the first 30 days after release. Reported reasons for not keeping first appointments within the first month were scattered among such things as lacking transportation or childcare, scheduling conflicts, being too ill, drug or alcohol problems, and simply forgetting.
Table 4.3

Linkages with Medical (n=97) and Mental Health (n=56) Care in the Community: Selected Results From 30-Day Follow-Up Interviews

<table>
<thead>
<tr>
<th></th>
<th>Physical Conditions (n=97)</th>
<th>Mental Health Conditions (n=56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had a Pre-Release Appointment Made (%) of total</td>
<td>51a (53%)</td>
<td>20 (36%)</td>
</tr>
<tr>
<td>Kept First Appointment b (%) of had an appointment</td>
<td>33 (65%)</td>
<td>14 (70%)</td>
</tr>
<tr>
<td>Saw a Provider/ No Appointment (%) of total</td>
<td>20 (21%)</td>
<td>19 (34%)</td>
</tr>
<tr>
<td>Total Saw Any Provider (%) of total</td>
<td>53 (55%)</td>
<td>34 (61%)</td>
</tr>
<tr>
<td>Provided Medications/Prescription At Release (%) of total</td>
<td>39 (40%)</td>
<td>25 (45%)</td>
</tr>
</tbody>
</table>

a 1 missing value.

b Date for the medical appointment had not come up at time of follow up interview for 2 participants, these were excluded from the denominator.

The patterns of linkage and follow-up for patients with mental health problems were fairly similar (Table 4.3), although a smaller percentage of these received appointments with community-based providers (36 percent) and slightly more (45 percent) were released with a supply or prescription for mental health medications. This may be at least partially attributable to the lack of literal continuity of care for patients with mental illness. In addition, because of a pattern of mental health patients failing to make appointments in the community, the mental health discharge planner only makes appointments for those they consider most likely to show up for them, and, indeed, seventy percent did attend the scheduled appointment. However, despite the low rate of pre-release appointment setting, three fifths of participants with a mental health condition (61 percent) saw a provider within the first month after release.

Overall, these results indicate that the Hampden County program is moderately successful in linking inmates to medical care in the community and that a majority of releasees do seek care in the community within 30 days of their release from the jail. It should be noted that these are fairly gross measures of continuity of care. That is, the inmates who failed to make an appointment or see a care provider in the first 30 days after release did not necessarily suffer adverse health outcomes as a result. Some of them may not, in fact, have needed an appointment or care during this period.

4.1.3 Barriers To and Facilitators Of Health Seeking Behavior in the Community At 30-Day Follow-Up

Thirty-day post-release interview respondents were also asked to report on the barriers to and facilitators of their obtaining community-based care. Tables 4.4 and 4.5 summarize these responses for all 124 of the 30-day respondents. Major factors considered by releasees to be very or somewhat helpful in their connecting with community-based care (Table 4.4) included having pre-release appointments (92 percent of those who received appointments), the health care provided in the jail
(87 percent), health education received in the jail (82 percent), and having dually-based providers (69 percent). These results indicate that the continuity of care and linkage services provided by the Hampden County program are considered by patients to be very helpful in their accessing care in the community post-release. A particularly salient finding is the high rate of perceived helpfulness attributed to having an appointment with a provider in the community. About three-quarters (76 percent) of 30-day respondents also reported having some form of public or private health insurance.

Table 4.4
Facilitators to Seeking Care in the Community at 30-day Follow-up (n = 124)

<table>
<thead>
<tr>
<th>Facilitators</th>
<th>Very Helpful</th>
<th>Somewhat Helpful</th>
<th>Not Helpful</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Release Medical Appointment Set Up in Advance</td>
<td>43 (35%)</td>
<td>5 (4%)</td>
<td>4 (3%)</td>
<td>72 (58%)</td>
</tr>
<tr>
<td>Health care in Jail</td>
<td>53 (43%)</td>
<td>55 (44%)</td>
<td>14 (11%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Health education in Jail</td>
<td>58 (47%)</td>
<td>43 (35%)</td>
<td>20 (16%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>Dully-Based Providers</td>
<td>57 (46%)</td>
<td>29 (23%)</td>
<td>19 (15%)</td>
<td>19 (15%)</td>
</tr>
<tr>
<td>Drug/Alcohol Treatment in Jail</td>
<td>50 (40%)</td>
<td>30 (24%)</td>
<td>14 (11%)</td>
<td>30 (24%)</td>
</tr>
</tbody>
</table>

Table 4.5
Barriers to Seeking Care in the Community at 30-day Follow-up (n = 124)

<table>
<thead>
<tr>
<th>Barriers</th>
<th>A Big Problem</th>
<th>Somewhat of a Problem</th>
<th>Not a Problem</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not having transportation</td>
<td>51 (41%)</td>
<td>21 (17%)</td>
<td>48 (39%)</td>
<td>4 (3%)</td>
</tr>
<tr>
<td>Not being able to pay for care or medication</td>
<td>29 (23%)</td>
<td>18 (15%)</td>
<td>68 (55%)</td>
<td>9 (7%)</td>
</tr>
<tr>
<td>Not being able to get an Appointment</td>
<td>25 (20%)</td>
<td>20 (16%)</td>
<td>73 (59%)</td>
<td>6 (5%)</td>
</tr>
<tr>
<td>Conflicts with work or other activities</td>
<td>18 (15%)</td>
<td>23 (19%)</td>
<td>78 (63%)</td>
<td>5 (4%)</td>
</tr>
<tr>
<td>Not liking the care you get from providers</td>
<td>11 (9%)</td>
<td>15 (12%)</td>
<td>88 (71%)</td>
<td>10 (8%)</td>
</tr>
</tbody>
</table>

Barriers to seeking care in the community considered to be a big or somewhat big problem by substantial numbers of releasees (Table 4.5) included not having transportation (58 percent), not being able to pay for services (38 percent), and not being able to get an appointment (36 percent). The barriers do not appear to have been as salient for these releasees as the facilitators provided by the Hampden County program.
Table 4.6 reports housing and employment status of study respondents at 30 days and six months after release.

Table 4.6

<table>
<thead>
<tr>
<th>Status</th>
<th>30-Days Post Release</th>
<th>6-Months Post Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spent at least one night homeless, in a shelter or in a group/ transitional residence during the follow-up period a</td>
<td>16 (13.0%)</td>
<td>34 (26.0%)</td>
</tr>
<tr>
<td>Spent at least one night sleeping in an abandoned building, a car, on the street or in a park during the follow-up period</td>
<td>10 (8.1%)</td>
<td>21 (16.2%)</td>
</tr>
<tr>
<td>Spent at least one night in a shelter during the follow-up period</td>
<td>4 (3.3%)</td>
<td>18 (13.7%)</td>
</tr>
<tr>
<td>Spent at least one night in a group/ transitional residence during the follow-up period</td>
<td>4 (3.3%)</td>
<td>11 (8.5%)</td>
</tr>
<tr>
<td>Re-incarcerated during the follow-up period</td>
<td>-- b</td>
<td>44 (33.6%)</td>
</tr>
<tr>
<td>Unemployed at the time of the interview</td>
<td>77 (62.1%)</td>
<td>89 (67.0%)</td>
</tr>
</tbody>
</table>

a Total represents unduplicated individuals, but respondents could select multiple categories.  
b Data not available on reincarceration at 30-days.

Table 4.6 shows that by the time of the six months interview over one quarter of study participants had experienced some form of housing instability, including spending one night sleeping on the street, staying in a shelter, or living in a supervised setting. Rates of unemployment were also very high in this group—62 percent were unemployed at the time of the 30-day interview and two-thirds (67 percent) at the time of the six-month interview.

These high rates of homelessness and unemployment may partially explain why some study participants did not access health care after release, though it should be noted that study participants were not directly asked if housing (i.e., homelessness) or employment status were barriers to accessing medical care in the 30 days after release, and when asked the open-ended question, “What else made it hard to take care of your health since your release?” no respondents volunteered housing instability or unemployment as barriers to seeking care.

4.2 Health Outcomes at 6-Month Follow-Up

In this section, we report on our analysis of health outcomes at six-month post-release follow-up. These outcomes include self-reported health status, seeking primary medical and mental health care services in the community, and the use of emergency rooms and hospitalizations. We first report on absolute change in these outcome measures from baseline to follow-up and then on our analysis of the effects of the public health model intervention at the jail on these changes.
4.2.1 Absolute Change

Examination of the health outcomes from baseline to six-month follow-up reveals largely positive change. As shown in Table 4.7 the percentage of the 131 respondents that completed the 6-month interview reporting fair or poor health based on a standard five-point scale of self reported health status declined from baseline to follow-up while the proportions reporting good, very good or excellent health increased. In addition, the share of respondents who reported being bothered “extremely” or “quite a bit” by emotional problems declined over this period. Both of these changes were statistically significant.

Table 4.7
Self-reported Physical Health and Emotional Status at Baseline and 6-Month Follow-Up (n = 131)

<table>
<thead>
<tr>
<th>Physical Health Status</th>
<th>Baseline</th>
<th>6-Month</th>
<th>Matched Pairs Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent, very good, or good</td>
<td>60 (45.8%)</td>
<td>87 (66.4%)</td>
<td>( p &lt; 0.0006^a )</td>
</tr>
<tr>
<td>Fair or poor</td>
<td>71 (54.2%)</td>
<td>44 (33.6%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bothered by Emotional Problems</th>
<th>Baseline</th>
<th>6-Month</th>
<th>Matched Pairs Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all, slightly, or moderately</td>
<td>45 (34.4%)</td>
<td>75 (57.3%)</td>
<td>( p &lt; 0.0001^a )</td>
</tr>
<tr>
<td>Quite a bit or extremely</td>
<td>86 (65.7%)</td>
<td>56 (42.8%)</td>
<td></td>
</tr>
</tbody>
</table>

\( ^a \) Significant Values in bold type.

Table 4.8 reports individual changes in health and emotional status, showing that about half reported improvements from baseline to 6-month follow-up (48 percent on health and 47 percent on emotional status) and almost one third reported that their status had not changed (29 percent on health and 33 percent on emotional status).

Table 4.8
Individual Change in Self-Reported Physical and Mental Health Status From Baseline To 6-Month Follow-Up (n = 131)

<table>
<thead>
<tr>
<th>Change From Baseline to 6-Month Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health Status</td>
</tr>
<tr>
<td>Improved</td>
</tr>
<tr>
<td>Stayed the same</td>
</tr>
<tr>
<td>Worsened</td>
</tr>
</tbody>
</table>

| Bothered by Emotional Problems           |                             |
| Improved                                 | 62 (47.3%)                 |
| Stayed the same                          | 43 (32.8%)                 |
| Worsened                                 | 26 (19.8%)                 |
In terms of health seeking outcomes, as shown in Table 4.9, there was a slight, but significant (p=0.018), decline in the percentage of the 103 6-month interview respondents with a medical problem who saw a medical provider between the six months prior to baseline and the post-release period. Table 4.9 also shows that emergency room visits and hospitalizations in this group declined from the six months prior to incarceration to the follow-up period, and this was a statistically significant reduction of hospitalizations (p=0.005).

Table 4.9

<table>
<thead>
<tr>
<th>Health Care Utilization at Baseline and Six-Month Follow-Up (n=103) (Respondents with Medical Conditions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
</tr>
<tr>
<td>Saw Medical Provider&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Went to Emergency Room&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td>Admitted to Hospital&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Using a McNemar with correction for continuity test.
<sup>b</sup> 3 missing values at baseline and 1 missing value at 6-months.
<sup>c</sup> Significant values in bold type.
<sup>d</sup> 3 missing values at baseline and 1 missing value at 6-months.
<sup>e</sup> 3 missing values at baseline and 1 missing value at 6-months.

Table 4.10 reports the equivalent figures for the 54 6-month respondents with mental health problems. There was a similar decline in the number of 6-month interview respondents’ use of primary care, emergency rooms, and hospitals, but none of the changes were statistically significant.

Table 4.10

<table>
<thead>
<tr>
<th>Mental Health Care Utilization at Baseline and Six-Month Follow-Up (n=54) (Respondents with Mental Health Conditions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
</tr>
<tr>
<td>Saw Mental Health Provider&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Went to Emergency Room</td>
</tr>
<tr>
<td>Admitted to Hospital&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Using a McNemar with correction for continuity test.
<sup>b</sup> 3 missing values at baseline and 1 missing value at 6-months.

These results are subject to the variable follow-up period represented in the “6-month” follow-up interviews. As noted earlier, the window period for completing the second follow-up interview was opened to increase study retention and so the actual follow-up period was somewhat longer than six months for some respondents, these respondents had more opportunity to access services after release than prior to incarceration. However, since participants utilized fewer of all services after release than prior to incarceration, this does not seem to have affected the results.

To address the problem of the variable follow-up period we also report mean rates per day, calculated on the basis of the number of days in the community (i.e., total days between the release date and the
date of the follow-up interview, less any days spent back in the jail during that interval) of care utilization for participants with medical (Table 4.11) and mental health (Table 4.12) problems. For those with medical problems, mean rates of seeing regular providers and visiting emergency rooms stayed essentially the same from the baseline to the follow-up period, while there was a statistically significant decline in the rate of hospital admissions between these two periods.

**Table 4.11**

**Rates of Health Care Utilization at Baseline and Six-Month Follow-Up, (n=103)(Respondents with Medical Problems)**

<table>
<thead>
<tr>
<th></th>
<th>Mean Events Per Day</th>
<th>P-Value&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>6-Months</td>
</tr>
<tr>
<td>Saw Medical Provider</td>
<td>0.0196</td>
<td>0.0204</td>
</tr>
<tr>
<td>Went to Emergency Room</td>
<td>0.0069</td>
<td>0.0065</td>
</tr>
<tr>
<td>Admitted to Hospital</td>
<td>0.0029</td>
<td>0.0012</td>
</tr>
</tbody>
</table>

<sup>a</sup> Using a paired t-test.

<sup>b</sup> Significant Values in bold type.

**Table 4.12**

**Rates of Mental Health Care Utilization at Baseline and Six-Month Follow-Up, (n=54)(Respondents with Mental Health Problems)**

<table>
<thead>
<tr>
<th></th>
<th>Mean Events Per Day</th>
<th>P-Value&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>6-Months</td>
</tr>
<tr>
<td>Saw Mental Health Provider</td>
<td>0.0651</td>
<td>0.0264</td>
</tr>
<tr>
<td>Went to Emergency Room</td>
<td>0.0052</td>
<td>0.0038</td>
</tr>
<tr>
<td>Admitted to Hospital</td>
<td>0.0048</td>
<td>0.0026</td>
</tr>
</tbody>
</table>

<sup>a</sup> Using a paired t-test.

<sup>b</sup> Significant values in bold type.

Participants with mental health problems experienced declining rates of emergency room visits and hospitalizations, but these changes were not statistically significant. On the other hand, these study participants had a statistically significant decline in their mean rate of seeing mental health providers between the pre-baseline and follow-up periods.

The interpretation of these changes is difficult. On the one hand, care received in jail might result in a reduced need for care post-release. On the other hand, diagnosis of a condition during incarceration could result in a need for more care post-release. Probably both of these changes, as well as other patterns, are embedded in the raw numbers regarding visits to health providers. Finally, in general, patients in the sample have variable need for post-release care. For example, about one-quarter of the sample have hepatitis C infection and many of these have no symptoms or overt evidence of liver disease. Such patients would not necessarily require regular care for this condition within the study period.
The declines in use of emergency rooms and hospitalization could be related to linkage with primary care and more timely attention to ongoing health problems and a consequent reduction in reliance on more expensive emergency room care and hospitalization. This interpretation would support the view that the Hampden County public health model of care represents a cost-effective intervention.

### Trust in Health Care Staff and Likelihood of Post-Release Medical Follow-Up

The level of trust in jail health care staff appeared to be a modifying factor in the relationship between having appointments set up prior to release and receipt of primary care post-release. The strength of the relationship (odds ratio) between an appointment being scheduled and going to the doctor was most evident in the group with higher trust of health staff in jail (Table 4.15), as might be expected.

<table>
<thead>
<tr>
<th>Trust of Jail Health Staff</th>
<th>n</th>
<th>Odds Ratio (95%CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>28</td>
<td>1.2 (0.6-2.6)</td>
</tr>
<tr>
<td>Med</td>
<td>26</td>
<td>1.3 (0.7-2.6)</td>
</tr>
<tr>
<td>High</td>
<td>47</td>
<td>1.9 (1.1-3.2)</td>
</tr>
<tr>
<td>All</td>
<td>101</td>
<td>1.5 (1.1-2.2)</td>
</tr>
</tbody>
</table>

### 4.3 Effects of the Intervention on Changes in Health Outcomes

A simple contrast of baseline and follow-up scores shows positive changes among the study participants in most areas. Regression analysis (methods are detailed in chapter 2) sometimes, but not always, shows that the favorable changes can be attributed to the public health model interventions at the Hampden County Correctional Center.

This analysis was designed to test whether or not the HCCC interventions had a salutary impact on health status and health seeking behaviors during the six-month period following participants’ release from jail. In particular, we tested the null hypothesis that treatment (i.e., the HCCC intervention) delivered during incarceration had no effect on health status and health-seeking behaviors following release.

Section 4.3.1 identifies variables used to represent the intervention; section 4.3.2 explains how we developed instrumental variables to address the problem of selection bias; section 4.3.3 explains how we tested for treatment effectiveness and estimated the size of the treatment effect; and section 4.3.4 discusses our findings.
4.3.1 Variables Used to Represent the Intervention

We adopted two ways to identify the receipt of treatment. The first way associated the receipt of treatment with three indicators of participation:

- **MDVISIT** was the number of times that a study subject visited a physician for a physical health problem while at HCCC. **MNTLVISIT** was its counterpart for mental health visits. Either MDVISIT or MNTLVISIT entered the analysis depending on whether the study subject had a qualifying physical health problem (hence MDVISIT) or a qualifying mental health problem (hence MNTLVISIT).

- **DISHPLAN** was coded one if the subject received a discharge plan and was coded zero otherwise.

- **CASEMAN** was the number of times that the subject received case management services while at HCCC.

As explained subsequently, we used each of these measures jointly as indications of the participants’ receipt of treatment while at HCCC. The second method used a single variable:

- **APPT** was coded 1 when a staff member made a post-release medical appointment for the study subject, 2 if a mental health appointment was made, 3 if both a medical and a mental health appointment was made (for study participants with both medical and mental health diagnoses), and was coded zero if no appointment was made. For this analysis, the variable was recoded to 1 if there was an appointment and 0 otherwise.

4.3.2 Developing the Instrumental Variables

Based on all 200 baseline interview participants, Table 4.13 reports the number of intervention events recorded for the five variables that were collectively used to represent the public health model intervention. A skipped number (e.g., 12) means that no participants had that number of events recorded.

According to these statistics, a large proportion of study subjects did not participate in the intervention (59 percent). A small number participated intensively. The first step in this analysis was to estimate the rate at which the 200 study subjects eligible for follow-up interviews participated in the intervention. This required regressing each of the intervention variables on a set of explanatory variables:

- **AGE**: The study participant’s age, recoded by dividing the reported age by the maximum age reported among the 200 subjects, so the recoded variable had a minimum value of slightly greater than zero and a maximum of 1.

- **AGE**: The square of the participant’s age, after recoding.

- **LOS**: The participant’s length of stay at HCCC. The length of stay was divided by the largest length of stay observed in the data, so the recoded variable had a minimum value of slightly greater than zero and a maximum of 1.
**Table 4.13**

Descriptive Statistics: Dependent Variables Entering the Regressions with the Intervention as the Dependent Variable (n=200)

<table>
<thead>
<tr>
<th>Number of Events</th>
<th>MDVISIT</th>
<th>DISHPLAN</th>
<th>CASEMAN</th>
<th>MNTLVISIT</th>
<th>APPT a</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>117</td>
<td>170</td>
<td>121</td>
<td>148</td>
<td>61</td>
</tr>
<tr>
<td>1</td>
<td>37</td>
<td>30</td>
<td>17</td>
<td>34</td>
<td>70</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>16</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 69 missing values for APPT.

- **LOS²**: The square of the participant’s length of stay, after recoding.
- **HEALTH**: The five-point self-assessment of health at baseline, scaled from 1 (excellent) through 5 (poor).
- **BOTHER**: The five-point self-assessment of emotional well being at baseline, scaled from 1 (excellent) through 5 (poor).
- **GLOBAL**: A ten-point nurse practitioner’s assessment of the participant's level of physical functioning at baseline scaled from 0 (dead) to 10 (perfect health) (Karnofsky scale).
- **HLTHINK**: The four-point self-reported interest in participating in health services at HCCC.
- **PRE_EXPO**: This is a dummy variable coded 1 if the participant had been in jail during the twelve months prior to the index incarceration. If he or she had been in jail during that period, there is some chance that he or she would have received an earlier dose of the intervention.

Rescaling age and length of stay facilitates statistical computing. Rescaling has a proportional effect on regression parameters, but otherwise the recode has no effect on the analysis.

Table 4.14 reports regression results. The first column identifies the variables that entered the analysis. **CONST** is a constant. **DISP** is a “dispersion” parameter—used to estimate the variance for the negative binomial model but otherwise of no interest here. The dependent variables are identified in the first row—MDVISIT through APPT. For each dependent variable, Table 4.14 identifies a
parameter estimate and t-score. The t-score is the parameter estimate divided by its estimated asymptotic standard error.

Table 4.14

Regression Results for Program Participation

<table>
<thead>
<tr>
<th></th>
<th>MDVISIT</th>
<th>MNTLVISIT</th>
<th>DISHPLAN</th>
<th>CASEMAN</th>
<th>APPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>T-Score</td>
<td>Parameter</td>
<td>T-Score</td>
<td>Parameter</td>
<td>T-Score</td>
</tr>
<tr>
<td>CONST</td>
<td>-1.940</td>
<td>-1.496</td>
<td>3.116</td>
<td>-1.867</td>
<td>-1.106</td>
</tr>
<tr>
<td>LOS2</td>
<td>-3.555</td>
<td>-2.244</td>
<td>-1.639</td>
<td>-6.534</td>
<td>-2.455</td>
</tr>
<tr>
<td>GLOBAL</td>
<td>-0.223</td>
<td>-2.800</td>
<td>0.298</td>
<td>-0.196</td>
<td>-1.573</td>
</tr>
<tr>
<td>HEALTH</td>
<td>0.111</td>
<td>1.054</td>
<td>0.089</td>
<td>0.136</td>
<td>1.008</td>
</tr>
<tr>
<td>AGE</td>
<td>7.632</td>
<td>2.233</td>
<td>2.042</td>
<td>7.264</td>
<td>1.555</td>
</tr>
<tr>
<td>AGE2</td>
<td>-4.319</td>
<td>-1.540</td>
<td>-1.736</td>
<td>-5.910</td>
<td>-1.426</td>
</tr>
<tr>
<td>HLTHINK</td>
<td>-0.227</td>
<td>-0.902</td>
<td>-0.039</td>
<td>0.022</td>
<td>0.067</td>
</tr>
<tr>
<td>PRE_EXPO</td>
<td>-0.192</td>
<td>-0.882</td>
<td>0.464</td>
<td>0.124</td>
<td>0.465</td>
</tr>
<tr>
<td>DISP</td>
<td>0.661</td>
<td>2.371</td>
<td>-0.423</td>
<td>1.335</td>
<td>4.939</td>
</tr>
</tbody>
</table>

Length of stay is an important variable. This is a sensible result, of course, because the longer that a study subject stayed at HCCC, the greater his or her exposure to the intervention. The number of physician visits (MDVISIT), mental health visits (MNTLVISIT), and case management sessions (CASEMAN) increased at a decreasing rate with time in jail (LOS). The probability of a discharge plan (DISHPLAN) and the probability of an appointment (APPT) both increased with time spent in HCCC (a negative coefficient implies an increase for these two variables). Although neither the parameter associated with LOS nor the parameter associated with LOS2 are statistically significant for the DISHPLAN regression, this is probably because LOS and LOS2 are highly collinear.

Age is also an important predictor of program participation. For each of these measures of program participation, older study subjects participated at a higher rate than did younger study subjects. This is not unexpected because health care needs tend to increase with age. Although variables that attempt to control for health care needs might mitigate the age effect, we doubt that those variables are perfect controls.

Finding that program participation and length of stay in HCCC are highly correlated is central to this study. As explained earlier, this high correlation established the “identification condition,” which is required for application of the instrumental variable approach. In the next step of the analysis, we used the predictions from the above estimates in place of their observed counterparts. For reasons explained in section 2.2, the instrumental variable approach provides consistent estimates of the treatment effect even in the face of selection bias.

4.3.3 Outcome Analysis

The outcomes of interest in this analysis were embodied in four variables:

- Rate of visiting a physician or mental health provider during the follow-up period.
- Rate of visiting an emergency room during the follow-up period.
- Rate of hospital admissions during the follow-up period.
- Self-reported health status during the follow-up period.
We analyzed each outcome separately. For the first three outcomes, the rate was defined as the number of events (physician visits, emergency room visits, or hospital admissions) per time at liberty during the follow-up period (days between release date and interview date, less any days spent incarcerated during that interval, based on interview responses and HCCC records). We assumed that visits and admissions occurred according to a negative binomial process. In contrast to the first three rate variables, health status was a five-point scale that we converted to a three-point scale for this analysis. Time at-risk did not factor into the analysis of the health status variable.

We distinguished people with mental health problems from people with physical health problems and analyzed them separately. That is, we estimated three regressions for people with physical health problems and three more regressions for people with mental health problems. This resulted in six separate analyses for the rate variables: three rate variables analyzed by two distinct groups. We did not distinguish between physical health and mental health for the health status variable. Consequently there were seven total regressions. Given the two ways to identify the receipt of treatment (staff contacts and having an appointment made), the seven regressions became thirteen regressions: three outcomes for the rate variables for each of two distinct groups times two ways of representing treatment (twelve regressions) plus a single regression on the health status variable that employed only the first method of representing treatment.

**Physician and Mental Health Provider Visits**

We tested whether or not post-release physician visits increased with participation in the intervention. This test started with 103 subjects who both had physical health problems and answered the six-month follow-up interview. The sample shrunk to 102 because of missing baseline data, to 99 because of bad control variables, and finally to 98 because of an outlier in the regression analysis. Table 4.15 reports results for these 98 subjects.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>std. Error</th>
<th>T-Score</th>
<th>P (1-tail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONST</td>
<td>1.169</td>
<td>0.362</td>
<td>3.233</td>
</tr>
<tr>
<td>MDTIMES</td>
<td>26.733</td>
<td>2.684</td>
<td>9.959</td>
</tr>
<tr>
<td>HEALTH</td>
<td>-0.005</td>
<td>0.092</td>
<td>-0.050</td>
</tr>
<tr>
<td>POST_EXP</td>
<td>0.704</td>
<td>0.272</td>
<td>2.584</td>
</tr>
<tr>
<td>MDVISIT</td>
<td>0.590</td>
<td>0.334</td>
<td>1.769</td>
</tr>
<tr>
<td>DISHPLAN</td>
<td>-0.181</td>
<td>0.208</td>
<td>-0.873</td>
</tr>
<tr>
<td>CASEMAN</td>
<td>-0.261</td>
<td>0.194</td>
<td>-1.345</td>
</tr>
<tr>
<td>DISP</td>
<td>1.420</td>
<td>0.221</td>
<td>6.416</td>
</tr>
<tr>
<td>Deviation Inc.</td>
<td>0.159</td>
<td>0.107</td>
<td>1.490</td>
</tr>
<tr>
<td>Deviation 2</td>
<td>0.505</td>
<td>0.250</td>
<td>2.024</td>
</tr>
<tr>
<td>Joint test</td>
<td>0.145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDVISIT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISHPLAN</td>
<td>0.175</td>
<td>0.087</td>
<td>2.007</td>
</tr>
<tr>
<td>CASEMAN</td>
<td>0.120</td>
<td>0.084</td>
<td>1.435</td>
</tr>
</tbody>
</table>
Table 4.15 identifies independent variables in the left column. The variables MDVISIT, DISHPLAN and CASEMAN are predictions based on the previous analysis. A constant (CONST) appears in the analysis. The parameter associated with DISP is of little interest here. Parameters estimates appear in the second column, their estimated standard errors appear in the third column, and their asymptotic t-score appear in the fourth column. The estimated parameter associated with MDVISIT approaches significance depending on the critical value of the t-score selected for hypothesis testing. The three intervention variables are highly collinear ($r = 0.85$ for MDVISIT/DISHPLAN; $r = 0.84$ for MDVISIT/CASEMAN; and $r = 0.59$ for DISHPLAN/CASEMAN), so detecting a statistically significant effect in this regression is likely to be difficult.

Table 4.15 also reports an estimate of the treatment effect from increasing each of the three interventions simultaneously by one standard deviation each (see Deviation Inc.). The t-score is 1.49, which is significant at 0.07 in a one-tailed test. The table also reports an estimate of the effect from increasing the first two interventions simultaneously by one standard deviation each. The t-score is 2.02, which is significant at 0.02 in a one-tailed test.

The last three lines of Table 4.15 report the regression results when one of the three interventions was included in the regression while the other two were excluded. For example, when MDVISIT is included and both DISHPLAN and CASEMAN are excluded, the estimated parameter associated with MDVISIT is 0.19, which is significant at 0.02 in a one-tailed test. When they enter the regression by themselves, DISHPLAN is significant at 0.02 and CASEMAN is significant at 0.08.

Taken together the results reported in Table 4.15 provide evidence that participation in the intervention increased physician visits after release from HCCC. Most of the impact seems to come from MDVISIT and DISHPLAN.

When the intervention is characterized as having an appointment for a post-release physician visit before leaving HCCC, sample attrition is similar to that reported above, but we eliminated three cases as apparent outliers, leaving 96 cases. Including those outliers did not materially affect the conclusions from this analysis, however. Estimates when the three outliers were excluded are reported in Table 4.16. The t-score of 2.54 indicates that a program participant was more likely to visit a physician following release from HCCC if he or she had an appointment with a community-based provider prior to release ($P < 0.01$).

Table 4.17 reports statistics that are comparable to those reported in Table 4.15 except that the dependent variable is visits to a mental health provider and the variable MDVISIT is replaced by MNTLVISIT and general health status (HEALTH) is replaced by emotional status (BOTHER). The analysis was limited to 54 subjects who had mental health problems and completed the follow-up interview. The sample was reduced from 54 to 49 because of missing follow-up data on the outcome variable, from 49 to 47 because of missing values on control variables, and finally to 46 cases because of an outlier detected during diagnostics of the regression results.

---

15 Testing for a one-standard deviation increase in each of the intervention variables should be relatively unaffected by the collinearity among these three variables.
### Table 4.16

Regressions on Physician Visits: Study Subjects with Physical Health Problems—Appointment as the Intervention Variable (n=96)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Standard Error</th>
<th>T-Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONST</td>
<td>1.486</td>
<td>0.382</td>
</tr>
<tr>
<td>MDTIMES</td>
<td>30.315</td>
<td>3.296</td>
</tr>
<tr>
<td>HEALTH</td>
<td>-0.133</td>
<td>0.108</td>
</tr>
<tr>
<td>POST_EXP</td>
<td>0.658</td>
<td>0.289</td>
</tr>
<tr>
<td>APPT</td>
<td>0.355</td>
<td>0.140</td>
</tr>
<tr>
<td>DISP</td>
<td>1.275</td>
<td>0.223</td>
</tr>
</tbody>
</table>

### Table 4.17

Regressions on Mental Health Provider Visits: Study Subjects with Mental Health Problems—Jail Physician Visits, Case Management and Discharge Planning as the Intervention Variables (n=46)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Std. Error</th>
<th>T-Score</th>
<th>P (1-tail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONST</td>
<td>2.154</td>
<td>0.384</td>
<td>5.603</td>
</tr>
<tr>
<td>EMOTIMES</td>
<td>-0.122</td>
<td>3.740</td>
<td>-0.033</td>
</tr>
<tr>
<td>BOTHER</td>
<td>0.009</td>
<td>0.126</td>
<td>0.073</td>
</tr>
<tr>
<td>POST_EXP</td>
<td>0.546</td>
<td>0.348</td>
<td>1.567</td>
</tr>
<tr>
<td>MNTLVISIT</td>
<td>-0.021</td>
<td>0.232</td>
<td>-0.091</td>
</tr>
<tr>
<td>DISHPLAN</td>
<td>0.813</td>
<td>0.297</td>
<td>2.734</td>
</tr>
<tr>
<td>CASEMAN</td>
<td>-0.431</td>
<td>0.267</td>
<td>-1.614</td>
</tr>
<tr>
<td>DISP</td>
<td>1.272</td>
<td>0.284</td>
<td>4.471</td>
</tr>
<tr>
<td>Deviation Inc.</td>
<td>0.435</td>
<td>0.396</td>
<td>1.098</td>
</tr>
<tr>
<td>Deviation 2</td>
<td>1.207</td>
<td>0.405</td>
<td>2.985</td>
</tr>
<tr>
<td>Joint test</td>
<td>0.026</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNTLVISIT</td>
<td>0.129</td>
<td>0.157</td>
<td>0.824</td>
</tr>
<tr>
<td>DISHPLAN</td>
<td>0.455</td>
<td>0.187</td>
<td>2.434</td>
</tr>
<tr>
<td>CASEMAN</td>
<td>0.114</td>
<td>0.170</td>
<td>0.667</td>
</tr>
</tbody>
</table>

The intervention had a favorable effect on increasing the number of visits to mental health providers during the follow-up period. (P = 0.14 based on Deviation Inc., and P = 0.001 for Deviation 2.) However, the evidence seems to indicate that creating a discharge plan was not the mechanism by which the intervention was effective. There was no evidence that having an appointment made increased the probability of visiting a mental health provider during the follow-up period. It should be recalled that only 36 percent of the participants with mental health problems received post-release appointments with providers (Table 4.3).

**Emergency Room Visits**

We repeated the analysis reported above after substituting emergency room visits for physician and mental health provider visits. When the analysis was limited to subjects with physical health problems (n=99), using the three intervention variables to reflect the intervention, the intervention seemed to have a negative effect on using emergency rooms, but that effect did not approach...
statistical significance. Results were similar when the intervention was characterized as making an appointment. The t-score was only −0.79.

We repeated the analysis for emergency room visits after limiting the data to subjects who had mental health problems. The analysis was based on 45 cases that remained after dropping cases that lacked follow-up data, otherwise had missing data, or, in two cases, were identified as outliers by the regression analysis. There was no evidence that the intervention reduced trips to the emergency room following release from HCCC. The same conclusions followed when we defined the intervention as having an appointment made with a mental health provider.

**Hospital Admissions**

We repeated the analyses reported for emergency room visits after substituting hospital admissions as the dependent variable. Based on data for 99 subjects who had physical health problems, the intervention was associated with fewer hospital admissions during the follow-up period, but the effect was not statistically significant at conventional levels of confidence. Making an appointment did not reduce the number of hospital admissions.

Because of computational problems, we were unable to estimate the regression for hospital admissions for those subjects who had mental health problems. Presumably these problems occurred because of the small number of cases and the infrequency of hospital admissions during the follow-up period.

**Health Status**

The final dependent variable entering the analysis was the subject’s self-assessment of health status. Originally coded on a five-point scale, we recoded the variable into a three point scale: 1=good (original 1 and 2), 2=average (original 3), and 3=poor (original 4 and 5). One hundred and three subjects with physical health problems and follow-up interviews entered the analysis; results are reported in Table 4.18.

| Table 4.18 |
|---|---|
| **Regressions on Health Status: Study Subjects with Physical or Mental Health Problems—Jail Physician Visits, Case Management and Discharge Planning as the Intervention Variables (n=103)** |
| Parameter | Standard Error | T-Score |
| HEALTH | 0.318 | 0.174 | 1.820 |
| POST_EXP | 0.323 | 0.400 | 0.810 |
| MDVISIT | -1.087 | 0.861 | -1.260 |
| DISHPLAN | 1.543 | 0.513 | 3.010 |
| CASEMAN | 0.166 | 0.503 | 0.330 |
| Alpha_1 | 0.542 | 0.678 | 0.800 |
| Alpha_2 | 1.898 | 0.697 | 2.730 |
| MDVISIT | 0.2962 | 0.2184 | 1.36 |
| DISHPLAN | 0.57936 | 0.2304 | 2.51 |
| CASEMAN | 0.13807 | 0.202 | 0.68 |
Table 4.18 reports the independent variables that entered the analysis in the first column. HEALTH is the baseline health score, so there is no surprise that this has a positive correlation with the follow-up health measure. The two parameters Alpha_1 and Alpha_2 are additional parameters necessarily estimated by an ordered logistic model, the estimation technique for this part of the analysis. They are not of material importance here.

What is important is the evidence that the self-assessment of health status decreases with program participation. (A positive parameter denotes a decrease because bad health is coded 3 and good health is coded 1.) Thus, the intervention appears to have caused subjects to give more negative assessments of their health during the follow-up period. It is important to note that this apparently perverse result summarizes what is in fact a complicated situation. For example, by virtue of having improved access to medical care in the jail, some of the participants may have been diagnosed with serious medical conditions during their incarceration. This might understandably lead them to self-assess their health as deteriorating from the pre-incarceration to the post-release period.

4.3.4 Discussion

The findings from these analyses are mixed. For participants with medical problems, there is evidence that the interventions increased physician visits (especially for those who had specific appointments with providers before leaving HCCC) and reduced emergency room visits and hospital admissions. For participants with mental health problems, the interventions were also apparently associated with an increase in post-release visits to mental health providers (particularly for those who had discharge plans), but there is no evidence that the interventions reduced emergency room visits or hospital admissions. Participants’ self-assessments of health indicated deterioration. Some factors inherent in the data and the analytic methods used may help us to understand these results.

We should not accept a null hypothesis that the program was ineffective as we fail to reject that same null. In the logic of statistical testing, failure to reject a null is not tantamount to accepting that null. In fact, the small sample size alone limited the power of the statistical tests, and the instrumental variable approach may have further reduced power to a level below what it would have been had we been able to ignore the problem of selection bias. Of course, we could not ignore selection bias, so we must accept the consequences of having very modest power to detect program effects.

One finding of the analysis on the effects of the HCCC interventions is that, for inmates with medical problems, having an appointment made with a community provider prior to release was a statistically significant predictor of increased visits to medical care providers in the community post-release. This finding supports a conclusion that making a specific appointment for a patient may be a very important (although perhaps not, in itself, sufficient) part of the HCCC model intervention. Having an appointment made may also serve as a marker for completion of basic aspects of case management and/or a less unexpected release from the facility. It is also important to note that, in most cases, the inmates receive appointments with providers in their neighborhoods of residence, not at one of the four participating health centers. In any event, the importance of having a specific appointment underscores findings from other studies of discharge planning and community linkages.16

standpoint of practical utility and replicability, it is also noteworthy that making appointments for inmates about to be released is a relatively inexpensive portion of the intervention. Presumably, if the full HCCC model were unaffordable or otherwise infeasible in a correctional system, arrangement of appointments could still be widely adopted at much more modest cost.

There are a number of possible reasons for the mixed pattern of treatment effects found in our analysis. First, as already noted, statistical power was modest because of small samples. Second, several of the outcomes of interest, such as emergency room visits and hospitalizations, occurred infrequently during the short follow-up period of about six months, so statistically significant changes in these outcomes became even more difficult to detect. Third, as shown above, within-jail participation in the public health model interventions was uneven when defined as seeing a doctor, having a discharge plan, or receiving case management. This raises questions about how successful HCCC staff was at reaching inmates in need of the interventions, the completeness and accuracy of the jail’s records of clients’ participation in the interventions, or both. As reported earlier in this section, the jail was moderately successful in linking releasees with post-release care. For those who were linked, especially with specific appointments in the community, the effects appear to have been positive.

At the same time, it is important to consider alternative explanations for the apparently low rates of participation in the interventions and the seemingly mixed effect of the interventions on post-release health status and health-seeking behavior. Some of these participants had medical or mental health conditions newly diagnosed while they were incarcerated. Such new diagnoses could help to explain the observed declines in self-reported health status from baseline to follow-up. Overall, the target population’s need for the in-jail interventions and post-release care was probably highly varied. A less than expected proportion of the participants in this evaluation had conditions requiring intensive treatment, such as those with a symptomatic HCV infection, and these may have had less urgent need for care either at HCCC or in the community post-release. In such cases, it would come as no surprise that they did not participate extensively in the intervention while in jail or receive substantial medical services in the six months following their release. Indeed, the arrangement of appointments may be the component of the intervention that best targets those in need of care in the community soon after their release.
Chapter 5

Recidivism

5.1 Methods

As part of the larger study to assess the impact of the public health model, we examined the relationship between exposure to health care at the facility and recidivism six and twelve months after the index release from HCCC.

The official criminal history records of the 200 study participants were examined at 6 and 12 months after release. Any activity within the Massachusetts criminal court system is recorded in this database. Recidivism was defined at three levels: rearraignment, reconviction, and reincarceration. The three types of recidivism rates were compared for inmates grouped by degree of intensity of medical care in HCCC health services programs and correlated with other health behavior related variables.

5.2 Results

We examined recidivism at one year after release from the index incarceration for the 94 sentenced study participants. Rearraignment (48.9 percent), reconviction (37.2 percent), and reincarceration (25.5 percent) rates for the study group were similar to those of the total HCCC population, 53.2 percent, 36.0 percent, and 27.8 percent respectively, during the same period.

Six-month recidivism data were available for the entire study sample (sentenced and pre-trial). Recidivism rates were calculated by demographic category, health status, and number of health services contacts at the jail (Table 5.1). No differences were found by age, sex, race, or length of stay for rearraignment, reconviction, and reincarceration. No correlations of recidivism with multiple measures of alcohol or drug abuse were found (data not displayed). Pretrial status was predictive of recidivism.

We then looked at health care in jail and recidivism, controlling for pretrial/sentenced status and found no consistent correlations other than higher number of mental health visits in the pretrial group being predictive of decreased recidivism (see Table 5.2).

5.3 Conclusion

Recidivism rates are influenced by multiple factors. In this group with medical and mental health conditions, we found recidivism correlated with correctional status as it is for the general correctional population—higher in those not sentenced and those with prior incarcerations. We did not find any correlation between health services received in jail and recidivism, with the exception of more mental health visits predicting lower recidivism in the pretrial subset. In this study the degree of contact with the health care system and the length of stay in the institution were used to assess the potential impact of these systems on recidivism. We were not able to fully assess the effects of health care following release into the community (a key aspect of the HCCC public health model) on recidivism.
Table 5-1
Rearrangement, Reconviction, and Reincarceration At Six Months After Index Release by Multiple Characteristics

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>n</th>
<th>Rearraigned</th>
<th>Reconvicted</th>
<th>Reincarcerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>200</td>
<td>34.0%</td>
<td>19.0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-34</td>
<td>94</td>
<td>37.2%</td>
<td>21.3%</td>
<td>13.8%</td>
</tr>
<tr>
<td>35-69</td>
<td>106</td>
<td>31.1%</td>
<td>17.0%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>178</td>
<td>33.1%</td>
<td>19.1%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>40.9%</td>
<td>18.2%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>67</td>
<td>32.8%</td>
<td>14.9%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>92</td>
<td>39.1%</td>
<td>25.0%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Black</td>
<td>37</td>
<td>24.3%</td>
<td>13.5%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Entry Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretrial</td>
<td>132</td>
<td>39.4%</td>
<td>23.5%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Sentenced</td>
<td>68</td>
<td>23.5%</td>
<td>10.3%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Release Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Sentenced</td>
<td>80</td>
<td>45.0%</td>
<td>23.8%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Sentenced</td>
<td>120</td>
<td>26.7%</td>
<td>15.8%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Prior Sentences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-1</td>
<td>115</td>
<td>29.6%</td>
<td>14.8%</td>
<td>7.8%</td>
</tr>
<tr>
<td>2+</td>
<td>85</td>
<td>40.0%</td>
<td>24.7%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Length Of Stay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;31 days</td>
<td>49</td>
<td>42.9%</td>
<td>24.5%</td>
<td>18.4%</td>
</tr>
<tr>
<td>31-90</td>
<td>59</td>
<td>30.5%</td>
<td>11.9%</td>
<td>6.8%</td>
</tr>
<tr>
<td>90+</td>
<td>92</td>
<td>31.5%</td>
<td>20.7%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Self-Reported Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair/poor</td>
<td>111</td>
<td>30.6%</td>
<td>15.3%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Good</td>
<td>52</td>
<td>42.3%</td>
<td>21.2%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Very good/excel.</td>
<td>37</td>
<td>32.4%</td>
<td>27.0%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Nurse Visits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td>87</td>
<td>33.3%</td>
<td>7.4%</td>
<td>12.6%</td>
</tr>
<tr>
<td>2-3</td>
<td>40</td>
<td>52.5%</td>
<td>27.3%</td>
<td>15.0%</td>
</tr>
<tr>
<td>4+</td>
<td>73</td>
<td>24.7%</td>
<td>6.7%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Health Center Team</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 visits</td>
<td>83</td>
<td>38.6%</td>
<td>16.9%</td>
<td>10.8%</td>
</tr>
<tr>
<td>1-2</td>
<td>58</td>
<td>31.0%</td>
<td>19.0%</td>
<td>13.8%</td>
</tr>
<tr>
<td>3+</td>
<td>59</td>
<td>30.5%</td>
<td>22.0%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Mental Health Visits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>119</td>
<td>37.0%</td>
<td>21.8%</td>
<td>14.3%</td>
</tr>
<tr>
<td>1-2</td>
<td>42</td>
<td>28.6%</td>
<td>14.3%</td>
<td>9.5%</td>
</tr>
<tr>
<td>3+</td>
<td>38</td>
<td>28.9%</td>
<td>13.2%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>
Table 5.2
Rearraignment, Reconviction, and Reincarceration at One Year By Number of Mental Health Visits, Controlling for Sentenced Status at Intake (Pretrial n=102, sentenced n=57)

<table>
<thead>
<tr>
<th># Visits</th>
<th>Rearraigned</th>
<th></th>
<th>Reconvicted</th>
<th></th>
<th>Reincarcerated</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretrial</td>
<td>Sentenced</td>
<td>Pretrial</td>
<td>Sentenced</td>
<td>Pretrial</td>
<td>Sentenced</td>
</tr>
<tr>
<td>None</td>
<td>p=0.03⁣</td>
<td>p=0.17</td>
<td>p=0.02⁣</td>
<td>p=0.71</td>
<td>p=0.04⁣</td>
<td>p=0.30</td>
</tr>
<tr>
<td>1-2</td>
<td>68.3%</td>
<td>38.7%</td>
<td>55.6%</td>
<td>25.8%</td>
<td>41.3%</td>
<td>19.4%</td>
</tr>
<tr>
<td>3+</td>
<td>40.9%</td>
<td>69.2%</td>
<td>31.8%</td>
<td>38.2%</td>
<td>13.6%</td>
<td>38.5%</td>
</tr>
<tr>
<td>Total</td>
<td>57.8%</td>
<td>47.4%</td>
<td>45.1%</td>
<td>31.6%</td>
<td>32.4%</td>
<td>22.8%</td>
</tr>
</tbody>
</table>

⁣

Limitations on this analysis include that this was not an experimental design and thus selection of groups by amount of health care includes bias, for which it is difficult to control given the limited sample size. A randomized study design would not have been ethical. Because of the six-month follow-up study design, we were not able to analyze recidivism at one year for all study participants. Given the number of other factors that effect recidivism, health care studies on recidivism should involve a much larger group or utilize very well matched comparison groups or an experimental design, and given this, our results should be interpreted with caution.
Chapter 6

Risk Behavior: Tobacco, Drug and Alcohol Use

This chapter presents findings from the follow-up interviews regarding self-reported risk behaviors in the jail (reported in the 30-day interview) and changes in tobacco, alcohol, and drug use from baseline to six-month follow-up.

6.1 Risk Behavior in Jail

Questions about HIV risk behavior in jail were asked on the 30-day interview. By asking these sensitive questions on the post-release interviews, rather than the baseline interview conducted in the jail, we hoped to elicit more responses from participants.

Eight of the 124 30-day interview respondents reported drug use in jail. This is not inconsistent with rates of persons testing positive in HCCC random drug tests of about one percent. None reported injecting illicit drugs while incarcerated. Two reported tattoo or body piercing in jail, and five reported sexual behavior (not including masturbation) in jail.

Men reporting sex with men could certainly have been under reported and, based on our impressions from clinical care experience, sexual activity is more likely to be underreported than illicit drug use.

6.2 Cigarette Smoking Abstinence Among Inmates Upon Return to the Community

6.2.1 Background

As part of this larger evaluation project, an analysis was undertaken to assess whether forced cigarette smoking cessation due to the jail’s smoke-free policy and reinforced by the preventive messages from health education classes and the health services staff, led to maintenance of smoking abstinence post-release among inmates who were smokers at the time of their intake to the jail (intake smokers).

HCCC adopted a no-smoking policy for inmates and staff in 1996. Thus, all incoming inmates who smoke involuntarily cease smoking for the duration of their incarceration or while they are on facility grounds. At HCCC inmates are also exposed to health education classes and to messages from health services staff, both of which emphasize the health and financial benefits of smoking cessation. This focus on smoking prevention is especially appropriate for the inmates with chronic health conditions.

A 1997 study of 1200 incoming inmates at HCCC found a pre-incarceration active cigarette smoking rate of 74.2 percent; of the 200 participants in the current study, 165 (82.5 percent) were cigarettes smokers at intake. These figures are 3.7 and 4.1 times higher than the rate of 20.2 percent for Massachusetts adults for the Centers for Disease Control and Prevention’s national Behavioral Risk Factor Surveillance Survey data for the year 2000.
6.2.2 Findings

Among the 124 study participants located for the 30-day follow-up interview, the smoking abstinence rate among intake smokers was 13.7 percent (n=14). One hundred thirty-one participants were located for the six-month interview. Of the 27 intake smokers located at the first time for the six-month interview, all were either current smokers or had smoked since release from HCCC. Of the 14 abstainers identified for the 30 day interview, 10 were reinterviewed at 6 months and only 3 of these were abstainers for the full 6 months. Thus for the 123 intake smokers contacted for either interview only 3 individuals were known abstainers at 6 months leading to a confirmed abstention rate of 2.4 percent (n=3). The other four individuals who were abstinent at 30 days were lost to follow-up at six months. If these four individuals were added to the confirmed abstinent group the highest possible abstinence rate would be 5.7 percent (n=7). Only 2 of the intake non-smokers subsequently reported smoking either at the 30-day or 6-month follow-up.

As part of the post-release interviews, inmates were asked about their cigarette smoking behavior after release. Figure 6-1, through the six-month period, shows the rapid rate of decrease in smoking abstinence after release among the 102 study participants who were smokers at intake to the non-smoking correctional center, who were successfully interviewed 30 days after release and the 123 intake smokers successfully interviewed six months post-release. Only 37.3 percent of the former smokers remained abstinent at the end of the first day post-release. By the end of the first week only 17.7 percent were still abstinent, and by the end of the first month only 13.7 percent had maintained their abstinence. The 180-day post-release data point of 2.4 percent reflects the abstinence rate of the intake smokers contacted at 30 days or six months after release.

Figure 6-1

Percent of Intake Smokers Involuntarily Ceasing Smoking While Incarcerated Who Remained Cigarette Abstinent, by Length of Time Post-Release

<table>
<thead>
<tr>
<th>Days</th>
<th>% Not Smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Day*</td>
<td>37.3%</td>
</tr>
<tr>
<td>7 Days*</td>
<td>17.6%</td>
</tr>
<tr>
<td>30 Days*</td>
<td>13.7%</td>
</tr>
<tr>
<td>6 Months**</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

* Percentages based on 102 30-day interview respondents.
** Percentages based on 123 30-day and six-month interview respondents.
The high rate of smoking in this study group is especially disturbing given their chronic medical conditions. Table 6.1 indicates the distribution of chronic medical conditions among the 123 smokers who participated at least one follow-up interview. Almost three quarters of the smokers had hepatitis C infection, asthma, diabetes, HIV, or cardiovascular disease (including hypertension), medical conditions in which smoking abstention might reduce the risk of further complications.

**Table 6.1**

| Chronic Medical Conditions in the 123 Intake Cigarette Smokers Contacted After Release (n=123) |
|---|---|---|
| **Medical Condition** | **N** | **%** |
| Hepatitis C | 35 | 28.4 |
| Asthma/Chronic Obstructive Pulmonary Disease (COPD) | 18 | 14.6 |
| Hypertension | 18 | 14.6 |
| HIV/AIDS | 11 | 8.9 |
| Gastrointestinal (except hepatitis C) | 11 | 8.9 |
| Musculoskeletal | 10 | 8.1 |
| Seizure Disorder | 9 | 7.3 |
| Diabetes Mellitus | 8 | 6.5 |
| Cardiovascular (except hypertension) | 5 | 4.1 |
| Other | 9 | 7.0 |

Because of the extremely low rates of abstinence, the results presented above are purely descriptive. The lack of abstainers made moot any analyses considering abstinence and exposure to health services staff and health education classes, or the consideration of the many other data items usually relevant to cigarette smoking.

### 6.2.3 Conclusions

As addicts, cigarette smokers often quit a number of times before being successful. In this relatively young population (albeit with a number having quite serious chronic diseases) the confirmed successful continuous abstinence rate in intake smokers over a six-month follow-up period was only 3 or 2.4 percent. In the general population it is generally considered that 50 percent of smokers make a serious attempt to quit each year but that only up to 7 percent of those who try actually succeed—or up to 3.5 percent of smokers successfully quitting each year. The 6-month abstinence rate in this HCCC group seems to be in the same range as that in the overall population.

Although the smoking data in the current study come from unconfirmed self-reported interview responses, given the low rate of reported abstinence, the veracity of the data should not be in dispute. It appears that under conditions of forced abstinence and in a setting where the benefits (health and otherwise) of quitting smoking are promoted, even inmates with chronic conditions who were smokers at the time of their incarceration resumed smoking almost unanimously within a six-month period after their return to the community. Given both the high prevalence of tobacco use and its known health risks in the chronic conditions in this group, even small reductions in tobacco use could have significant benefits. To be successful in maintaining abstinence, other interventions should be investigated. For example, inmates may need to be linked to an active community-based smoking abstinence maintenance program available in the correctional center at least a month before their
release and be able to continue in the same program outside upon returning to the community. Such support might mitigate the relapse of an appreciable proportion of the inmates, especially those already able to resist the immediate opportunity to smoke upon release.

6.3 Alcohol and Drug Use and Treatment

While the HCCC public health model does not directly address substance abuse, however drug education and treatment are offered at the jail and the health staff refer inmates to post-release treatment in the community as needed.

Alcohol and drug use were both common among the study sample; 79 percent of study respondents had had a drink in the thirty days prior to incarceration and half (50.4) had used at least one hard drug (excluding marijuana). Eighty one percent had ever used a hard drug and over one third (36 percent) had ever injected drugs. Among those who had not had a drink (n=33) in the 30 days prior to the baseline interview, three-quarters (73 percent) described themselves as non-drinkers or occasional drinkers and a quarter (27 percent) recovering alcoholics. Among those who had not used drugs in the 30 days prior to the baseline interview 15 percent considered themselves to be recovering addicts. As might be expected, these high rates of substance use were accompanied by high rates of lifetime participation in substance abuse treatment services; eighty percent of respondents had ever been in drug or alcohol treatment.

6.3.1 Alcohol Use

There was a dramatic, statistically significant (p=0.0001) decrease in alcohol consumption among study participants from baseline to follow-up; only 37 percent of respondents reported having a drink in the past 30 days in the six-month follow-up interview compared to 79 percent at baseline. Table 6.2 shows that among drinkers, there was a shift from heavier drinking to lighter drinking. The dramatic, statistically significant (p=<0.0001) decrease in the number drinking every day or almost everyday (5-7 days per week) from 34 percent to 12 percent was accompanied by an increase in the proportions drinking 1-5 days per week. There were also large declines in the percentage of respondents reporting the heaviest drinking (11 or more drinks per sitting), at baseline almost half (48 percent) drank at this level while at follow-up only one tenth (10 percent) did.

Overall there was a downward shift in both the number of days per week that participants had a drink and the number of drinks per sitting consumed. As shown in Table 6.3, over half decreased the number of days per week that they drank (52 percent) while only one tenth increased (10.7 percent). Almost two thirds (63 percent) decreased the number of drinks per day that they drank.
### Table 6.2

Alcohol Use in the Thirty-Days-Prior to the Baseline and Six-Month Follow-Up Interviews (n=131)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>6-Months</th>
<th>p-value&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drank alcohol in the Past 30-Days (N=131)</td>
<td>98 (78.8%)</td>
<td>49 (37.4%)</td>
<td>&lt;0.0001&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Days per Week Drank Alcohol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Than Once Per Week</td>
<td>11 (11.2%)</td>
<td>5 (10.2%)</td>
<td>&lt;0.0001&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>1-2</td>
<td>25 (25.1%)</td>
<td>23 (46.9%)</td>
<td>0.4576</td>
</tr>
<tr>
<td>3-5</td>
<td>29 (29.6%)</td>
<td>15 (30.6%)</td>
<td>0.0119&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>6-7</td>
<td>33 (33.7%)</td>
<td>6 (12.2%)</td>
<td>&lt;0.0001&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Number of Drinks per Day&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>11 (11.2%)</td>
<td>10 (20.4%)</td>
<td>0.6276</td>
</tr>
<tr>
<td>3-5</td>
<td>14 (14.3%)</td>
<td>16 (33.3%)</td>
<td>0.8312</td>
</tr>
<tr>
<td>6-10</td>
<td>21 (21.4%)</td>
<td>15 (31.3%)</td>
<td>0.2482</td>
</tr>
<tr>
<td>11 or more</td>
<td>48 (48.0%)</td>
<td>5 (10.4%)</td>
<td>&lt;0.0001&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> The p-value was generated by using a McNemar with continuity correction test.

<sup>b</sup> Significant values in bold type.

<sup>c</sup> 4 missing values at baseline and 3 at follow-up for Number of Drinks per Sitting.

### Table 6.3

Change in Alcohol Use in the Thirty Days Prior to the Baseline and Six-Month Follow-Up Interviews (n=131)<sup>b</sup>

<table>
<thead>
<tr>
<th>Change in Alcohol Use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of days per Week Drank</td>
<td></td>
</tr>
<tr>
<td>Decreased</td>
<td>68 (51.9%)</td>
</tr>
<tr>
<td>Stayed the Same (Users)</td>
<td>11 (8.4%)</td>
</tr>
<tr>
<td>Stayed the Same (Non-Users)</td>
<td>38 (29.0%)</td>
</tr>
<tr>
<td>Increased</td>
<td>14 (10.7%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Drinks per Day</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased</td>
<td>82 (62.6%)</td>
</tr>
<tr>
<td>Stayed the Same (Users)</td>
<td>7 (5.3%)</td>
</tr>
<tr>
<td>Stayed the Same (Non-Users)</td>
<td>31 (23.7%)</td>
</tr>
<tr>
<td>Increased</td>
<td>11 (4.4%)</td>
</tr>
</tbody>
</table>
6.3.2 Drug Use

There was also a large, statistically significant (p=0.0001) decrease in the use of hard drugs (defined as powdered cocaine, crack, heroin, and prescription, and party drugs) in the thirty days prior to the interviews from half (50 percent) using hard drugs at baseline to one fifth (20 percent) at six-month follow-up (Table 6.4). As with the pattern of alcohol use, drug users shifted their consumption to lower levels of use, this is especially dramatic in the heaviest and lightest drug use categories. The group using every day or almost every day (6-7 days per week) showed a statistically significant (p=0.0001) decline from 65 percent to 42 percent and the group using less than 1-2 days per week increased from 21 percent to 27 percent (p=0.0098). There was also a statistically significant (p=0.0003) decline in injection drug use from 18 percent at baseline to 5 percent at six-month follow-up.

Table 6.4

<table>
<thead>
<tr>
<th>Drug Use in the Thirty-Days-Prior to the Baseline and Six-Month Follow-Up Interviews (n=131)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N=131)</td>
</tr>
<tr>
<td>Days per Week Used At Least One Hard Drug</td>
</tr>
<tr>
<td>Less Than Once Per Week</td>
</tr>
<tr>
<td>1-2</td>
</tr>
<tr>
<td>3-5</td>
</tr>
<tr>
<td>6-7</td>
</tr>
<tr>
<td>Injected Drugs In Past 30 Days</td>
</tr>
</tbody>
</table>

a The p-value was generated by using a McNemar with continuity correction test.
b Hard drugs are defined as crack or rock cocaine, powdered cocaine, heroin, and other.
c Significant Values in bold type.
d 1 missing value for Days Per Week Used Hard Drugs at Six Months.
e 19 missing values for Injected in Past 30 Days at Baseline.

Table 6.5 shows that at the individual level, about a quarter of respondents (23-27 percent) decreased the number of days that they used each drug and that about two-thirds to three-quarters (64-73 percent) were steady non-users. Very few respondents reported an increase in hard drug use. About two-thirds (63.6 percent) of the baseline group and one-third (30.8 percent) of the follow-up group used two or more drugs, and may well have used them on the same day, if not at the same time, so they are represented in the results for multiple drugs.
Table 6.5

Change in the Number of Days Per Week Used Hard Drugs in the Thirty Days Prior to the Baseline and Six-Month Follow-Up Interviews (n=131)

<table>
<thead>
<tr>
<th>Change in Drug Use</th>
<th>Crack or Rock Cocaine</th>
<th>Powdered Cocaine</th>
<th>Heroin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased</td>
<td>30 (22.9%)</td>
<td>30 (22.9%)</td>
<td>35 (26.7%)</td>
</tr>
<tr>
<td>Stayed the Same (Users)</td>
<td>3 (2.3%)</td>
<td>0</td>
<td>6 (4.6%)</td>
</tr>
<tr>
<td>Stayed the Same (Non-Users)</td>
<td>94 (71.8%)</td>
<td>96 (73.3%)</td>
<td>84 (64.1%)</td>
</tr>
<tr>
<td>Increased</td>
<td>4 (3.1%)</td>
<td>5 (3.8%)</td>
<td>6 (4.6%)</td>
</tr>
</tbody>
</table>

a Hard drugs are defined as crack or rock cocaine, powdered cocaine, heroin, and other.

6.3.3 Alcohol and Drug Treatment

At baseline 80 percent of participants reported ever having participated in alcohol or drug treatment and many had attended multiple types of programs. Thirty six percent had received both alcohol and drug treatment during the six months prior to incarceration. As shown in Table 6.6, a majority participated in twelve-step programs—59 percent in alcoholics anonymous (AA) and 57 percent in narcotics anonymous (NA)—about a quarter had participated in out-patient (27 percent) and in-patient (28 percent) treatment for alcohol and about a third for drugs (34 percent and 35 percent respectively).

Table 6.6

Lifetime Participation in Alcohol or Drug Treatment Reported at Baseline (n=131)

<table>
<thead>
<tr>
<th>Participated In Any Drug or Alcohol Treatment</th>
<th>105 (80.2%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Programa</td>
<td>Alcohol Treatment</td>
</tr>
<tr>
<td>12-Step</td>
<td>77 (58.8%)</td>
</tr>
<tr>
<td>Out-Patient</td>
<td>35 (26.7%)</td>
</tr>
<tr>
<td>In-Patient</td>
<td>36 (27.5%)</td>
</tr>
<tr>
<td>Methadone Maintenance</td>
<td>N/A</td>
</tr>
<tr>
<td>Detox</td>
<td>42 (32.1%)</td>
</tr>
</tbody>
</table>

a Total is greater than 105 because respondents could report participation in more than one type of treatment.
In the six-month follow-up period slightly more than half (52 percent) participated in treatment (Table 6.7). AA and NA continued to be the most common treatment modality (30 percent for alcohol and 5 percent for drug treatment), the second was popular treatment for alcohol users was detoxification (5.3 percent) and for drug users was methadone maintenance (4.6 percent).

### Table 6.7

**Post-Release Participation in Alcohol or Drug Treatment (n=131)**

<table>
<thead>
<tr>
<th>Participated In Any Drug or Alcohol Treatment</th>
<th>Alcohol Treatment</th>
<th>Drug Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-Step</td>
<td>39 (29.8%)</td>
<td>7 (5.3%)</td>
</tr>
<tr>
<td>Out-Patient</td>
<td>2 (1.5%)</td>
<td>1 (0.7%)</td>
</tr>
<tr>
<td>In-Patient</td>
<td>0 (0.0%)</td>
<td>2 (1.5%)</td>
</tr>
<tr>
<td>Methadone Maintenance</td>
<td>N/A</td>
<td>6 (4.6%)</td>
</tr>
<tr>
<td>Detox</td>
<td>7 (5.3%)</td>
<td>N/A b</td>
</tr>
<tr>
<td>Other</td>
<td>N/A c</td>
<td>7 (5.3%)</td>
</tr>
</tbody>
</table>

*a Total is greater than 105 because respondents could report participation in more than one type of treatment.

*b Respondents were not asked about participation in detox programs for drug use on the follow-up interview.

*c Respondents were not asked about participation in other treatment programs for alcohol use on the follow-up interview.

We did not gather data on the specific treatment modalities used by study participants in the six months prior to incarceration, but Table 6.8 shows the change in overall participation in drug and alcohol treatment from the six months prior to the baseline interview to the follow-up interview. Participation in alcohol treatment stayed the same in the two periods (about 36 percent), but there was a statistically significant decline in participation in drug treatment after release (from 36 percent to 16 percent).

### Table 6.8

8 **Participation in Alcohol or Drug Treatment In the Six Months Prior to Incarceration and at Follow-Up (n=131)**

<table>
<thead>
<tr>
<th>Last Alcohol Treatment Encounter</th>
<th>Baseline</th>
<th>6-Months</th>
<th>p-value a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than 6 months Before Interview</td>
<td>47 (35.9%)</td>
<td>48 (36.6%)</td>
<td>0.1763</td>
</tr>
<tr>
<td>Greater Than 6 months Before Interview</td>
<td>33 (25.2%)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Drug Treatment Encounter</th>
<th>Baseline</th>
<th>6-Months</th>
<th>p-value b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than 6 months Before Interview</td>
<td>47 (35.9%)</td>
<td>21 (16.0%)</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Greater Than 6 months Before Interview</td>
<td>33 (25.2%)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*a The p-value was generated by using a McNemar with continuity correction test.

*b Significant Values in bold type.
6.3.4 Conclusions

The proportion of study respondents who used alcohol and drugs decreased over the study period, as did patterns of use such as the number of days per week that substances were used and the number of drinks per day consumed. We cannot attribute this reduction directly to the intervention, as we did not gather data on in-jail substance abuse treatment participation or linkages made by jail health staff to community treatment programs, but it is possible that the general health care and education provided at HCCC and the community health centers played a role in the reported reduction in use. Another explanation for the reduction in reported use is that study subjects may have been mandated by conditions of release to abstain from drugs or alcohol, this could be the reason for the reduced use or at least have made respondents reluctant to admit to use.

The dramatic decline in respondents reporting drug use is surprising in light of the fact that many probably did not received drug treatment at the jail and only 16 percent received drug treatment in the community after release. While it might be expected that respondents would have been less likely to report drug use while they were in jail then when they were in the community, there may be factors that make the reverse true. First, in jail the respondent may have believed that their drug use patterns were already known (especially if they were arrested for a drug-related crime or if drug test was conducted at admission). Next, respondents may have been on probation or parole at the time of the follow-up interview, and if not using drugs was a condition of the remaining out of jail then they may have been less likely to use drugs or less willing to report drug use. Finally the mode of the interview—conducted over the phone with someone that the respondent had never met—may have made respondents wary of disclosing information despite our effort to assure participants that the study was being conducted independently from the jail and that answers would not be shared with the jail, and the script preceding the section on drug use included the phrase, “I want to remind you that your answers are confidential and cannot be used against you in any way.”
Chapter 7

Conclusions and Study Limitations

7.1 Summary of Study Conclusions

Health-Related Characteristics Of The Population

- As might be expected given the eligibility criteria, study participants were in relatively poor physical and mental health, but also had surprisingly high levels of receipt of health care in the 6 months pre-incarceration (68 percent medical care, 80 percent mental health care—some of it perhaps during previous incarcerations) and relatively high rates of health insurance coverage (76 percent).

- The most prevalent medical conditions were hepatitis C (26 percent of released group), asthma (20 percent), hypertension (18 percent), and HIV/AIDS (10 percent).

- The most prevalent mental health diagnoses were depression (41 percent) and bipolar disorder (8 percent).

- Smoking, substance abuse, high-risk sexual practices, and violence (perpetration and victimization) were quite prevalent among participants.

Satisfaction With Health Services (30-Day Follow-Up)

- 58 percent of respondents rated HCCC health services as “good”, “very good”, or “excellent”, as opposed to 77 percent giving these ratings to medical care in the community post-release and 69 percent to community mental health care.

- 74 percent reported having “some”, “a lot”, or “complete” trust in jail health staff, and 82 percent gave these ratings to community medical services.

Linkage With Community-Based Health Care (30-Day Follow-Up Unless Otherwise Noted)

- 53 percent of respondents with medical problems and 36 percent with mental health problems left the jail with an appointment to see a provider in the community.

- 65 percent kept their first medical appointment and 70 percent kept their first mental health care appointment.

- Reasons for not keeping appointments included lack of transportation or childcare, scheduling conflicts, illness, drug or alcohol problems, and forgetting.
• 55 percent of those with medical problems and 61 percent of those with mental health problems either kept their first appointment or saw another provider in the community without an appointment arranged at HCCC.

• Commonly cited barriers to seeking care in the community included inability to pay (38 percent, although 76 percent of respondents reported having some form of health insurance) and lack of transportation (48 percent).

• Housing instability and unemployment were not cited as major barriers but were quite common among respondents—26 percent spent at least one night homeless in the 6 months post-release and 67 percent were jobless at 6 months.

• Facilitators to seeking care in the community included having appointments (cited by 92 percent of those with appointments), having dually-based providers (69 percent), and the health education provided in the jail (82 percent).

**Health Status and Health Care Utilization (6-Month Follow-Up)**

**Absolute Changes**

• The proportion of respondents reporting “excellent”, “very good”, or “good” health increased from 46 percent at baseline to 66 percent at 6-month post-release, while those reporting “fair” or “poor” health declined from 54 percent to 34 percent (p<.0006); the proportion of respondents who reported being bothered substantially by emotional problems declined from 66 percent at baseline to 43 percent at 6-months post-release (p=<.0001).

• 48 percent of participants reported improved physical health from baseline to 6-months post-release, while 47 percent reported improved mental health; during the same interval, 23 percent reported worsened physical health and 20 percent reported worsened mental health.

• There were several significant changes in health care utilization in the six months prior to incarceration compared to the six months after release. The percentage admitted to a hospital declined from 27 percent to 13 percent (p=.005); the percentage of respondents with a medical problem who saw a primary medical provider also declined from 68 percent at baseline to 56 percent at 6-month follow-up (p=.02)—however this change was not in the hypothesized direction. The percentage who went to the emergency room also declined from 50 percent to 38 percent, but it was not significant.

• For those with mental health problems, none of the changes reached statistical significance, but there were some changes in the hypothesized direction. The percentage going to an emergency room and admitted to a hospital declined, however the percentage seeing a provider in the community also declined.

• In parallel with our analyses of the proportion of participants seeking care we looked at the mean number of visits per day in the community pre- and post-release. There were two statistically significant changes, a decrease in the number of hospital admissions among participants with medical problems (p=02) and the number of visits to a provider among
participants with mental health problems (p=.02) (contrary to our hypothesis). The rest of the changes were in the hypothesized direction but did not reach statistical significance.

- These findings generally reflect positive changes, although they are difficult to interpret because patients’ individual diagnoses and treatments at HCCC might influence changes between pre-incarceration and post-release care in various ways and directions. Moreover, many of the participants in the study had been in HCCC before and might have received health services their previous to the index incarceration.

**Effects of the Intervention On Health Outcomes**

- Changes in health status and health care utilization from baseline to 6-month follow-up were subjected to statistical modeling based on receipt at HCCC of five core services in the model: physician visits; mental health provider visits; case management services; discharge planning; and a post-release appointment for care.

- For reasons perhaps related to their individual medical or mental health conditions and perhaps to problems with record keeping, participants in the study appeared to receive these services less commonly than might have been expected.

- Multivariate modeling revealed a mixed statistical relationship between changes in health status and health care utilization and participation in the interventions at HCCC.

  - For participants with medical problems, there was a statistically significant association between participation in the interventions and increased post-release physician visits, decreased use of emergency rooms (not significant) and hospitalization (not significant).

  - For participants with mental health problems, there was a statistically significant association between participation in the interventions and increased post-release visits to mental health care providers (even more likely if the participant had a discharge plan), but the interventions had no effect on use of emergency rooms in this group.

  - Participation in the interventions was statistically significantly related to decline in self-reported health status among participants with medical and mental health problems.

  - An important positive finding was that, for participants with medical problems, having an appointment with a provider in the community before they left HCCC was a statistically significant predictor of increased participation in primary medical care post-release. The strength of this relationship increased with the level of the participant’s trust in HCCC health care providers. The making of appointments may be the most important, cost-effective, and replicable portion of the HCCC model.

- The mixed relationships detected between participation in the interventions and the outcomes of interest may reflect generally small sample sizes (that made effects more difficult to detect), the use of the instrumental variable approach to control for selection bias, lower than expected participation in the interventions, new diagnoses of health problems (that may have produced the decreases in self-reported health status) as well as variations in the actual need
for post-release care. In the end, those who received appointments may have been those most in need of post-release care and those most likely to receive it.

**Recidivism**

- Analysis of criminal history records in light of participation in the health care interventions at HCCC revealed no relationship between recidivism (whether defined as rearraignment, reconviction, or reincarceration) and intensity of participation in the interventions.

**Tobacco Use**

- HCCC is a smoke-free facility so inmates are generally forced to abstain from smoking while incarcerated there. However, very few of the participants in the study who smoked at baseline were able to remain smoke-free six months after release (2 percent).

**Alcohol and Drug Use**

- Drug education and treatment are offered at the jail and the health staff refer inmates to post-release treatment in the community as needed, but substance abuse treatment is not a distinct component of the public health model for correctional health care.

- There was a statistically significant \( p=0.0001 \) decrease in the percentage of participants reporting having had a drink in the past 30 days from baseline (79 percent) to follow-up (37 percent). At follow-up participants reported drinking on fewer days per week and on days that they drank had fewer drinks. Over half decreased the number of days per week that they drank (52 percent) while only one tenth increased (11 percent). Almost two thirds decreased the number of drinks per day that they drank (63 percent).

- There was also a statistically significant \( p=0.0001 \) decrease in the percentage of respondents reporting the use of hard drugs (defined as powdered cocaine, crack, heroin, and prescription, and party drugs) in the thirty days prior to the interview from 50 percent at baseline to 20 percent at six-month follow-up. In parallel with the pattern of alcohol use, drug users shifted their consumption to lower levels of use—the group using 1-2 days per week increased from 21 percent to 27 percent \( (p=0.0098) \) and the group using every day or almost every day (6-7 days per week) showed a statistically significant \( (p=0.0001) \) decline from 65 percent to 42 percent.

- Eighty percent of study participants reported ever having participated in alcohol or drug treatment and many had attended multiple types of programs. Participation in alcohol treatment stayed the same in the two periods (about 36 percent), but there was a statistically significant decline in participation in drug treatment after release (from 36 percent to 16 percent).
7.2 Study Limitations

The primary limitations of the study were the relatively small sample size—significantly smaller than anticipated—available for the analysis of treatment effects and selection bias. Our total sample size was 200, with 124 (62 percent) completing the 30-day follow-up interview and 131 (65.5 percent) completing the 6-month interview. The small sample limited our power to detect differences, particularly changes in relatively rare events, such as hospitalization and emergency room use. Moreover, the analyses of specific outcomes used smaller sub-groups of the sample; for example, to analyze medical care utilization, we only examined individuals diagnosed with a physical health condition, and for mental health utilization, only those with a mental health condition. These sample sizes were further reduced in the regression model to individuals who had complete data for all the variables.

The lack of a randomized control design or comparison group is another major limitation of the study. Although we made statistical adjustments to address selection bias, without a randomized controlled study, we cannot be sure that we have eliminated all selection bias. Because inmates seek health services at different rates based on personal characteristics, including level of need, motivation to improve health, and knowledge of the services available, we cannot attribute improved outcomes solely to the program.

As discussed in chapter 3, our sample was not fully representative of all newly admitted inmates with chronic conditions. First, inmates who left the facility before the medical examination on day three (approximately 30 percent) were not available for evaluation and recruitment into the study. Second, although we tried to take a census of qualifying inmates over the study period, study recruitment efforts in the jail were not always consistent. Third, the study excluded inmates who did not spend at least three months in the community prior to the index jail admission and inmates who were not released directly to the community during the study period. Nearly 40 percent of inmates were ineligible due to these reasons, thus excluding individuals with longer sentences and some more likely to recidivate.

When we compared demographic characteristics of the sample from the baseline survey, there were few differences other than length of stay between inmates who were identified with chronic conditions (n=576), recruited into the study (n=336), and released and referred to follow-up (n=200). However, inmates referred for follow-up tended to be higher users of medical care (primary and urgent) and mental health care than the total group recruited into the study at baseline. Respondents and non-respondents of the post-release interviews were highly similar according to measured characteristics, with a few exceptions. Non-respondents were more likely to live alone or be homeless, less likely to be employed full-time, more likely to engage in risky sexual behavior and more worried about acquiring HIV, and more likely to have had Medicaid or Medicare coverage at their last episode of medical or mental health care.

Perhaps most importantly, a higher than expected proportion of patients with less intensive chronic conditions enrolled in the study (e.g., individuals with hepatitis C and hypertension). This sample selection issue directly affected the health-related study outcomes, including health care utilization, because individuals with less intensive medical conditions may not have needed medical care in the community in the six months after release. During the study period, HCCC intensified screening for...
hepatitis C, so patients with hepatitis C became a relatively larger proportion of the sample than originally anticipated. Most of these patients did not have symptoms or evidence of liver disease and were not on treatment, so their health services utilization for this condition would be relatively low in jail and after release. In addition, hypertension, when controlled, requires relatively less medical care. By contrast, some of the more intensive chronic conditions, such as HIV, were underrepresented in the study.17

HCCC encountered some challenges in administering program services consistently in jail, with fewer services received by inmates than expected. We found that a large proportion of study participants did not participate in key components of the interventions. In addition, data on services actually received were sometimes incomplete.

17 HIV-positive inmates tend to be an older group, with more prior charges so they may have been incarcerated longer, thus excluding them from the study at higher rates.
Appendix 1: Publications and Presentations Related to the Evaluation of the Public Health Model of Correctional Health Care


“Correctional Health Care– A Model Program.” American Hospital Association, Orlando, FL, April, 2000

“Challenges in Transitioning from Corrections to Community with HIV and Other Medical Conditions.” 5th New England Correctional Health Care Conference, Sturbridge, MA. June 28, 2000

Appendix 2: Data Collection Instruments

1. Baseline Interview
2. 30-Day Follow-Up Interview
3. 6-Month Follow-Up Interview
Baseline Interview
A. DEMOGRAPHICS

To start with, I have several questions about your age and your racial and ethnic background.

19 GENDER (INTERVIEWER CIRCLE NUMBERS IN FRONT OF ANSWERS; DO NOT READ CHOICES IN CAPITALS)
   1 MALE
   2 FEMALE

20 ___/___/___ What is your date of birth?

21 Which of the following do you consider yourself to be . . .
   1 Hispanic or Latino
   2 or not Hispanic or Latino?
      Which of the following do you consider yourself to be? You may choose more than one.
      YES  NO  READ ENTIRE LIST, RECORD ALL THAT APPLY

22 1 2 White?

23 1 2 Black or African-American?

24 1 2 Asian?

25 1 2 American Indian or Alaska Native?

26 1 2 Native Hawaiian or other Pacific Islander

27 1 2 or other? SPECIFY: ______________________

28 What is the language you speak most of the time . . .
   1 English
   2 Spanish
   3 or other? SPECIFY: ______________________

IF CHOSE ENGLISH, SPEAK ENGLISH THROUGHOUT INTERVIEW
B. HEALTH STATUS  Now some questions about your health.

29 During the 30 days before you came to jail, would you say that in general your health was . . .
   1 Excellent
   2 Very good
   3 Good
   4 Fair
   5 or poor?

30 During the 30 days before you came to jail, how much physical or bodily pain did you generally have . . .
   1 No pain
   2 Minimal pain
   3 Mild pain
   4 Moderate pain
   5 or severe pain?

31 During the 30 days before you came to jail, how much help was available to you from family, friends and neighbors . . .
   1 As much as you wanted
   2 quite a bit
   3 some
   4 a little
   5 or none?

32 During the 30 days before you came to jail, how much were you bothered by emotional problems such as feeling anxious, depressed, or sad . . .
   1 Not at all
   2 Slightly
   3 Moderately
   4 Quite a bit
   5 or extremely?

YES   NO

33 1 2 During the 6 months before you came to jail, since MONTH, did any physical health problem keep you from doing your usual activities?
   IF YES:

34 _____ What kind of problem did you have? ______________________________

35 For how many days were you unable to do your usual activities?

36 1 2 During the 6 months before you came to jail did any emotional or mental health problem keep you from doing your usual activities?
   IF YES:

37 _____ What kind of problem did you have? ______________________________

38 For how many days were you unable to do your usual activities?
39 1 2 While you're in jail, is there any physical or emotional health problem you want us to help you with?
   IF YES:
40    What problem is that?
41    How interested are you in having our medical help with this problem . . .
       1 Very interested
       2 Somewhat interested
       3 or a little interested?

C1. MEDICAL CARE UTILIZATION
Now, I'm going to ask a few questions about your use of medical care, not including mental health or drug or alcohol treatment.

42    How long has it been since your last visit anywhere for medical care?
   MONTHS WRITE DOWN UNITS REPORTED AND CALCULATE MONTHS LATER
   IF MORE THAN 6 MONTHS:
43    Where did you go for medical care that last time? (USE FACILITY CODES BELOW)
   SKIP TO: NEXT PAGE ITEM # 54
44    During the 6 months before you came to jail, how many different times did you go to a doctor for medical care, not counting emergency room visits, or hospital stays?
   PROBE: Regular visits? How often? More than one type of doctor?
   IF 1 OR MORE VISITS:
45    Where did you go for this care? (USE CODES BELOW)
46    CLINIC1 CLINIC2 (IF >1 TIME, ASK: Was this the only place you went? Where else?)

11 BRIGHTWOOD CLINIC (PLAINFIELD ST.)
12 NEIGHBORHOOD CLINIC (MASON SQUARE)
13 INTERNAL MEDICINE CLINIC AT BAYSTATE (STATE ST.)
14 HOLYOKE CLINIC (CENTER ST.)
15 HOLYOKE CLINIC (MAPLE ST.)
16 SOUTHWEST CLINIC (MAIN ST.)
17 MEDICAL WEST
18 HMOS OR OTHER CLINICS; SPECIFY: _____________________________
21 PRIVATE PHYSICIAN
22 PRIVATE ALTERNATIVE MEDICINE PRACTIONER (E.G. ACUPUNCTURE, CHIROPRACTOR, ETC.)
23 OTHER: SPECIFY: _____________________________
47    During the 6 months before you came to jail, were you admitted to a hospital overnight or longer because of physical problems? (NO = 00 YES: How many times?)
**IF 1 OR MORE VISITS:**

48 Which hospital(s) were you admitted to? (USE CODES BELOW)

<table>
<thead>
<tr>
<th>Code</th>
<th>Hospital Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>BAYSTATE MEDICAL CENTER (SPRINGFIELD)</td>
</tr>
<tr>
<td>32</td>
<td>BERKSHIRE MEDICAL CENTER (PITTSFIELD)</td>
</tr>
<tr>
<td>33</td>
<td>COOLEY DICKINSON HOSPITAL (NORTHAMPTON)</td>
</tr>
<tr>
<td>34</td>
<td>HOLYOKE HOSPITAL (HOLYOKE)</td>
</tr>
<tr>
<td>35</td>
<td>MARY LANE HOSPITAL (WARE)</td>
</tr>
<tr>
<td>36</td>
<td>MERCY HOSPITAL (SPRINGFIELD)</td>
</tr>
<tr>
<td>37</td>
<td>NOBLE HOSPITAL (WESTFIELD)</td>
</tr>
<tr>
<td>38</td>
<td>PROVIDENCE HOSPITAL (HOLYOKE)</td>
</tr>
<tr>
<td>39</td>
<td>VETERAN'S ADMINISTRATION HOSPITAL (NORTHAMPTON)</td>
</tr>
<tr>
<td>40</td>
<td>WING MEMORIAL HOSPITAL (PALMER)</td>
</tr>
<tr>
<td>45</td>
<td>OTHER IN-STATE HOSPITAL, SPECIFY:</td>
</tr>
<tr>
<td>46</td>
<td>OTHER OUT-OF-STATE HOSPITAL, SPECIFY:</td>
</tr>
</tbody>
</table>

50 During the 6 months before you came to jail, did you go to a hospital emergency room because you were sick or because of physical injury? (NO = 00 YES: How many times?)

**IF 1 OR MORE VISITS:**

51 Which hospital emergency room(s) did you go to for care? (CODES ABOVE)

<table>
<thead>
<tr>
<th>Code</th>
<th>Hospital Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>ER1 ER2 (IF &gt;1 TIME, ASK: Was this the only ER you went to? Where else?)</td>
</tr>
</tbody>
</table>

53 Did any of these visits to the emergency room lead to your being admitted directly to a hospital for at least an overnight stay? (NO=0 YES: How many of these visits?)

YES NO The last time you received medical care before you came to jail, who covered the cost -

54 1 2 Mass Health or Medicaid?
55 1 2 Medicare or Disability?
56 1 2 Employer Medical Plan?
57 1 2 Veteran's Administration?
58 1 2 You?
59 1 2 or no one?
60 1 2 OTHER: SPECIFY: ____________________________

61 1 2 Did you receive any prescription drugs during the last 6 months?

IF YES:

62 1 2 Did you have medical coverage or insurance to pay for any of the cost?

63 1 2 During the 6 months before you came to jail, was there any time when you needed to see a medical provider but didn't because it cost too much?

64 1 2 Was there any other reason that you didn't see a medical provider when you needed to?

IF YES:

65 _____ Why was that? ________________________________
C2. MENTAL HEALTH CARE UTILIZATION

Now I'm going to ask you a few questions about your use of counseling or medications for problems with nerves, emotions, or mental health, not including medical care for physical problems or for drug or alcohol treatment.

IF THE NURSE PRACTITIONER INDICATES THAT THE RESPONDENT HAS A QUALIFYING CHRONIC MENTAL HEALTH CONDITION, OR IF THE INMATE WAS REFERRED FOR A PSYCH EVALUATION.

IF NO INFORMATION FROM NURSE PRACTITIONER ASK THE FOLLOWING QUESTION:

66 1 2 Have you ever received medication, counseling, or other treatment for a problem with your nerves, emotions, or mental health

IF NO: SKIP TO TOBACCO SECTION #91

67 How long has it been since your last visit anywhere for medication, counseling, or other treatment for a problem with your nerves, emotions, or mental health?

IF MORE THAN 6 MONTHS:

68 Where did you go for mental health care that last time? (USE CODES BELOW)

SKIP TO: TOBACCO SECTION ITEM # 91

69 During the 6 months before you came to jail, how many different times did you go to a clinic doctor, therapist, or counselor for mental health care or medications, not counting emergency room visits, or inpatient mental health facility stays?

IF 1 OR MORE:

70 Where did you go for this care? (USE CODES BELOW)

71 CLINIC1 CLINIC2 (IF >1 TIME, ASK: Was this the only place you went? Where else?)

51 BRIGHTSIDE
52 CHILD AND FAMILY SERVICE (PINE ST.)
53 COMMUNITY CARE MENTAL HEALTH CENTER (STATE ST.)

54 GANDARA MENTAL HEALTH CENTER
55 HOLYOKE HOSPITAL
56 JOHNSON LIFE CENTER (MASON SQUARE)

57 MT TOM MENTAL HEALTH CENTER (BOBOLA RD.)
58 PIONEER VALLEY MENTAL HEALTH CENTER (MAPLE ST.)
61 PRIVATE PHYSICIAN
62 OTHER: SPECIFY: ________________________________

72 During the 6 months before you came to jail, were you admitted to a mental health or psychiatric facility for overnight or longer, not including for substance abuse treatment?

( NO = 00  YES: How many times?)

IF 1 OR MORE:

73 Which hospital(s) were you admitted to? (USE CODES BELOW)

74 HOSP1 HOSP2 (IF >1 TIME, ASK: Was this the only hospital you went to? Where else?)

31 BAYSTATE MEDICAL CENTER (SPRINGFIELD)
32 BERKSHIRE MEDICAL CENTER (PITTSFIELD)
33 COOLEY DICKINSON HOSPITAL (NORTHAMPTON)

34 HOLYOKE HOSPITAL (HOLYOKE)
35 MARY LANE HOSPITAL (WARE)
36 MERCY HOSPITAL (SPRINGFIELD)

37 NOBLE HOSPITAL (WESTFIELD)
38 PROVIDENCE HOSPITAL (HOLYOKE)
39 VETERAN'S ADMINISTRATION HOSPITAL (NORTHAMPTON)

40 WING MEMORIAL HOSPITAL (PALMER)
45 OTHER IN-STATE HOSPITAL, SPECIFY: ____________________________
During the 6 months before you came to jail, did you go to a hospital emergency room because of problems with your nerves, emotions or mental health?  
( NO = 0  YES: How many times?)

IF 1 OR MORE:  
Which hospital emergency room(s) did you go to? (USE CODES ABOVE)  
(IF >1 TIME, ASK: Was this the only ER you went to? Where else?)

Did any of these visits to the emergency room lead to your being admitted to a hospital or a mental health facility for at least an overnight stay?  
(NO=0  YES: How many of these visits?)

The last time you had mental health care before you came to jail, who covered the cost?

In the last 6 months, did you receive any prescription drugs for mental health reasons?  
IF YES:  
YES NO

Did you have medical coverage or insurance to pay for any of the cost?

During the 6 months before you came to jail, was there any time when you needed to see a mental health provider but didn't because it cost too much?

Was there any other reason that you didn't see a mental health provider when you needed to?  
IF YES:  

Why was that?

Now, I'm going to ask you about cigarette smoking, meaning tobacco but not marijuana.

During the 30 days before you came to jail did you smoke any cigarettes?  
IF NO: TO LAST 30 DAYS SMOKING

Were you ever a regular smoker?  
(SKIP TO: ALCOHOL SECTION # 100)

On average, how many cigarettes did you usually smoke a day?  
CIGS (20 CIGARETTES IN A PACK)

How old were you when you began smoking cigarettes regularly?  
AGE
Does anyone who lives with you smoke cigarettes?

Do most of your friends smoke?

Would you like to stop smoking cigarettes when you are released?

**IF YES:**

How interested are you in stopping smoking altogether . . .

1 Very interested
2 Somewhat interested
3 or only a little interested?

Are you interested in participating in a smoking cessation group while you are in jail?

---

**E. ALCOHOL**

Now I'm going to ask you about your alcohol use. What you tell me is part of your confidential medical record.

Are you . . .

1 A recovering alcoholic (SKIP TO: #110)
2 An occasional drinker (SKIP TO: STREET DRUGS #117)
3 or a non-drinker? (SKIP TO: STREET DRUGS #117)

During the 30 days before you came to jail, did you have any alcoholic drinks?

**IF NO:**

Which of the following best describes your alcohol experience. Are you . . .

1 A recovering alcoholic (SKIP TO: #110)
2 An occasional drinker (SKIP TO: STREET DRUGS #117)
3 or a non-drinker? (SKIP TO: STREET DRUGS #117)

During the 30 days before you came to jail, on how many days a week did you usually drink an alcoholic beverage? (CODE <1 DAY PER WEEK AS 0)

(PROBE: Every day, most days of the wk, 1-2 days a week, or <1 x per wk)

On days that you drink, how many cans or bottles of beer, shots of liquor, or glasses of wine do you usually drink? (PROBE: Usually, most often?)

Have you ever felt you ought to cut down on or reduce your drinking?

Have people ever annoyed you by criticizing your drinking?

Have you ever felt bad or guilty about your drinking?

Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover? (eye-opener?)

Have you ever been arrested because of your actions while you were drinking?

Do you think you have a drinking problem?

While you're in here would you like help for your drinking?

**IF YES:** How interested are you in getting help for your drinking . . .

1 Very interested
2 Somewhat interested
3 or only a little interested?
ALCOHOL TREATMENT

YES NO Have you ever participated in any of the following alcohol treatment programs . . .

112 2 An AA or other 12 step meeting because of your own drinking?
113 2 Detox?
114 2 An outpatient alcohol treatment program?
115 2 An inpatient alcohol treatment program?

IF YES TO ANY ITEM ABOVE:

116 How long ago was your most recent treatment?
1  Less than a month ago
2  1-6 months ago
3  7-12 months ago
4  or more than a year ago?

F. STREET DRUGS

Now I'm going to ask you a few questions about street drug use.
I want to remind you that your answers are part of your confidential medical file.

Did you ever . . .

During the 30 days before you came to jail did you . . .

How many days a week did you usually . . .

<table>
<thead>
<tr>
<th>EVER USE</th>
<th>LAST 30 DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBSTANCE</td>
<td>/WK</td>
</tr>
</tbody>
</table>

117 2 1 2 01 Use marijuana?
1 2 1 2 11 Use crack or rock cocaine?
1 2 1 2 12 Use powdered cocaine?
1 2 1 2 13 Use heroin?
131 2 1 2 14 Use any other street drug? SPECIFY: ____

YES NO

132 2 Have you ever injected drugs, not including prescription drugs?

IF NO AND NEVER USED DRUGS ABOVE: SKIP TO: SEXUAL PARTNERS # 151

IF NO BUT EVER USED DRUGS OR USED LAST 30 DAYS: SKIP TO: DRUG OF CHOICE # 139

IF INJECTED DRUGS: CONTINUE BELOW
YES NO
133 2 During the 30 days before you came to jail did you inject any drugs?

IF YES:
134 During the 30 days before you came to jail, how many times a week did you inject drugs

135 During the 30 days before you came to jail, how many times did you use a new needle when injecting drugs?

136 During the 30 days before you came to jail, when you didn't use a new needle, how many times did you clean a used needle before injecting drugs?

YES NO
137 2 Have you ever shared needles or works when injecting drugs?

IF YES AND INJECTED IN LAST 30 DAYS:

138 During the 30 days before you came to jail, with how many different people did you share needles or works?

139 What (is/was) your drug of choice? (USE DRUG CODES )

YES NO
140 2 Have you ever been arrested because of what you did to obtain drugs?

141 2 Do you think you have a problem with drug use?

IF EVER USED OR INJECTED DRUGS BUT NOT IN LAST 30 DAYS
142 Are you a . . .

1 An occasional drug user (CONTINUE IMMEDIATELY BELOW)
2 A recovering drug user (CONTINUE IMMEDIATELY BELOW)
3 or a former occasional user (SKIP TO: DRUG TREATMENT SECTION # 145 )

ALL CURRENT AND FORMER DRUG USERS
YES NO
143 2 While you're here would you like help with your drug use?

144 IF YES: How interested are you in getting help with your drug use. . .

1 Very interested
2 Somewhat interested
3 or only a little interested?

DRUG TREATMENT SECTION
YES NO Have you ever participated in any of the following types of drug treatment programs . .

145 2 An NA or AA or other 12 step program because of your own drug use?
146 2 Detox?
147 2 Methodone maintenance?
148 2 An outpatient drug treatment program?
149 2 An inpatient drug treatment program?
IF YES TO ANY ITEM ABOVE:
150 How long ago was your most recent treatment?
   1 Less than a month ago
   2 1-6 months ago
   3 7-12 months ago
   4 or more than a year ago?

G. FEMALE SEXUAL PARTNERS (MALE VERSION)
Now, I'm going to ask you a few questions about your sexual behavior.
YES NO
151 2 In the 6 months before you came to jail, since MONTH, did you have vaginal or anal sex with a female sex partner?
   IF NO: SKIP TO MALE SEXUAL PARTNERS # 165
152 With how many different women in the last 6 months?
153 With how many different women in the 30 days before you came to jail?
   IF NONE: SKIP TO ITEM # 159
154 In total, how many times did you have vaginal or anal sex with a woman, in the 30 days before you came to jail?

Now I'm going to ask about condom use. Condom use is counted only if you put the condom on before penetration and continued using it throughout sex. Do not include times when the condom broke or slipped off.
155 Did you use a condom any of these XX times? (NO = 00 YES: How many times?)
   IF NO, OR IF ONLY 1 PARTNER: SKIP TO ITEM # 157
156 With how many of these XX women did you use a condom at least once in the last 30 days?
157 2 Do you think that (any of) your female sexual partner(s) in the last 30 days were HIV positive?
158 2 Do you think that (any of) your female sexual partner(s) in the last 30 days were injection drug users?
159 During the last 6 months, since MONTH, when you had vaginal or anal sex with a woman how often had you been drinking or using street drugs . . .
   1 Never or rarely
   2 About a quarter of the time
   3 About half the time
   4 About three-quarters of the time
   5 Always or almost always?
   6 NOT SURE
"During the last 6 months before you came to jail . . ."
   YES NO
160 2 Did you have vaginal or anal sex with a woman you didn't know very well?
161 2 Did you talk about safe sex with a female partner?
162 2 Did you use a condom because your female partner asked you to?
H. MALE SEXUAL PARTNERS (MALE VERSION)

Now I'm going to ask you a few questions about your sexual behavior with men during the
6 months before you came to jail. Remember, everything you tell me is confidential.

165  1  2 In the past 6 months, since MONTH, did you have any male sexual partners?
   IF NO: SKIP TO HIV SECTION #179

Before we go further, I want to define anal sex. Anal sex includes both insertive and receptive
sex. Insertive sex is when you have your penis in another man's anus, and receptive sex is when a
man has his penis in your anus.

PROBE: Other terms for this are being a top (insertive partner) or a bottom (receptive partner).

166  1  2 In the past 6 months, since MONTH, did you have anal sex with a male partner?
   IF NO: SKIP TO HIV SECTION #179

167 With how many different male partners in the last six months?

168 With how many different male partners in the 30 days before you came to jail?
   IF NONE: SKIP TO ITEM # 174

169 In total how many times did you have anal sex with a man in the 30 days before you
came to jail?

170 Was a condom used by the insertive partner at any time in the last 30 days?
   IF NO, OR IF ONLY 1 PARTNER: SKIP TO ITEM # 172 (NO = 00 YES: How many times?)

171 With how many of these XX men was a condom used at least once by the
insertive partner during the past 30 days?

172  1  2 Do you think that (any of) your male sexual partner(s) in the last 30 days
were HIV positive?

173  1  2 Do you think that (any of) your male sexual partner(s) in the last 30 days
were injection drug users?

174 During the last 6 months before you came to jail, since MONTH, when you had anal sex with
a man how often had you been drinking or using street drugs . . .
   1 Never or rarely
   2 About a quarter of the time
   3 About half the time
   4 About three-quarters of the time
   5 or always or almost always

During the past 6 months before you came to jail . . .

175  1  2 Did you have receptive anal sex with a man you didn't know very well?

176  1  2 Did you talk about safe sex with a male partner?

177  1  2 Did you convince a male partner that a condom should be used when having anal sex?

178  1  2 Did you exchange sex for money or drugs?
I. HIV SECTION
Again, I remind you that the information you give me is confidential.
YES NO
179 2 Before you came to jail now, were you ever tested for HIV?
    IF YES
180 1 2 Have you ever tested positive for HIV?
    IF YES:
181 How long ago was that?(USE NEAREST WHOLE YEAR - <1 YEAR =00)
    SKIP TO: VIOLENCE AND ABUSE ITEM #184
182 Given the way you were living your life before you came to jail, do you think your chances of getting HIV were . . .
    1 high
    2 medium
    3 low
    4 or no chance at all?
183 Compared to other problems in your life, how much do you worry about getting HIV . . .
    1 a lot less
    2 a little less
    3 a little more
    4 or a lot more?

J. VIOLENCE AND ABUSE
Now I'm going to ask you a few questions about violence and abuse. Some of these questions may be sensitive, but I'm not going to ask for any details. If these questions raise concerns for you let me know and I can arrange for you to see a counselor if you wish.
YES NO
184 2 Has anyone kicked, punched, beaten or otherwise physically hurt you during the last 6 months before you came to jail, since MONTH?
    IF YES: Was this a . . .
        Y N
185 1 2 a spouse or partner?
186 1 2 a close relative?
187 1 2 a friend or acquaintance?
188 1 2 a stranger?
189 1 2 SOMEONE ELSE? SPECIFY RELATIONSHIP:
190  2 Have you kicked, punched, beaten or otherwise physically hurt someone during the last 6 months before you came to jail?  
IF YES: Was this a . . .
  Y N
  1  2 a spouse or partner?
  1  2 a close relative?
  1  2 a friend or acquaintance?
  1  2 a stranger?
  1  2 SOMEONE ELSE? SPECIFY RELATIONSHIP: ____________________________

YES NO
191  1  2 While you were growing up were you kicked, punched, beaten or otherwise physically hurt by a parent, caretaker, or relative?
192  1  2 While you were growing up were you sexually abused by a parent, caretaker, or relative?
193  1  2 Have you ever been cut or stabbed by someone else?
194  1  2 Have you ever been wounded by a gunshot?
195  1  2 In the 6 months before you came to jail did you have easy access to a handgun?

K. HOUSEHOLD  Next, a few questions about your living arrangements.
201 What is your legal marital status . . .
  1 Married     4 Separated
  2 Widowed      5 or never married?
  3 Divorced
202 Immediately before you came to jail, were you living . . .
  1 with your spouse or partner
  2 with other family members
  3 with non-family adult(s) (PROBE: friends or roommates)
  4 alone
  5 in a supervised group situation
  6 or were you homeless?
   Did you stay overnight in any of these places during the 6 months before you came to jail?
203  1  2 a shelter or welfare residence?
204  1  2 a group home or halfway house?
205  1  2 a detox, or residential alcohol or drug treatment center?
206  1  2 an abandoned building, a car, on the street or in a park?

YES NO
207  1  2 In the 6 months before you came to jail here on (DATE) were you in any jail or prison?  
IF YES:
208   About how many days was that in total?
209  Just before you came to jail how many children under 18 were in your care and custody?
How many times did you participate in religious activities in the 30 days before you came to jail?

Now, a couple of questions about your education and income.

What was the highest grade of school you completed? (PLEASE CIRCLE GRADE NUMBER)

In the 6 months before coming to jail, from which of these sources did you get money to live . . .

YES   NO
Wages from a full-time job?
Wages from a part-time job?
Welfare?
Disability payments?
Unreported or illegal sources of income?
Self-employed?
Income from someone else?
Any other source of support? SPECIFY: __________

M. POTENTIAL PROGRAM PARTICIPATION

Finally, either while you're in jail or when you return to the community are you interested in participating in any of the following programs . . .

YES   NO
HIV prevention?
Disease specific health education?
Anger management?
Adult education?
Job training?

After you get out of jail do you think you will be interested in participating in any of these programs . . .

Smoking cessation?
Drug or alcohol treatment?
30-Day Follow-Up Interview
HCCC 30-DAY FOLLOW-UP SURVEY
FINAL – 08/15/2001

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Introduction

Hello. May I speak with (Mr./Ms.) ______?

IF PERSON WHO ANSWERS THE PHONE ASKS WHAT THE CALL IS ABOUT:
I'm calling about a study of health services in Hampden County.

IF PERSON ANSWERING IS RESPONDENT:
Hello, (Mr./Ms._____) My name is _______. I’m calling from Abt Associates, a research company in Massachusetts, to follow-up on the Hampden County jail health study. You may remember that you were interviewed about your health after your physical exam in jail and agreed to participate in the study. I am calling to see how you’ve been doing since your release. I want to make sure that I’m talking with the right (RESPONDENT FIRST AND LAST NAME). Could you tell me your date of birth, please? [COMPARE TO PREPOPULATED DOB]

<DOBMES>  <<DOBDIA> ........................................................... <DOBYER>
The information that you give me will help the Hampden County jail and the community to improve their health programs. Your answers will also help us figure out what people need most when they get out of jail.

Some of the things I’m going to ask you are personal. You don’t have to answer anything that you don’t want to. You should also know that all of your answers are legally protected as part of this research project. That means that they cannot be traced back to you personally. They can’t be used against you in any legal proceedings, and they won’t be shared with anyone outside the research team.

ANSWERING MACHINE MESSAGE (AFTER 3 ATTEMPTS RESULTING IN ANSWERING MACHINE/NO ANSWER):
Hello, I’m calling for (Mr./Ms.)_______ about a study of health services in Hampden County. Can (he/she) please call me back at 1-800(#).
## HCCC 30-Day follow-up Interview

**Interviewer ID #:______________**  
**Interview Date: ___/___/___**

<table>
<thead>
<tr>
<th>Pre-populated field 1</th>
<th>Study # (STUDY ID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-populated field 2-4</td>
<td>Name of respondent (FIRST MIDDLE LAST)</td>
</tr>
<tr>
<td>Pre-populated field 5</td>
<td>Respondent’s date of birth (DOB)</td>
</tr>
<tr>
<td>Pre-populated field 6</td>
<td>Gender (GENDER=F, GENDER=M)</td>
</tr>
<tr>
<td>Pre-populated field 7</td>
<td>Jail admission date (ADMISSION DATE)</td>
</tr>
<tr>
<td>Pre-populated field 8</td>
<td>Release date (from jail or day reporting) (RELEASE DATE)</td>
</tr>
<tr>
<td>Pre-populated field 9</td>
<td>Chronic Condition? (CHRONIC1 OR 2=Y, CHRONIC1 and 2=N)</td>
</tr>
<tr>
<td>Pre-populated field 10</td>
<td>Qualifying chronic condition1 (CHRONIC1 DX)</td>
</tr>
<tr>
<td>Pre-populated field 11</td>
<td>Qualifying chronic condition 1 requires medication? (MED1=Y, MED1=N)</td>
</tr>
<tr>
<td>Pre-populated field 12</td>
<td>Qualifying chronic condition 2 (CHRONIC2 DX)</td>
</tr>
<tr>
<td>Pre-populated field 13</td>
<td>Qualifying chronic condition 2 requires medication? (MED2=Y, MED2=N)</td>
</tr>
<tr>
<td>Pre-populated field 14</td>
<td>HIV OR AIDS (Y/N)</td>
</tr>
<tr>
<td>Pre-populated field 15</td>
<td>Mental Health (PSYCH=Y, PSYCH=N)</td>
</tr>
<tr>
<td>Pre-populated field 16</td>
<td>Qualifying mental health condition (PSYCH DX)</td>
</tr>
<tr>
<td>Pre-populated field 17</td>
<td>Mental health condition requires medication? (PSY MED=Y, PSY MED=N)</td>
</tr>
<tr>
<td>Pre-populated field 18</td>
<td>Smoker at baseline? (SMOKER=Y, SMOKER=N)</td>
</tr>
<tr>
<td>Pre-populated field 19</td>
<td>Released from day-reporting? (DRC=Y, DRC=N)</td>
</tr>
<tr>
<td>Pre-populated field 20</td>
<td>Completed 30-day interview? (Y/N)</td>
</tr>
<tr>
<td>Pre-populated field 21</td>
<td>Date of 30-day interview (DD/MM/YYYY)</td>
</tr>
</tbody>
</table>
I. Health Status

First, I’m going to ask you a few questions about how you have been feeling since your (release in [MONTH]). (IF DRC=YES: release from day reporting in MONTH).

1. Since you were released from jail in (MONTH), would you say that in general your health has been… [Base: All] <GENHLTH>
   - Excellent ................................................................. 1
   - Very good ................................................................. 2
   - Good ........................................................................... 3
   - Fair ............................................................................. 4
   - Or poor? ....................................................................... 5
   - REF ............................................................................ 7
   - DK ............................................................................. 8

2. Since you were released, how much help has been available to you from family, friends and neighbors… [Base: All] <HLPAVAL>
   - As much as you wanted................................................... 1
   - Quite a bit ...................................................................... 2
   - Some ............................................................................ 3
   - A little .......................................................................... 4
   - Or none? ....................................................................... 5
   - REF ............................................................................ 7
   - DK ............................................................................. 8

3. Since you were released, how much have you been bothered by emotional problems such as feeling anxious, depressed or sad… [Base: All] <EMOTIONL>
   - Not at all ...................................................................... 1
   - Slightly ......................................................................... 2
   - Moderately ..................................................................... 3
   - Quite a bit ..................................................................... 4
   - Or extremely? .............................................................. 5
   - REF ............................................................................ 7
   - DK ............................................................................. 8
II. Medical Utilization

Now I’m going to ask you some questions about your use of medical care (since you were released from) (IF DRC=YES: while you were on day reporting or since you were released from) the Hampden County Correctional Center in (MONTH). This does not include any mental health care or drug or alcohol treatment you may have received.

1. (Before you were released from jail,) (IF DRC=YES: Before you were released from jail or while you were on day reporting,) was a medical appointment set up for you in the community? [PROBE: WAS THE APPOINTMENT SET UP BEFORE YOU WERE RELEASED, EITHER BY YOU OR JAIL STAFF.] <SETAPPT> [ Base : All ]

YES ..............................................................................................1
NO ...............................................................................................2

(IF DRC=YES, SKIP TO Q6; OTHERWISE SKIP TO Q7)

REF ..............................................................................................7
DK ...............................................................................................8

2. Did you go to the first appointment? [SEPTAPPT = 1] <GOAPPT>

YES ..............................................................................................1

(IF DRC=YES, SKIP TO Q4; OTHERWISE SKIP TO Q8)

NO ...............................................................................................2
REF ..............................................................................................7
DK ...............................................................................................8


DATE HASN’T COME UP YET ................................................1
RESCHEDULED THE APPOINTMENT ..................................2
HAD A SCHEDULING CONFLICT AND DIDN’T RESCHEDULE..............................................................3
WASN’T SICK OR DIDN’T NEED CARE.........................4
COULDN’T AFFORD IT OR DIDN’T HAVE MEDICAL COVERAGE..............................................................5
DIDN’T HAVE TRANSPORTATION TO GET TO THE APPOINTMENT ....................................................6
TOO SICK TO GET TO THE APPOINTMENT ......................7
FORGOT ABOUT THE APPOINTMENT .........................8
OTHER (specify______________________________)..............9
DID NOT HAVE TIME.............................................................10
HAD FAMILY/CHILD PROBLEMS...................................11
USING DRUGS/ALCOHOL..................................................12
(IF DRC=YES, SKIP TO Q6; OTHERWISE SKIP TO Q7)

IF DRC=YES AND Q2=YES, ASK Q4-5:

4. Did you see the doctor while you were on day reporting? <DRCDOC>

[DRC = YES AND <GOAPPT> = 1]
YES ..............................................................................................1
NO ..............................................................................................2  SKIP TO Q.8
REF ..............................................................................................7
DK……………………………………………………………….8

5. Have you seen the doctor since you were released from day reporting? <SEENDOC>

[DRCDOC = 1]
YES ..............................................................................................1  SKIP TO Q.8
NO ..............................................................................................2  SKIP TO Q.8
REF ..............................................................................................7
DK……………………………………………………………….8

IF DRC=YES AND Q1 OR Q2=NO, ASK Q6-7:

6. Did you see any doctor or other medical provider while you were on day reporting, not including any visits to the hospital or emergency room? <ONDRCDR>

[DRC=YES AND <SETAPPT> =2 OR <GOAPPT>=2]
YES ..............................................................................................1
NO ..............................................................................................2
REF ..............................................................................................7
DK……………………………………………………………….8

IF Q1 OR Q2=NO, ASK Q. 7:

7. Have you seen a (other) doctor or other medical provider since your release (IF DRC=YES: from day reporting)? Do not include visits to the hospital or emergency room. <OTHDOC> [<SETAPPT> in (2, 8) OR <GOAPPT>=2]

YES ..............................................................................................1
NO ..............................................................................................2
REF ..............................................................................................7
DK……………………………………………………………….8

8. When you were released from jail, did the jail health staff provide you with medications or a prescription for a medical condition? <PILLS>

[BASE : ALL]
YES ..............................................................................................1
NO ..............................................................................................2  SKIP TO Q10
REF ..............................................................................................7
DK……………………………………………………………….8
9. Have you taken any of those prescribed medications?  

[<PILLS>=1]  

YES ..............................................................................................1  
NO ...............................................................................................2  
REF ..............................................................................................7  
DK...............................................................................................8

10. Since your release, have you gone to a hospital emergency room because you were sick or because of a physical injury? 

[Base: All]  

YES ..............................................................................................1  
NO ...............................................................................................2  
REF ..............................................................................................7  
DK...............................................................................................8

11. Does MassHealth, Medicaid, or Medicare currently pay for some or all of the costs of your medical care? (PROBE: “MassHealth is the name of the Massachusetts Medicaid program.” NOTE: IF RESPONDENT SAYS THEY ARE ON SSA/SSI DISABILITY, THEN THEY AUTOMATICALLY HAVE MASSHEALTH/MEDICAID OR MEDICARE (IF AGE 65 OR OVER).  

[Base : All] <MEDIPAYS> <V0403>  

YES ..............................................................................................1  
NO ...............................................................................................2  
REFUSED ....................................................................................7  
DON’T KNOW............................................................................8

12. Does any other program or insurer, such as a private insurance company or an employer, cover any of your medical costs?  

[ <MEDIPAYS> = 2, 7, 8 ] <OTHPAYS>  

YES ..............................................................................................1  
NO ...............................................................................................2  
REFUSED ....................................................................................7  
DON’T KNOW ............................................................................8

SKIP TO Q.14
13. Why aren’t you covered by MassHealth or Medicaid? DO NOT READ UNLESS NEED TO PROBE. (PROBE: “MassHealth is the name of the Massachusetts Medicaid program.”) 

[<OTHPAY> = 2] Multi <YNOCOV>

NOT ELIGIBLE.................................................................1
DON’T KNOW IF ELIGIBLE ..............................................2
APPLICATION IS IN PROCESS.................................3
PLAN TO SIGN UP, BUT HAVEN’T YET ..................4
NEED HELP WITH APPLICATION..........................5
OTHER PRIORITIES/NOT ENOUGH TIME ............6
LOST ELIGIBILITY DUE TO INCARCERATION.........7
DON’T KNOW...............................................................98
REFUSED .......................................................................97

14. Now I’m going to read you a list of things that can make it easier for some people to take care of their health. Please rate each one as being “very helpful,” “somewhat helpful” or “not helpful” to you in taking care of your health while you were in jail and since your release. If something doesn’t apply to you, just say so.

AFTER READING THE FIRST FEW ITEMS, ASK: “Was it very helpful, somewhat helpful, or not helpful?” [ BASE : ALL ]

8 = Don’t know; 7 - Refused

<table>
<thead>
<tr>
<th>The care you got from your doctors, nurses or case managers in jail. &lt;B14A&gt;</th>
<th>VERY</th>
<th>SOME</th>
<th>NOT</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning more about your health in jail. &lt;B14B&gt;</th>
<th>VERY</th>
<th>SOME</th>
<th>NOT</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Being in drug or alcohol treatment in jail. &lt;B14C&gt;</th>
<th>VERY</th>
<th>SOME</th>
<th>NOT</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Having a medical appointment set up for you in the community before you left the jail. (NOTE: IF Q1=NO, DO NOT ASK THIS.) &lt;B14D&gt;</th>
<th>VERY</th>
<th>SOME</th>
<th>NOT</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

[<SETAPPT> = (2,8)]

<table>
<thead>
<tr>
<th>Having the same doctors and nurses in jail and at the health center in the community. &lt;B14E&gt;</th>
<th>VERY</th>
<th>SOME</th>
<th>NOT</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

15. What else was helpful to you in taking care of your health, either while you were in jail or since your release? [ BASE : ALL ]

<V0411S1 - V0411S3> <HLTHAID>

| PROPER MEDICATION/ACCESS TO MEDICATION...........1 |
|--------------------------------------------------|------|
| COUNSELING...............................................2 |
| CARING FOR SELF/EXERCISE/MENTALITY/DIET.........3 |
| NOTHING/NO OTHER MENTIONS..........................4 |
16. Now I’m going to read you a list of problems that some people have in trying to take care of their health. Please rate each one as being “a big problem,” “somewhat of a problem” or “not a problem” to you in taking care of your health since your release. If something doesn’t apply to you, just say so.

AFTER READING THE FIRST FEW ITEMS, ASK: “Was it a big problem, somewhat of a problem or not a problem?” [ BASE : ALL ] 8 = Don’t know; 7 - Refused

<table>
<thead>
<tr>
<th>Problem</th>
<th>BIG</th>
<th>SOME</th>
<th>NOT</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not being able to pay for care or medications since your release.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Not being able to get an appointment with a provider.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Not liking the care you get from doctors, nurses or case managers at</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>the health center in the community.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not having transportation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Conflicts in scheduling with work or other activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. What else made it hard to take care of your health since your release?  <MADEHRD> 

<table>
<thead>
<tr>
<th>Mention</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRESS/ANXIETY/DEPRESSION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTHING/NO OTHER MENTIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. Mental Health Care Utilization

Pre-populated field: through HCCC records, it will be determined in advance which respondents have a qualifying mental health condition. If no qualifying mental health condition is indicated, skip to Section IV, Tobacco.

Now I’m going to ask you a few questions about your use of services for problems with your emotions, nerves or mental health—not including any drug or alcohol treatment—(since you were released from jail in [MONTH])

*IF DRC=YES:*

Now I’m going to ask you a few questions about your use of services for problems with your emotions, nerves or mental health *while you were on day reporting or since you were released from jail in* (MONTH). Do not include any drug or alcohol treatment.

1. *(Before you were released from jail,)* *(IF DRC=YES: Before you were released from jail or while you were on day reporting,)* a mental health or psychological appointment made for you in the community? [ PSYCH = YES ] <PSYAPPT>

   YES ..............................................................................................1
   NO ...............................................................................................2
   REF ..............................................................................................7
   DK.................................................................................................8

   *(IF DRC=YES, SKIP TO Q6; OTHERWISE SKIP TO Q7)*

2. Did you go to the first appointment? <PSYCGO>  
   [ < PSYAPPT> = 1 ]

   YES ..............................................................................................1
   NO ...............................................................................................2
   REF ..............................................................................................7
   DK.................................................................................................8

   *(IF DRC=YES, SKIP TO Q4; OTHERWISE SKIP TO Q8)*

3. Why couldn’t you go to the appointment? ENTER ALL THAT APPLY.  
   [ <PSYCGO> = 2 ] <V0420S1 – V042S010> <PSYNOT>

   DATE HASN’T COME UP YET ......................................................1
   RESCHEDULED THE APPOINTMENT ......................................2
   HAD A SCHEDULING CONFLICT AND DIDN’T RESCHEDULE ......................................................3
   WASN’T SICK OR DIDN’T NEED CARE ....................................4
   COULDN’T AFFORD IT OR DIDN’T HAVE MEDICAL COVERAGE FOR MENTAL HEALTH CARE ...............5
   DIDN’T HAVE TRANSPORTATION TO GET TO
THE APPOINTMENT .................................................................6
TOO SICK TO GET TO THE APPOINTMENT .....................7
FORGOT ABOUT THE APPOINTMENT ...............................8
OTHER REASONS (Specify_______________________).........9

( IF DRC=YES, SKIP TO Q6; OTHERWISE SKIP TO Q7 )

IF DRC=YES AND Q2=YES, ASK Q4-5:

4. Did you see the counselor or doctor while you were on day reporting?
[ PSYCH = YES AND DRC = YES AND <PSYCGO> = 1 ]

<DRCCOUNS> <V0421>
YES ..............................................................................................1
NO ...............................................................................................2 SKIP TO Q.8
REF ..............................................................................................7
DK……………………………………………………………….8

5. Have you seen the counselor or doctor since you were released from day reporting?
[ < DRCCOUNS> = 1 ]

<RELDOC>
YES ..............................................................................................1 SKIP TO Q.8
NO ...............................................................................................2 SKIP TO Q.8
REF ..............................................................................................7
DK……………………………………………………………….8

IF DRC=YES AND Q1 OR Q2=NO, ASK Q6:

6. Did you see any counselor, psychiatrist, or doctor for a nervous, emotional, or mental health condition while you were on day reporting? Do not include any visits to the hospital or emergency room.
[ ( PSYCH = YES AND DRC = YES )   AND  (<PSYAPPT> = 2 OR <PSYCGO> = 2 )  ]

<DRCPsy>

YES ..............................................................................................1
NO ...............................................................................................2
REF ..............................................................................................7
DK……………………………………………………………….8

IF Q1 OR Q2=NO, ASK Q. 7:

7. Have you seen a counselor, psychiatrist, or doctor for a nervous, emotional, or mental health condition since your release (IF DRC=YES: from day reporting)? Do not include visits to the hospital or emergency room.
[ PSYCH = YES AND (<PSYAPPT> = 2 OR <PSYCGO> = 2 ) ]

<OTHPSY>

YES ..............................................................................................1
NO ...............................................................................................2
REF ..............................................................................................7
DK……………………………………………………………….8
8. When you were released from jail, did the jail health staff provide you with medications or a prescription for a mental health condition? [ PSYCH = YES ]

<PSYPILL>
YES ..............................................................................................1
NO .............................................................................................2
REF ...........................................................................................7
DK .............................................................................................8

9. Have you taken any of those prescribed medications? [ PSYCH = YES ]

<MEDINTK>
YES ..............................................................................................1
NO .............................................................................................2
REF ...........................................................................................7
DK .............................................................................................8

10. Since your release, have gone to a hospital emergency room because of problems with your nerves, emotions, or mental health? [ PSYCH = YES ]

<PSYER>
YES ..............................................................................................1
NO .............................................................................................2
REF ...........................................................................................7
DK .............................................................................................8

11. Do you have any health insurance or coverage that pays for any of the costs of mental health care? [ PSYCH = YES ]

<PSYINS>
YES ..............................................................................................1
NO .............................................................................................2
REF ...........................................................................................7
DK .............................................................................................8
12. Now I’m going to read you a list of things that can make it easier for some people to take care of their nerves, emotions or mental health. Please rate each one as being “very helpful”, “somewhat helpful” or “not helpful” to you in taking care of your mental health while you were in jail and since your release. If something doesn’t apply to you, just say so.

AFTER READING THE FIRST FEW ITEMS, ASK: “Was it very helpful, somewhat helpful or not helpful?” [ PSYCH = YES ]  8 = Don’t know; 7 - Refused

<table>
<thead>
<tr>
<th></th>
<th>VERY</th>
<th>SOME</th>
<th>NOT</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting treatment from the mental health department in jail. &lt;C12A&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking medications for your nerves, emotions or mental health in jail. &lt;C12B&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being in drug or alcohol treatment in jail. (IF RESPONDENT ANSWERED N/A TO D/A TREATMENT IN THE PRIOR SECTION, DO NOT ASK AGAIN HERE.)&lt;C12C&gt;[B14C] &lt;&gt; 4]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having an appointment set up for you with a therapist, psychiatrist or other mental health provider in the community before you left jail. (IF Q1=NO, DO NOT ASK THIS QUESTION.) &lt;C12D&gt; [PSYAPPT &lt;&gt; 2]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking medications for your nerves, emotions or mental health since your release. &lt;C12E&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. What else helped you take care of your mental health, either while you were in jail or since your release? [ PSYHLP ] [ PSYCH = YES ]

SEEING COUNSELOR/ THERAPIST SINCE RELEASE……..1
HAVING FAMILY/FAMILY SUPPORT………………………2
EXERCISE/ MEDITATION………………………………..3
NOTHING/ NO OTHER MENTIONS………………………..4
14. Now I’m going to read you a list of problems that some people have in trying to take care of their nerves, emotions or mental health. Please rate each one as being “a big problem,” “somewhat of a problem” or “not a problem” to you in taking care of your mental health since your release. If something doesn’t apply to you, just say so.

AFTER READING THE FIRST FEW ITEMS, ASK: “Was it a big problem, somewhat of a problem or not a problem?” [ PSYCH = YES ] 8 = Don’t know; 7 - Refused

<table>
<thead>
<tr>
<th>Problem</th>
<th>BIG</th>
<th>SOME</th>
<th>NOT</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not knowing where to go for care. &lt;C14A&gt;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Not being able to pay for care or medications. &lt;C14B&gt;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Not taking your medications. &lt;C14C&gt;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Not liking the care you get from the counselors or doctors in the community. &lt;C14D&gt;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Not having transportation. &lt;C14E&gt;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Conflicts in scheduling with work or other activities. &lt;C14F&gt;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

15. What else made it hard for you to take care of your mental health since your release?

[ PSYCH = YES ] <PSYOTH> <V0441S1 – V0441S3>

- FAMILY PROBLEMS/FAMILY PRESSURES…………………1
- HOMELESS………………………………………………………2
- UNEMPLOYED……………………………………………………3
- NOTHING/NO OTHER MENTIONS…………………………….4
IV. Tobacco

The next few questions are about cigarette smoking since you were released from the Hampden County Correctional Center in (MONTH).

1. Since your release in (MONTH), have you smoked any cigarettes, meaning tobacco but not marijuana? [BASE : ALL ]

   <SMOKED>
   YES ...................................................................................................................1 (SKIP TO Q3)
   NO ...................................................................................................................2
   REF .................................................................................................................7
   DK .................................................................................................................8

   (IF NO AND NOT A SMOKER AT BASELINE, SKIP TO SECTION V)

2. Why haven’t you started to smoke (again)? (ENTER ALL THAT APPLY) [SMOKERS = YES AND <SMOKED> ^in 1] 

   <V0443S1 – V0443S7>
   <STRTED>
   BECAUSE I QUIT FOR SO LONG IN JAIL .................................................1
   IT’S BAD FOR MY HEALTH .................................................................2
   OTHER HEALTH PROBLEMS ............................................................3
   OTHER (Specify: ____________________________) ..........................4
   DO NOT LIKE IT ANYMORE ...........................................................5

   (SKIP TO SECTION V)

3. Since your release, how many cigarettes have you usually smoked a day?

   [ < SMOKED> = 1 ] 0 = LESS THEN 1 PER DAY

   <PACKS>
   ________ NO. OF CIGS -1 = Don’t know ; -2 = Refused
4. What led you to smoke since your release? DO NOT READ UNLESS NEED TO PROBE. (ENTER ALL THAT APPLY) [ < SMOKED> = 1 ] <LED2SMK> <V0445S01-0445S10>

- NEVER QUIT COMPLETELY........................................1
- ADDICTED / CRAVED CIGARETTES .........................2
- INTENDED TO CONTINUE AFTER JAIL ....................3
- STRESS......................................................................4
- DRINKING OR DRUGS..............................................5
- AROUND OTHER SMOKERS.................................6
- BECAUSE I CAN NOW/EXERCISE FREE CHOICE
  (WASN’T ALLOWED IN JAIL) ...................................7
- OTHER. (Specify: ___________________________) ....8
- HABIT/ENJOYS SMOKING........................................9
- DEPRESSION.........................................................10

5. How many days (after you were released) (IF DRC=YES: after you began day reporting or were released from day reporting) did you have your first cigarette? <DAY2LIT> [ < SMOKED> = 1 ] -1 = Don’t know ; -2 = Refused

<table>
<thead>
<tr>
<th>NO. OF DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

IF DRC=YES, ASK:
Did you have that first cigarette when you began day reporting or after you were released from day reporting? [DRC= YES AND ( < SMOKED> = 1 ) ] <DRCCIG>

- WHEN BEGAN DAY REPORTING..............................1
- AFTER RELEASED DAY REPORTING......................2
V. Alcohol

Now I’m going to ask you about your alcohol use (since you were released).

IF DRC=YES: (since you were released from day reporting in [MONTH]).

1. Since your release, have you had any alcoholic drinks? A drink is a can or bottle of beer, a shot of liquor or a glass of wine. <UNPALO> BASE : ALL

   YES ..............................................................................................1
   NO ...............................................................................................2  (SKIP TO SEC VI)
   REF ..............................................................................................7
   DK..............................................................................................8

2. Since your release, on how many days per week have you usually had an alcoholic beverage?
   [<UNPALO> = 1 ] <WKLYSHT>
   ________ NO. OF DAYS
   -1 = Don’t know; -2 = Refused
   0< 1 DAY PER WEEK

3. On days that you drink, how many cans or bottles of beer, shots of liquor or glasses of wine do you usually drink? [<UNPALO> = 1] <SHOTS>

   ________ NO. OF DRINKS
   -1 = Don’t know ; -2 = Refused
VI. Drug Use

Now I’m going to ask you a few questions about your street drug use, not including prescription drugs, (since your release). *IF DRC=YES:* (since you were released from day reporting in [MONTH]). What you tell me is confidential and cannot be used against you in any way.

1. Since your release, have you used any type of street drug, including marijuana?

   ![DRUG](BASE: ALL)

   YES ................................................................. 1
   NO .................................................................. 2
   REF ................................................................. 7
   DK..................................................................... 8

2. Since your release, have you injected any drugs, not including prescription drugs?

   ![<DRUG> = 1]

   YES ................................................................. 1
   NO .................................................................. 2
   REF ................................................................. 7
   DK..................................................................... 8

3. Since your release, on how many days per week have you usually used (or injected) drugs?

   ![<DRUG> = 1 OR <UNPALO>= 1]

   ________ NO. OF DAYS PER WEEK

   0< 1 DAY PER WEEK

   (ONLY ASK Q4 IF DRANK ANY DRINKS OR USED ANY DRUGS, I.E., IF Q1=1 OR SECTION V Q1=1)

   ![<DRUG> = 1 OR <UNPALO>= 1]

4. (Has/have) your (alcohol and/or drug) use been a problem for you in taking care of your health?

   ![WEEDGIN]

   YES ................................................................. 1
   NO .................................................................. 2 (SKIP TO Q6)
   REF ................................................................. 7
   DK..................................................................... 8
5. Would you say it has been a…[<WEEDGIN> = 1]  <PRBOHLT>

Big problem.................................................................1
Somewhat of a problem, or ...........................................2
Not a problem.............................................................3
REF ..................................................................................7
DK......................................................................................8

6. Since your release, have you participated in any type of drug or alcohol treatment programs, including AA, NA, detox, methadone, or anything else because of your own drinking or drug use? [ Base : all ]  <STEPER>

YES ......................................................................................1
NO .......................................................................................2 (SKIP TO SECTION VII)
ON WAITING LIST FOR A PROGRAM.................................3
TRIED, BUT THERE WAS NO ROOM.........................4
WANTED TO BUT DIDN’T KNOW WHERE TO GO .......5
REF ..................................................................................7
DK......................................................................................8

7. What type of treatment program was it? (ALL THAT APPLY)
If respondent used both drugs and alcohol, and doesn’t specify if it was drug or alcohol treatment, ASK: “Was that for drugs or alcohol?” <PRGTYPE> <V0457S1 – V0457S6> [<STEPER> = 1, 3, 4 or 5]

AN AA, NA OR OTHER 12-STEP MEETING
FOR ALCOHOL USE..............................................................1
AN AA, NA OR OTHER 12-STEP MEETING
FOR DRUG USE ....................................................................2

DETOX......................................................................................3
A METHADONE MAINTENANCE PROGRAM ........3
ANOTHER TYPE OF OUT-PATIENT DRUG TREATMENT
PROGRAM (NOT MMTP) .................................................5
AN OUT-PATIENT ALCOHOL
TREATMENT PROGRAM......................................................6
A RESIDENTIAL DRUG TREATMENT PROGRAM,
INCLUDING A HALFWAY HOUSE .................................7
A RESIDENTIAL ALCOHOL TREATMENT PROGRAM,
INCLUDING A HALFWAY HOUSE .................................8
OTHER (Specify_______) ..................................................9
8. How helpful was the treatment to you in taking care of your health? Would you say it was…

<table>
<thead>
<tr>
<th>Option</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very helpful</td>
<td>1</td>
</tr>
<tr>
<td>Somewhat helpful, or</td>
<td>2</td>
</tr>
<tr>
<td>Not helpful?</td>
<td>3</td>
</tr>
</tbody>
</table>

REF ..............................................................................................7
DK……………………………………………………………….8

VII. Risk Behavior in Jail

The next questions are about any drug use and sexual activity when you were incarcerated at the Hampden County jail from (BOOKING/ADMISSION DATE) to (RELEASE DATE). [IF DRC=Yes, ADD: not including the time you were on day reporting.] Remember that your answers are legally protected and cannot be used against you.

A. Drug Use in Jail

1. While you were incarcerated in jail, did you use any street drugs? BASE : ALL

<table>
<thead>
<tr>
<th>Drug</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>2</td>
</tr>
<tr>
<td>REF</td>
<td>7</td>
</tr>
<tr>
<td>DK</td>
<td>8</td>
</tr>
</tbody>
</table>

2. Did you use…

<table>
<thead>
<tr>
<th>Drug</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>1 2</td>
</tr>
<tr>
<td>Powdered cocaine</td>
<td>1 2</td>
</tr>
<tr>
<td>Crack or rock cocaine</td>
<td>1 2</td>
</tr>
<tr>
<td>Heroin</td>
<td>1 2</td>
</tr>
<tr>
<td>Other street drugs (Specify_&lt;V0464S1-V0464S3&gt;_ )</td>
<td>1 2</td>
</tr>
</tbody>
</table>

ECSTASY .......................................................................................1
LSD/ACID .....................................................................................2
3. Did you inject any street drugs in jail? \(<\text{DRGJAIL} = 1>\) \(<\text{JAILINJK} > \text{V0465} >\)

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>2</td>
</tr>
<tr>
<td>REF</td>
<td>7</td>
</tr>
<tr>
<td>DK</td>
<td>8</td>
</tr>
</tbody>
</table>

B. Tattooing and Piercing

4. Did you get a tattoo or any body piercings in jail? \(<\text{TATTOO} > \text{BASE : ALL} >\)

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>2</td>
</tr>
<tr>
<td>REF</td>
<td>7</td>
</tr>
<tr>
<td>DK</td>
<td>8</td>
</tr>
</tbody>
</table>

C. Sexual Behavior in Jail (MEN’S VERSION)

Now a few questions about your sexual behavior while you were in jail. Remember that the information you give me is private and cannot be traced to you individually.

5. While you were in jail, did you engage in sexual behavior, not including masturbation? \(<\text{GENDER} = \text{M} >\) \(<\text{JAILSEX} >\)

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>(SKIP TO SEC. VIII)</td>
</tr>
<tr>
<td>REF</td>
<td>7</td>
</tr>
<tr>
<td>DK</td>
<td>8</td>
</tr>
</tbody>
</table>

6. Did you have oral, vaginal or anal sex with any women? \(<\text{SEXWOM} >\)

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>(SKIP TO Q9)</td>
</tr>
<tr>
<td>REF</td>
<td>7</td>
</tr>
<tr>
<td>DK</td>
<td>8</td>
</tr>
</tbody>
</table>

7. With how many women did you have oral, vaginal or anal sex? \(<\text{NUMWOM} >\)

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>(DON’T KNOW)</td>
</tr>
<tr>
<td>REF</td>
<td>(REFUSED)</td>
</tr>
<tr>
<td>DK</td>
<td>8</td>
</tr>
</tbody>
</table>

| NO. OF WOMEN |
8. How often did you use a condom or some other form of protection, such as a rubber glove or saran wrap, during vaginal or anal sex with a woman? <WRUBER>

[<SEXWOM> = 1]

Never or almost never .................................................................1
Seldom ..........................................................................................2
Sometimes ..................................................................................3
Often ............................................................................................4
Always or almost always..............................................................5

Now I’m going to ask you about sex with men. <HOMSEX>

[ GENDER = M AND <JAILSEX> = Yes]

9. While you were in jail, did you engage in any sexual behavior with any men?

YES ..............................................................................................1
NO ...............................................................................................2 (SKIP TO SEC. VIII)
REF ..............................................................................................7
DK.................................................................................................8

When you answer the following questions, I want you to think of oral sex as when you have your penis in another man’s mouth or when a man has his penis in your mouth.

10. With how many men did you have oral sex in jail? <MANBJ>

[<HOMSEX> = 1] -1 = Don’t know ; -2 = Refused

_________ NO. OF MEN

When you answer the following questions, I want you to think of anal sex as when you have your penis in another man’s anus or when a man has his penis in your anus.

PROBE: Butt (anus). “Other terms for this are being a “top” (insertive partner) or a “bottom” (receptive partner)”.

11. With how many men did you have anal sex? <MANANL>

[ <HOMSEX> = 1 ] -1 = Don’t know ; -2 = Refused

_________ NO. OF MEN (IF 0, SKIP TO SECTION VIII)
12. How often did you or the other person use a condom or some other form of protection, such as a rubber glove or saran wrap, during anal sex? <ANLRUBR> [<MANANL> <> 0 ]

Never or almost never ..............................................................1
Seldom .....................................................................................2
Sometimes ..............................................................................3
Often .......................................................................................4
Always or almost always..........................................................5

SKIP TO SECTION VIII

C. Sexual Behavior in Jail (WOMEN’S VERSION)

The next few questions are about your sexual behavior while you were in jail. Remember that the information you give me is private and cannot be traced to you individually. <WJAILSX>

6. While you were in jail, did you engage in sexual behavior, not including masturbation? [ GENDER = F ] <WJAILSX>

YES ..........................................................................................1
NO ..............................................................................................2 (SKIP TO SEC. VIII)
REF ............................................................................................7
DK ..............................................................................................8

7. Did you have oral, vaginal or anal sex with any men? <SEXMEN> [<WJAILSX> = 1 ]

YES ..........................................................................................1
NO ..............................................................................................2 (SKIP TO Q10)
REF ............................................................................................7
DK ..............................................................................................8

8. With how many men did you have oral, vaginal or anal sex? <NUMMEN> [<SEXMEN> = 1 ] -1 = Don’t know ; -2 = Refused

_________ NO. OF MEN

9. How often was a condom or some other form of protection, such as a rubber glove or saran wrap, used during vaginal or anal sex? [SEXMEN] = 1] <MRUBER>

Never or almost never ..............................................................1
Seldom .....................................................................................2
Sometimes ..............................................................................3
Often .......................................................................................4
Always or almost always..........................................................5
DID NOT HAVE VAGINAL OR ANAL SEX ............................6

10. Did you have sex with any women? [ GENDER = F and <JAILSX> = YES] <FEMSEX>
VIII. Satisfaction with Jail Health Services

Now I have a few questions for you about the kind of care you got while you were in jail and the way that the health staff there acted towards you. Please be honest, the information you give me will help them improve their services.

1. Overall, how would you rate the quality of the medical care you received in jail?  
   \(<\text{MEDQUAL}>\)  \(\text{BASE : ALL}\)  
   Poor ..............................................................................................1 
   Fair ...............................................................................................2 
   Good .............................................................................................3 
   Very good .....................................................................................4 
   Excellent .......................................................................................5 
   REF ..............................................................................................7 
   DK ...............................................................................................8 

2. Were you able to find someone on the jail health staff who you felt comfortable talking with about your health concerns?  
   \(\text{BASE : ALL} \quad <\text{TALKHLT}>\)  
   YES ..............................................................................................1 
   NO ...............................................................................................2 
   REF ..............................................................................................7 
   DK ...............................................................................................8 

3. How much did you trust the jail health staff to give you good care?  
   \(\text{BASE : ALL} \quad <\text{TRSTKRE}>\)  
   Not at all ..........................................................................................1 
   A little ............................................................................................2 
   Somewhat .....................................................................................3 
   A lot ...............................................................................................4 
   Completely ....................................................................................5 
   REF ..............................................................................................7 
   DK ...............................................................................................8 

(If Q1=1 OR 2 OR Q2=2 OR Q3=1 OR 2, ASK):
4. Do you have any specific problem with the health services in jail? 

\[<\text{SPECPRB}>\]

\[<\text{MEDQUAL}> = (1 \text{ OR 2}) \text{ OR } <\text{TALKHLT}> = 2 \text{ OR } (<\text{TRSTKRE}> = (1 \text{ OR 2})\]

YES ...........................................................................................................1
NO ...........................................................................................................2 (SKIP TO SECT. IX)
REF .........................................................................................................7
DK ..........................................................................................................8

5. What was your main problem with the health services? 

\[<\text{WHTPRB}>\]

\[<\text{SPECPRB}> = (1, 7, \text{ OR 8}) \text{ }<0484S1 – V0484S3>\]

WOULD NOT ADMINISTER PRESCRIBED OR EXISTING MEDICATION/CUT DOSAGE FOR EXISTING MED.............1
SLOW RESPONSE TIME FOR HEALTH CARE/TAKES LONG TIME TO RECEIVE CARE..............................................2

IX. Household

Finally, a few questions about your living situation since you were released from jail in (MONTH).

1. Are you currently living… 

\[<\text{LIVIN}> \text{ BASE : ALL}\]

In your own home or apartment ..........................01
In the home of friends or relatives, or .........................02
Somewhere else? Where? (ALL THAT APPLY)
RENTING A ROOM .................................................................03
A SHELTER OR WELFARE RESIDENCE .....................04
A RESIDENTIAL DRUG OR ALCOHOL TREATMENT CENTER ..........................................................05
A HALFWAY HOUSE OR GROUP HOME ..................06
HOMELESS/IN AN ABANDONED BUILDING/A CAR/ ON THE STREET/IN A PARK .................................................07
OTHER (SPECIFY________________) .................................08
REF ..............................................................................................97
DK ..............................................................................................98
2. Since you were released, have you stayed one or more nights at….
   IF YES: ASK: “How many nights?”  IF RESPONDENT ALREADY CITED ONE OF
   THESE ANSWERS IN Q.1, JUST ASK HOW MANY NIGHTS THEY WERE AT THAT
   PLACE.

   Further note on bases:  If <LIVIN> = 04 then <ABAND1> can be blank
   If <LIVIN> = 06 then <ABAND2> can be blank
   If <LIVIN> = 07 then <ABAND3> can be blank
   -1 = Don’t know ; -2 = Refused (for # of nights)
   8 = Don’t know; 7 - Refused

   - BASE : ALL
<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th># NIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A)</td>
<td>&lt;ABAND1&gt; &lt;LIVAT1&gt;</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B)</td>
<td>&lt;ABAND2&gt; &lt;LIVAT2&gt;</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C)</td>
<td>&lt;ABAND3&gt; &lt;LIVAT3&gt;</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

3. Since your release, have you been working at all, either full or part-time, including odd jobs on or off the books? PROBE: Including any odd jobs. ON OR OFF THE BOOKS MEANS REPORTED OR UNREPORTED INCOME (LEGAL OR ILLEGAL).

   - BASE : ALL <WORKIN>
<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th># NIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>.................................................................</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>.................................................................</td>
<td>4</td>
<td>(SKIP TO Q. 5)</td>
</tr>
<tr>
<td>REF</td>
<td>.................................................................</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>DK</td>
<td>.................................................................</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

4. Was that full-time or part-time work? <FULLPART> <V0493> [<WORKIN> = 1]
   FULL-TIME.................................................................| 1 |
   PART-TIME OR ODD JOBS................................................| 2 |

5. Do you currently receive….
   - BASE : ALL
<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any disability payments? &lt;DISAB&gt;</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Any welfare or cash assistance? &lt;WELFA&gt;</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
X. Locator Information Update

(MONTH) REFERS TO MONTH OF RELEASE PLUS 6   BASE: ALL

1. When I try to reach you again in (MONTH), do you think this will be a good number to try?  
   <LOCPHON>
   YES
   NO (CROSS NUMBER OFF ON LOCATOR FORM)

2. I also have (READ CONTACT NAMES) as people who might be able to help us locate you. Are they still good people to ask about where to find you in (MONTH)? (CROSS OF ANY NOT STILL GOOD. FOR REMAINING ASK: Are these the correct phone numbers and addresses? Do you have any more information about them that you can give me, such as a cell phone number or a beeper number? UPDATE LOCATOR FORM

3. REVIEW REMAINING CONTACTS. IF WE WERE UNABLE TO CONTACT THE PERSON AT THE ADDRESS AND PHONE NUMBER THE RESPONDENT HAS GIVEN SAY:

   We were not able to contact (PERSON) at (PHONE NUMBER). Do you have a more recent number or address for (him/her)? UPDATE /ANNOTATE LOCATOR FORM.

4. What other contact names and numbers can you give me? It should be someone who will know where you’ll be in (MONTH). ADD TO LOCATOR FORM

5. If I can’t find you using this information, is it OK if I call your clinic and ask them if they know where you are? I won’t tell them anything that you have told me today and I won’t ask them any personal questions about you.  
   <LOST_U>
   YES
   NO

CLOSE:
Thank you very much for your participation in the study. We will call you again in (MONTH) for the final interview. After we complete that interview, we will send you a gift certificate worth $25.
6-Month Follow-Up Interview
Contents

HCTY 6-Month Followup Interview

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Cleaning note: Don’t know and refused

-1 = Don’t know - Where question concerns quantity – example – “How many days a week do you…

-2 = Refused - Where question concerns a quantity – example – “How many days a week do you…

8, 98, 998 etc. = Don’t know unless otherwise noted

7, 97 etc. = Refused unless otherwise noted
Introduction

Hello. May I speak with (Mr./Ms.) ______?

IF PERSON WHO ANSWERS THE PHONE ASKS WHAT THE CALL IS ABOUT:
I'm calling about a study of health services in Hampden County.

Note: <Intro> = Continue (1) – respondent is in the community.
       = 7 – respondent is in jail at time of interview.

Read the introduction slowly and carefully.

IF PERSON ANSWERING IS RESPONDENT:
Hello, (Mr./Ms.______) My name is _______. I’m calling from Abt Associates, a research company in Massachusetts, to follow-up on the Hampden County jail health study. You may remember that you were interviewed about your health after your physical exam when you were admitted to jail on (MONTH, DAY) and agreed to participate in the study. I am calling to see how you’ve been doing since then. [IF 30-DAY WAS COMPLETED: You were also interviewed in (MONTH OF 30-DAY INTERVIEW).] This is the final interview for the study. After the interview, you will be mailed a $30 gift certificate for the Ingleside Mall in Holyoke.

I want to make sure that I’m talking with the right (RESPONDENT FIRST AND LAST NAME). Could you tell me your date of birth, please? [COMPARE TO SAMPLE DOB]

<DOBMES>  <<DOBdia> .................................................................  <DOBYER>

The date of birth is asked to confirm that you are speaking to the correct individual. If the dates match the DOB information, the interview continues.

The information that you give me will help the Hampden County jail and the community to improve their health programs. Your answers will also help us figure out what people need most after they get out of jail.
Stress the personal nature of these questions and reaffirm their legal rights and protection.

Some of the things I’m going to ask you are personal. You don’t have to answer anything that you don’t want to. You should also know that all of your answers are legally protected as part of this research project. That means that they cannot be traced back to you personally. They can’t be used against you in any legal proceedings, and they won’t be shared with anyone outside the research team.

ANSWERING MACHINE MESSAGE (AFTER 3 ATTEMPTS RESULTING IN ANSWERING MACHINE/NO ANSWER):
Hello, I’m calling for (Mr./Ms.)_______ about a study of health services in Hampden County. Can (he/she) please call me back at 1-800-786-4816. (Mr./Ms.____) will receive a $30 gift certificate at the Ingleside Mall for participation in a telephone interview.
I. Health Status

First, I’m going to ask you a few questions about how you have been feeling in the past month.

1. During the last 30 days, would you say that in general your health has been…

   - Excellent ................................................................. 1
   - Very good ............................................................ 2
   - Good ..................................................................... 3
   - Fair....................................................................... 4
   - Or poor? ................................................................ 5
   - REFUSED ............................................................. 7
   - DON’T KNOW ...................................................... 8

2. During the last 30 days, how much physical or bodily pain have you generally had…

   - No pain ................................................................. 1
   - Minimal pain ........................................................ 2
   - Mild pain ............................................................. 3
   - Moderate pain .................................................... 4
   - Or severe pain? ................................................... 5
   - REFUSED ............................................................. 7
   - DON’T KNOW ...................................................... 8

3. During the last 30 days, how much help has been available to you from family, friends and neighbors…

   - As much as you wanted ......................................... 1
   - Quite a bit ............................................................ 2
   - Some ..................................................................... 3
   - A little ................................................................... 4
   - Or none? .............................................................. 5
   - REFUSED ............................................................. 7
   - DON’T KNOW ...................................................... 8
During the last 30 days, how much have you been bothered by emotional problems such as feeling anxious, depressed, or sad… <EMOTNAL> [Base:ALL]

4.

Not at all........................................................................................................ 1
Slightly .......................................................................................................... 2
Moderately................................................................................................. 3
Quite a bit .................................................................................................. 4
Or extremely? .......................................................................................... 5
REFUSED .................................................................................................. 7
DON’T KNOW .......................................................................................... 8

5. Since your release from jail in (MONTH), has any physical health problem kept you from doing your usual activities? <PHYPRB> [Base:ALL]

YES ........................................................................................................... 1
NO .......................................................................................................... 2  (SKIP TO Q.8)
REFUSED ............................................................................................ 7
DON’T KNOW .................................................................................... 8

6. What kind of problem did you have? <WHTPRB> <V0399S1> - <V0399S2> [<PHYPRB> = 1] Record the respondent’s physical health problems only.

REFUSED .................................................................................................. 97
DON’T KNOW .......................................................................................... 98

7. For how many days were you unable to do your usual activities? <DAYSOUT> [<PHYPRB> = 1]

1-265 ______ NUMBER OF DAYS

DON’T KNOW .......................................................................................... -1
REFUSED .................................................................................................. -2
8. Since your release from jail in (MONTH), has any emotional or mental health problem kept you from doing your usual activities? <RELMENTL> <V0401> [Base: ALL]

YES ............................................................................................................... 1
NO ............................................................................................................... 2 (SKIP TO SECTION II)
REFUSED .................................................................................................... 7
DON’T KNOW .............................................................................................. 8

9. What kind of problem did you have? <WHTPRB2> <V0402S1>-<V0402S3> [Base: <V0401> = 1]
Record the respondent’s emotional or mental health problems only.

REFUSED .................................................................................................... 7
DON’T KNOW .............................................................................................. 8

10. For how many days were you unable to do your usual activities? <DYNACT> [Base: <V0401> = 1]  

1-265 NUMBER OF DAYS

DON’T KNOW .................................................................................... -1
REFUSED ............................................................................................... -2
II. Medical Care Utilization

Now, I'm going to ask a few questions about your use of medical care since you were released from the Hampden County Correctional Center in (MONTH). Don’t include any drug, alcohol, or mental health treatment or any care you received in jail.

1. Since you were released from jail in (MONTH), have you gone to a doctor for medical care, not counting emergency room visits or hospital stays?  
   YES ....................................................................................................... 1<br>NO ......................................................................................................... 2 (SKIP TO Q4)<br>REFUSED ............................................................................................. 7<br>DON’T KNOW .......................................................................................... 8

2. How many different times have you been?  
   __1-25_____ NUMBER OF TIMES  
   DON’T KNOW .................................................................................... -1<br>REFUSED ................................................................................................... -2

3. Where did you go for that care?  MARK ALL THAT APPLY.  
   IF Q2 WAS >1, ASK: Was this the only place you went?  Where else?  
   BRIGHTWOOD CLINIC (PLAINFIELD ST) ................................................... 1<br>NEIGHBORHOOD CLINIC (MASON SQUARE).......................................... 2<br>REFUSED ........................................................................................................... 7<br>DON’T KNOW .................................................................................................... 8

3a. IF RESPONDENT SELECTS #2 (NEIGHBORHOOD CLINIC), ASK: “Was that the walk-in urgent care section or the clinic?”  
   URGENT CARE ............................................................................................ 1<br>CLINIC........................................................................................................... 2<br>INTERNAL MEDICINE CLINIC AT BAYSTATE (STATE ST)............... 3<br>HOLYOKE CLINIC (CENTER ST)................................................................. 4<br>HOLYOKE CLINIC (MAPLE ST)................................................................. 5<br>SOUTHWEST CLINIC (MAIN ST)............................................................... 6<br>MEDICAL WEST ............................................................................................ 7<br>HMOs OR OTHER CLINICS (specify: ________________________) .......... 8<br>PRIVATE PHYSICIAN ................................................................................. 9<br>PRIVATE ALTERNATIVE MEDICINE PRACTIONER  
   (E.G. ACUPUNCTURE, CHIROPRACTOR, ETC.)................................. 10<br>OTHER (specify: ________________________) .......................................... 95<br>REFUSED ...................................................................................................... 97
4. Since your release in (MONTH), have you been admitted to a hospital overnight or longer because of a physical problem? <ADMITED> [Base: ALL]
   YES ................................................................. 1
   NO ................................................................. 2  (SKIP TO Q.6)
   REFUSED ........................................................... 7
   DON’T KNOW ...................................................... 8

5. How many different times were you admitted? <NUMADMT> [Base: <ADMITED> = 1]
   -1 = Don’t know; -2 = Refused
   1-20_______ NUMBER OF ADMISSIONS
   DON’T KNOW ...................................................... -1
   REFUSED ............................................................ -2

6. Since you were released from jail, have you gone to a hospital emergency room because you were sick or because of a physical injury? <GO_ER> [Base: All]
   YES ................................................................. 1
   NO ................................................................. 2  (SKIP TO Q10)
   REFUSED ........................................................... 7
   DON’T KNOW ...................................................... 8

7. How many different times? <ERTIMES> [Base: <GO_ER> = 1]
   1-20_______ NUMBER OF TIMES
   DON’T KNOW ...................................................... -1
   REFUSED ............................................................ -2

8. Did any of these visits to the emergency room lead to your being admitted directly to a hospital for at least an overnight stay? <ERADMIT> [Base: <GO_ER> = 1]
   YES ................................................................. 1
   NO ................................................................. 2  (SKIP TO Q10)
   REFUSED ........................................................... 7
   DON’T KNOW ...................................................... 8
9. How many of these visits? \(<ERVISIT>\) \([\text{Base: } <GO\_ER> = 1 \text{ and } <ERADMIT> = 1]\)

1-20 NUMBER OF VISITS

DON’T KNOW ................................................................. -1
REFUSED ........................................................................ -2

10. Since you were released from jail, has there been any time when you needed to see a medical provider but didn’t because it cost too much? \(<DOCCOST>\) \([\text{Base: } = \text{All}]\)

YES ....................................................................................... 1
NO ......................................................................................... 2
REFUSED ............................................................................. 7
DON’T KNOW ................................................................. 8

11. Has there been any other reason that you didn't see a medical provider when you needed to? \(<NODOC>\) \([\text{Base: } = \text{All}]\)

YES ....................................................................................... 1
NO ......................................................................................... 2 (SKIP TO Q13)
REFUSED ............................................................................. 7
DON’T KNOW ................................................................. 8

12. Why was that? \(<PORQUE>\) \(<V0416S1>-<V0416S3>\) \([\text{Base: } <NODOC> = 1]\)

REFUSED ............................................................................. 97
DON’T KNOW ................................................................. 98

IF Q1=NO AND Q4=NO AND Q6=NO, SKIP TO Q16
[BASE: (<GODOC> = YES) OR (<ADMITED> = YES) OR (<GO\_ER> = YES)]

13. The last time you received medical care since your release from jail, who covered the cost?
ALL THAT APPLY \(<V0417S01>-<V0417S10>\)

COVERG>
MassHealth or Medicaid ................................................. 1
Medicare or disability ..................................................... 2
An employer medical plan (R’S OR SPOUSE’S) .............. 3
Veteran's Administration .............................................. 4
Did you cover any of the cost ........................................ 5
(Or did no one cover it) ............................................... 6
OTHER (SPECIFY:______) ............................................. 95
REFUSED ........................................................................ 97
DON’T KNOW .......................................................... 98
Do you currently have any health insurance or coverage to pay for any of the costs of your medical care? \( \text{BASE: (<GODOC> = YES) OR (<ADMITED> = YES) OR (<GO_ER> = YES)>} \)

14.
- YES ....................................................................................................... 1
- NO ......................................................................................................... 2 (SKIP TO Q17)
- REFUSED ............................................................................................. 7
- DON’T KNOW ..................................................................................... 8

\[ \text{BASE: (<GODOC> = YES) OR (<ADMITED> = YES) OR (<GO_ER> = YES) AND <HLTHCVR> = 1} \]

15. Which type? _______________ SKIP TO Q17 \(<\text{COVRTYP}> <\text{CVRTYPS01}> <\text{CVRTYPS10}>\) MARK ALL THAT APPLY. PROBE WITH LIST:
- MASSHEALTH OR MEDICAID.......................................................... 1
- MEDICARE OR DISABILITY ............................................................ 2
- EMPLOYER MEDICAL PLAN (R’S OR SPOUSE’S) ....................... 3
- VETERAN’S ADMINISTRATION ................................................... 4
- SOME OTHER KIND OF COVERAGE .......................................... 5
- REFUSED ........................................................................................... 97
- DON’T KNOW .................................................................................. 98

NOTE: IF RESPONDENT SAYS THEY ARE ON SSA/SSI DISABILITY, THEN THEY AUTOMATICALLY HAVE MASSHEALTH/MEDICAID OR MEDICARE (IF AGE 65 OR OVER). MASSHEALTH IS THE NAME OF THE MASSACHUSETTS MEDICAID

16. Do you currently have any of the following types of health insurance or coverage to pay for any of the costs of your medical care? \(<\text{HAVEINS}> <\text{V0420S01}> <\text{V0420S10}>\) 

\[ \text{BASE: (<GODOC> = NO) AND (<ADMITED> = NO) AND (<GO_ER> = NO)>} \]

Which type? _______________

CHECK ALL THAT APPLY. PROBE WITH LIST:
- MASSHEALTH OR MEDICAID.......................................................... 1
- MEDICARE OR DISABILITY ............................................................ 2
- EMPLOYER MEDICAL PLAN (R’S OR SPOUSE’S) ....................... 3
- VETERAN’S ADMINISTRATION ................................................... 4
- SOME OTHER KIND OF COVERAGE .......................................... 5
- REFUSED ........................................................................................... 7
- DON’T KNOW .................................................................................. 8
NOTE: IF RESPONDENT SAYS THEY ARE ON SSA/SSI DISABILITY, THEN THEY AUTOMATICALLY HAVE MASSHEALTH/MEDICAID OR MEDICARE (IF AGE 65 OR OVER). MASSHEALTH IS THE NAME OF THE MASSACHUSETTS MEDICAID PROGRAM.

IF CHRONIC 1 OR CHRONIC 2 EQUALS HIV (I.E., ALL PERSONS WITH HIV, WHETHER THEY WERE RELEASED ON MEDS OR NOT); OR
IF CHRONIC 1 OR CHRONIC 2 EQUALS DIABETES AND MEDS1 OR MEDS2 EQUAL YES (I.E., ONLY PERSONS WITH DIABETES WHO WERE RELEASED ON MEDS); OR
IF CHRONIC 1 OR CHRONIC 2 EQUALS HYPERTENSION AND MEDS1 OR MEDS2 EQUAL YES (I.E., ONLY PERSONS WITH HYPERTENSION WHO WERE RELEASED ON MEDS)
THEN ASK QUESTION 17 OTHERWISE SKIP TO SECTION III.

IF Q.14 EQUALS YES OR IF Q.16 EQUALS YES, THEN SAY (“Does your”).
IF Q.14 EQUALS NO AND Q.16 EQUALS NO, THEN SAY (“Do you have any”) and (“that”).

[Base A: (<CHRONIC1DX) or (<CHRONIC2DX) = <HIV>= YES) or (<CHRONIC1DX) or (<CHRONIC2DX) = DIABETES OR HYPERTENSION AND (<MED1> OR <MED2> = YES]

17. (Does your/Do you have any) health insurance or benefits (that) pay for any of the costs of medicine or prescriptions? <PAYMED>

YES ....................................................................................................... 1
NO ......................................................................................................... 2
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

18. Now I’m going to ask you about any prescription medicine you may be taking. Remember everything you tell me is confidential. Are you currently taking any prescription medicine to treat a serious health condition? <TAKEPIL>

[Base A: <HIV>= YES or (<CHRONIC1DX) or (<CHRONIC2DX) = DIABETES OR HYPERTENSION AND (<MED1> OR <MED2> = YES]

YES ....................................................................................................... 1
NO ......................................................................................................... 2   SKIP TO Q. 22.
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8
19. For what illnesses are you taking prescription medicine? Again, this information is confidential. Is the medicine for

**[Base A]:** <CHRONIC1DX> or (<CHRONIC2DX) = DIABETES OR HYPERTENSION

AND (<MED1> OR <MED2> = YES) and <TAKEPILL> = 1

<table>
<thead>
<tr>
<th>Illness</th>
<th>Yes</th>
<th>No</th>
<th>REF</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Hypertension</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
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<tr>
<td>B. Diabetes</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>C. HIV</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>D. Other illness</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

IF A, B, AND C EQUAL 2 (NO), SKIP TO SECTION III

IF C. EQUALS 1 (YES), ASK ABOUT C. (HIV MEDICINE) IN Q.20.

IF C. EQUALS 2 (NO) AND A. OR B. EQUALS 1 (YES), ASK ABOUT B (DIABETES MEDICINE) IN Q.20.

IF C. EQUALS 2 (NO) AND B. EQUALS 2 (NO), AND A. EQUALS 2 (YES), ASK ABOUT A.

(HYPERSTENSION MEDICINE) IN Q.20.

20. Now we're going to talk about how often you took your medicine over the last month. Many people miss taking some of their medicine. It is important to understand how people really use their medicine. About how many days per week did you miss taking all or some of your (HIV medicine)(diabetes medicine, either pills or injection)(hypertension medicine)? Would you say…

**<MISPILL>** [BASE: <Q19A> OR <Q19B> OR <Q19C> = 1] AND [TAKEPIL = YES (1) ]

Every day............................................................................................... 1
4-6 days/week........................................................................................ 2
2-3 days/week........................................................................................ 3
Once a week .......................................................................................... 4
Less than once a week ........................................................................... 5
Or never? ............................................................................................... 6
REFUSED .............................................................................................. 7
DON’T KNOW ...................................................................................... 8

20A. PROBE FOR “NEVER”: Do you mean that you always take all of your medicine when you’re supposed to over the last month?  

**<NEVMISS>** [BASE: <MISPILL> = 6]

YES ..................................................................................................... 1
NO ..................................................................................................... 2
REFUSED ............................................................................................ 7
DON’T KNOW .................................................................................... 8

21. When was the last time you missed at least one dose of your (HIV/diabetes/hypertension) medicine? Would you say…
IF NEEDED: A dose is the amount of medicine you are supposed to take each time.

<WHENMIS> [BASE: <Q19A> OR <Q19B> OR <Q19C> = 1]

In the past week ................................................................. 1
1-2 weeks ago ................................................................... 2
3-4 weeks ago ................................................................... 3
Between 1 and 3 months ago ............................................. 4
More than 3 months ago .................................................... 5
Or never? ........................................................................... 6 (SKIP TO SECTION III)
(IF RESPONDENT DID NOT ANSWER NEVER IN Q.20, PROBE FOR “NEVER”:
REFUSED ........................................................................... 7
DON’T KNOW ................................................................... 8

21A. Do you mean that you always take all of your medicine when you’re supposed to?)

<NUNKA> [BASE: <WHENMIS> = 6]

YES ................................................................................. 1
NO .................................................................................. 2
REFUSED .......................................................................... 7
DON’T KNOW ................................................................. 8

IF Q20 =6(NEVER) AND Q21=6(NEVER), SKIP TO SECTION III.
(IF Q. 18=NO, SAY (any) MEDICINES; OTHERWISE, SAY (your) AND (diabetes/HIV/hypertension)

22. What is your main reason for not taking (your diabetes/HIV/hypertension) (any) medicine?

<RAZNOT> [BASE: <MISSPILL> not equal NEVER and <whenmiss> not equal NEVER and Q19a/b/c/ not equal No/Don’t know/Refused or <TAKEPIL =2>

Probe for MAIN REASON if respondent gives multiple reasons for not taking medicine.

CANNOT PAY/DO NOT HAVE HEALTH COVERAGE .................. 1
NO PRESCRIPTION / PRESCRIPTION EXPIRED ...................... 2
CANNOT GET A MEDICAL APPOINTMENT ............................ 3
SIDE EFFECTS ................................................................. 4
NO PRIVACY TO TAKE MEDICINES ............................... 5
LACK OF HOUSING/LIVING IN A SHELTER ...................... 6
AWAY FROM HOME OR TRAVELING ................................. 7
REGIMENS TOO COMPLICATED/CONFUSING .................... 8
OTHER PRIORITIES ......................................................... 9
FELT HEALTHIER/DON’T NEED MEDS ............................ 10
DOCTOR SAID NOT TO .................................................. 11
DRUG OR ALCOHOL USE .............................................. 12
FELT SICK ........................................................................ 13
FELT DEPRESSED OR OVERWHELMED ....................... 14
SIMPLY FORGOT .......................................................... 15
OTHER (Specify__________) ............................................... 95
REFUSED ........................................................................ 97
DON’T KNOW ............................................................... 98
III. Mental Health Care Utilization

Pre-populated field: through HCCC records, it will be determined in advance which respondents have a qualifying mental health condition (PSYCH=Y). If no qualifying mental health condition is indicated (PSYCH=N), skip to section IV (Satisfaction with Community Health Care Services).

Now I’m going to ask you a few questions about your use of counseling or prescription medicine for problems with your nerves, emotions or mental health since you were released from jail in (MONTH). Don’t include any treatment for a drug, alcohol, or physical problem, or any care you received in jail.

It is very important to distinguish standard medical care utilization of the respondent from their mental health care utilization. The respondent’s use of medical care which is not mental health care or drug or alcohol treatment was covered in the previous section. Section III deals with mental health only.

1. Since your release from jail in (MONTH), have you been to a doctor, therapist or counselor for mental health care or medication, not counting emergency room visits or inpatient mental health facility stays?  
   \[ \text{<B2DOC>} \quad \text{[Base: psych} = 1 \text{]} \]
   
   YES ....................................................................................................... 1
   
   NO ......................................................................................................... 2   (SKIP TO Q4)
   
   REFUSED ............................................................................................. 7
   
   DON’T KNOW ..................................................................................... 8

2. How many different times have you been?  \[ \text{<DRTIMES>} \quad \text{[BASE: <B2DOC} = 1 \text{]} \]
   
   ______ NUMBER OF TIMES
   
   DON’T KNOW ........................................................................................ -1
   
   REFUSED ............................................................................................. -2
3. Where did you go for that care? MARK ALL THAT APPLY. IF Q2 WAS >1, ASK: Was this the only place you went? Where else? <ADONDE> [BASE: <B2DOC> = 1]

BRIGHTSIDE .....................................................................................................1
BRIGHTWOOD CLINIC ....................................................................................2
CHILD AND FAMILY SERVICE (PINE ST) ....................................................3
COMMUNITY CARE MENTAL HEALTH CENTER (STATE ST).................4
GANDARA MENTAL HEALTH CENTER ..................................................5
HOLYOKE HOSPITAL......................................................................................6
JOHNSON LIFE CENTER (MASON SQUARE) .............................................7
MEDICAL WEST .............................................................................................8
MT TOM MENTAL HEALTH CENTER (BOBOLA RD)...............................9
NEIGHBORHOOD CLINIC .........................................................................10
PIONEER VALLEY MENTAL HEALTH CENTER (MAPLE ST)....................11
PRIVATE PHYSICIAN ..................................................................................12
SOUTHWEST CLINIC ..................................................................................13
OTHER (specify: ___________________).........................................................95
REFUSED .......................................................................................................97
DON’T KNOW ...........................................................................................98

4. Since your release from jail, have you been admitted to a mental health or psychiatric facility for overnight or longer, not including for substance abuse treatment? <INMENTL> [BASE: <PSYCH> >= 1]

YES ....................................................................................................... 1
NO ......................................................................................................... 2 (SKIP TO Q6)
REFUSED ............................................................................................. 7
DON’T KNOW ........................................................................................ 8

5. How many different times were you admitted? <PSYTIME> [BASE: <INMENTL> = 1]

_____ NUMBER OF TIMES

DON’T KNOW ............................................................................................-1
REFUSED ....................................................................................................-2

6. Since your release from jail, have you gone to a hospital emergency room because of problems with your nerves, emotions or mental health? <GO2ER> [BASE: <PSYCH> >= 1]

YES ....................................................................................................... 1
NO ......................................................................................................... 2 (SKIP TO Q10)
REFUSED ............................................................................................. 7
DON’T KNOW ........................................................................................ 8
7. How many different times?  

\[ \text{ETIME} \] \[ \text{BASE: } \text{GO2ER} = 1 \]

- NUMBER OF TIMES
  - DON'T KNOW ................................................................. -1
  - REFUSED ............................................................................ -2

8. Did any of these visits to the emergency room lead to your being admitted to a hospital or mental health facility for at least an overnight stay?  

\[ \text{ERADMT} \] \[ \text{BASE: } \text{GO2ER} = 1 \]

- YES ..................................................................................... 1
- NO ....................................................................................... 2  (SKIP TO Q.10)
- REFUSED ............................................................................ 7
- DON'T KNOW ................................................................. 8

9. How many of these visits?  

\[ \text{ERADMX} \] \[ \text{BASE: } \text{GO2ER} = 1 \text{ OR } \text{ERAMT} = 1 \]

- NUMBER OF VISITS
  - DON'T KNOW ................................................................. -1
  - REFUSED ............................................................................ -2

10. Since you were released from jail, has there been any time when you needed to see a mental health provider but didn't because it cost too much?  

\[ \text{DRCARO} \] \[ \text{BASE: } \text{Psych} = 1 \]

- YES ..................................................................................... 1
- NO ....................................................................................... 2
- REFUSED ............................................................................ 7
- DON'T KNOW ................................................................. 8

11. Has there been any other reason that you haven't seen a mental health provider when you needed to?  

\[ \text{OTHRAZ} \] \[ \text{BASE: } \text{Psych} = 1 \]

- YES ..................................................................................... 1
- NO ....................................................................................... 2  (SKIP TO Q.13)
- REFUSED ............................................................................ 7
- DON'T KNOW ................................................................. 8
12. Why was that?  

[BASE: <OTHRAZ> = 1]

REFUSED ........................................................................................... 97
DON’T KNOW ................................................................................... 98

IF Q1 = NO AND Q4 = NO AND Q6 = NO, SKIP TO Q14A.
IF Q1, Q4, OR Q6 = YES AND SECTION II, Q. 13 WAS ALREADY ANSWERED BY
RESPONDANT, SKIP TO Q.14.

[BASE: <B2DOC>=1 OR <INMENTL> =1 OR <GO2ER> =1 AND <COVERG = BLANK>]

13. The last time you received mental health care since your release from jail, who covered the cost?

ALL THAT APPLY  <PSYCOST> <V0444S1>-<V0444S8>
MassHealth or Medicaid ......................................................... 1
Medicare or disability ................................................................. 2
An employer medical plan (R’S OR SPOUSE’S) .......................... 3
Veteran's Administration ......................................................... 4

Did you cover any of the cost ...................................................... 5
(Or did no one cover it) ............................................................. 94
OTHER (SPECIFY:_______) ......................................................... 95
REFUSED ....................................................................................... 97
DON’T KNOW ............................................................................... 98

(SKIP TO Q. 15)

14. The last time you received mental health care since your release from jail, who covered the cost?

MARK ALL THAT APPLY.  PROBE WITH LIST: [BASE: <B2DOC>=1 OR <INMENTL> =1
OR <GO2ER> =1 AND <PSYCOST> = BLANK
<COSTPSY> <V0445S1>-<V0445S8>
MASSHEALTH OR MEDICAID ................................................. 1
MEDICARE OR DISABILITY ....................................................... 2
EMPLOYER MEDICAL PLAN (R’S OR SPOUSE’S) ..................... 3
VETERAN’S ADMINISTRATION ............................................... 4
SELF .............................................................................................. 5

SOME OTHER KIND OF COVERAGE ........................................... 6
(OR DID NO ONE COVER IT) ..................................................... 94
OTHER: (SPECIFY) ................................................................. 95
REFUSED ................................................................................... 97
DON’T KNOW ............................................................................. 98

(SKIP TO Q. 15)

ONLY ASK Q.14A IF RESPONDENT DID NOT GET MENTAL HEALTH CARE AND SKIPPED
OUT OF Q. 13-14 AND IF SECTION II, Q14 (HAVING PHYSICAL HEALTH INSURANCE)=YES;
OTHERWISE SKIP TO Q. 15.
[BASE: FOR <PSYNOW> IS :: <B2DOC> ^=1 AND <INMENTL> ^=1 AND <GO2ER> ^=1 AND (<PSYCOST> AND <COSTPSY> = BLANK) AND (<HLTHCVR> = YES) AND (PSYCH = YES)]

14a. Does your current health insurance or benefits cover any of the costs of your care for your nervous, emotional or mental health? <PSYNOW>

YES ....................................................................................................... 1
NO ......................................................................................................... 2
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

ONLY ASK Q. 15 IF PRE-POPULATED FIELD PSY MED=Y. OTHERWISE SKIP TO SECTION IV.

15. Now I’m going to ask you about any prescription medicine you may be taking. Remember, everything you tell me is confidential. Are you currently taking any prescription medicine to treat an emotional or mental health condition? <PSYRX> [BASE: <PSYMED> = 1]

YES ....................................................................................................... 1
NO ......................................................................................................... 2  SKIP TO Q 18
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

ONLY INCLUDE TEXT IN PARENTHESES IF RESPONDENT DID NOT ALREADY ANSWER Q.20 IN PRIOR SECTION.

16. we’re going to talk about how often you took your medicine over the last month. (Many people miss taking some of their medicine. It is important to understand how people really use their medicine.) About how many days per week do you think you missed taking your medicine? Would you say… <PILSKIP> [BASE: (PSYCH = YES AND <PSYMED>= YES) AND <PSYRX> =1]

Every day............................................................................................... 1
4-6 days/week........................................................................................ 2
2-3 days/week........................................................................................ 3
Once a week ......................................................................................... 4
Less than once a week ......................................................................... 5
Or never? ............................................................................................. 6
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

16A. PROBE FOR “NEVER”: Do you mean that you always take all of your medicine when you’re supposed to over the last month? <NEVSKIP> [BASE: <PILSKIP> = 6]

YES ....................................................................................................... 1
NO ......................................................................................................... 2
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8
17. When was the last time you missed at least one dose of your medicine? Would you say…

   IF NEEDED: A dose is the amount of medicine you are supposed to take each time.
   <LASTSKP> [BASE: (PSYCH = YES AND <PSYMED>= YES) AND <PSYRX> =1]
   In the past week ..................................................................................... 1
   1-2 weeks ago ........................................................................................ 2
   3-4 weeks ago ........................................................................................ 3
   Between 1 and 3 months ago ................................................................. 4
   More than 3 months ago ...................................................................... 5
   Or never? .............................................................................................. 6
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

17A. PROBE FOR “NEVER”: Do you mean that you always take all of your medicine at the time you’re supposed to? <JAMAH> [BASE: <LASTSKP> = 6]

   YES ....................................................................................................... 1
   NO ......................................................................................................... 2
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

(IF Q.16=NEVER AND Q.17=NEVER: SKIP TO Q.19)

IF Q15=2(NO), SAY “ANY”; OTHERWISE SAY “YOUR.”

18. What is your main reason for not taking (your/any) medicine?
   <NOTAKE> [BASE: (<PSYMED>= YES) OR <PILSKIP> ^= NEVER OR <LASTSKIP> ^=NEVER)
   Probe for MAIN REASON if respondent gives multiple reasons for not taking medicine.

   CANNOT PAY/DO NOT HAVE HEALTH COVERAGE .................... 1
   NO PRESCRIPTION / PRESCRIPTION EXPIRED ....................... 2
   CANNOT GET A MEDICAL APPOINTMENT ......................... 3
   SIDE EFFECTS ............................................................................... 4
   NO PRIVACY TO TAKE MEDICINES ..................................... 5
   LACK OF HOUSING OR LIVING IN SHELTER ...................... 6
   REGIMENS TOO COMPLICATED .......................................... 7
   OTHER PRIORITIES ................................................................. 8
   DRUG OR ALCOHOL USE ...................................................... 9
   CONDITION IMPROVED/DON’T NEED MEDS ....................... 10
   OTHER (Specify___________) ..................................................... 95
   REFUSED ..................................................................................... 97
   DON’T KNOW .............................................................................. 98
19. Some people have special requirements to take medications. Are you required by court order or as a condition of parole to take medication? <REQLAW> [Base: <PSYCHMED> = 1]

YES .................................................................................................................. 1
NO .................................................................................................................. 2
REFUSED ................................................................................................. 7
DON’T KNOW .......................................................................................... 8

IV. Satisfaction with Community Health Services - Physical Care

IF RESPONDENT DID NOT GO TO THE DOCTOR FOR A PHYSICAL HEALTH PROBLEM AT ALL SINCE RELEASE (i.e., SECTION II, Q1=NO AND Q4=NO AND Q6=NO), SKIP TO SECTION V.

Now, I have a few questions about your satisfaction with the health services you’ve received in the community since your release from jail, not including any mental health care.

1. Since your release in (MONTH), were you able to find a doctor or health care provider who you felt comfortable talking with about your health concerns? <FINDR> [Base: <GODOC> =1 OR <ADMITED> = 1 OR <GO_ER>= 1]

YES .................................................................................................................. 1
NO .................................................................................................................. 2
REFUSED ................................................................................................. 7
DON’T KNOW .......................................................................................... 8

2. Do you have a regular doctor or health care provider? <REGDR> [Base: <GODOC>=1 OR <ADMITED>= 1 OR <GO_ER>= 1]

YES .................................................................................................................. 1
NO .................................................................................................................. 2  SKIP TO Q. 5
REFUSED ................................................................................................. 7
DON’T KNOW .......................................................................................... 8
3. Where do you go to see your main health care provider?  <WHRDRX>  
[Base: <REGDR> = 1]  

<table>
<thead>
<tr>
<th>Clinic Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRIGHTWOOD CLINIC (PLAINFIELD ST)</td>
<td>1</td>
</tr>
<tr>
<td>NEIGHBORHOOD CLINIC (MASON SQUARE)</td>
<td>2</td>
</tr>
<tr>
<td>INTERNAL MEDICINE CLINIC AT BAYSTATE (STATE ST)</td>
<td>3</td>
</tr>
<tr>
<td>HOLYOKE CLINIC (CENTER ST)</td>
<td>4</td>
</tr>
<tr>
<td>HOLYOKE CLINIC (MAPLE ST)</td>
<td>5</td>
</tr>
<tr>
<td>SOUTHWEST CLINIC (MAIN ST)</td>
<td>6</td>
</tr>
<tr>
<td>MEDICAL WEST</td>
<td>7</td>
</tr>
<tr>
<td>HMOs OR OTHER CLINICS (specify: ____________________)</td>
<td>8</td>
</tr>
<tr>
<td>PRIVATE PHYSICIAN</td>
<td>9</td>
</tr>
<tr>
<td>PRIVATE ALTERNATIVE MEDICINE PRACTIONER (E.G. ACUPUNCTURE, CHIROPRACTOR, ETC.)</td>
<td>10</td>
</tr>
<tr>
<td>OTHER HEALTH CARE PROVIDER (specify: ________)</td>
<td>11</td>
</tr>
<tr>
<td>BAYSTATE MEDICAL CENTER (SPRINGFIELD)</td>
<td>12</td>
</tr>
<tr>
<td>BERKSHIRE MEDICAL CENTER (PITTSFIELD)</td>
<td>13</td>
</tr>
<tr>
<td>COOLEY DICKINSON HOSPITAL (NORTHAMPTON)</td>
<td>14</td>
</tr>
<tr>
<td>HOLYOKE HOSPITAL (HOLYOKE)</td>
<td>15</td>
</tr>
<tr>
<td>MARY LANE HOSPITAL (WARE)</td>
<td>16</td>
</tr>
<tr>
<td>MERCY HOSPITAL (SPRINGFIELD)</td>
<td>17</td>
</tr>
<tr>
<td>NOBLE HOSPITAL (WESTFIELD)</td>
<td>18</td>
</tr>
<tr>
<td>PROVIDENCE HOSPITAL (HOLYOKE)</td>
<td>19</td>
</tr>
<tr>
<td>VETERAN'S ADMINISTRATION HOSPITAL (NORTHAMPTON)</td>
<td>20</td>
</tr>
<tr>
<td>WING MEMORIAL HOSPITAL (PALMER)</td>
<td>21</td>
</tr>
<tr>
<td>OTHER IN-STATE HOSPITAL (specify: ____________)</td>
<td>22</td>
</tr>
<tr>
<td>OTHER OUT-OF-STATE HOSPITAL (specify: ____________)</td>
<td>23</td>
</tr>
<tr>
<td>REFUSED</td>
<td>7</td>
</tr>
<tr>
<td>DON’T KNOW</td>
<td>8</td>
</tr>
</tbody>
</table>

4. How much do you trust your main doctor or health care provider to give you good care?  <TRSTDR>  
[Base: <REGDR> = 1]  

<table>
<thead>
<tr>
<th>Trust Level</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>1</td>
</tr>
<tr>
<td>A little</td>
<td>2</td>
</tr>
<tr>
<td>Somewhat</td>
<td>3</td>
</tr>
<tr>
<td>A lot</td>
<td>4</td>
</tr>
<tr>
<td>Or completely</td>
<td>5</td>
</tr>
<tr>
<td>REFUSED</td>
<td>7</td>
</tr>
<tr>
<td>DON’T KNOW</td>
<td>8</td>
</tr>
</tbody>
</table>
5. Overall, how would you rate the quality of the medical care you have received since your release?

   <RATEDOC>
   [Base: <GODOC> = 1 OR <ADMITED> = 1 OR <GO_ER>= 1]

   Poor ............................................................................................................... 1
   Fair ............................................................................................................. 2
   Good .......................................................................................................... 3
   Very good ................................................................................................. 4
   Or excellent? ............................................................................................ 5
   REFUSED .................................................................................................. 7
   DON’T KNOW ......................................................................................... 8

IF Q1=2(NO) AND Q2=1(YES), OR Q4=1 OR 2, OR Q5= 1 OR 2, ASK Q6, OTHERWISE SKIP TO SECTION V

6. Have you had any specific problem with the health care that you received since your release?

   <SPECPRB>
   [Base: ( <FINDR> = 2 AND <REGDR> = 1 ) OR ( <TRSTDR> IN (1 OR 2) ) OR <RATEDOC>= 1 OR 2 ]

   YES ........................................................................................................... 1
   NO ............................................................................................................. 2 (SKIP TO SECTION V)
   REFUSED .................................................................................................. 7
   DON’T KNOW ........................................................................................... 8

7. What has been your main problem with these health services?

   <MAINPRB> [ Base: <SPECPRB> = 1 ]

   ______________________________________________________________________

   REFUSED .................................................................................................. 97
   DON’T KNOW ........................................................................................... 98
V. Satisfaction with Community Mental Health Services

IF RESPONDENT DOES NOT HAVE A CHRONIC MENTAL HEALTH CONDITION (PSYCH=N) OR DID NOT GO TO A MENTAL HEALTH CARE PROVIDER AT ALL SINCE RELEASE (SECTION III, Q1=NO AND Q4=NO AND Q6=NO), SKIP TO SECTION VI.

Now, I have a few questions about your satisfaction with the mental health services you’ve received in the community since your release from jail.

1. Since your release in (MONTH), were you able to find a mental health care provider who you felt comfortable talking with about your nervous, emotional or mental health concerns?
   
   <DOCSAT>
   
   [Base: <PSYCH> = YES OR <B2DOC> = 1 OR <INMENTL> = 1 OR <GO2ER> = 1]
   
   YES ....................................................................................................... 1
   NO ........................................................................................................ 2
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

2. Do you have a regular doctor, counselor or health care provider for your nervous, emotional or mental health care?  <GOTSHRNK>  <V0462>

   [Base: <PSYCH> = YES OR <B2DOC> = 1 OR <INMENTL> = 1 OR <GO2ER> = 1]

   YES ....................................................................................................... 1
   NO ........................................................................................................ 2  SKIP TO Q. 4
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8
3. Where do you go to see that provider?  <ATSHRNK> [Base: <GOTSHRNK> = 1 ]

   BRIGHTSIDE .....................................................................................................1
   CHILD AND FAMILY SERVICE (PINE ST) ......................................................2
   COMMUNITY CARE MENTAL HEALTH CENTER (STATE ST)...................3
   GANDARA MENTAL HEALTH CENTER ......................................................4
   HOLYOKE HOSPITAL ..................................................................................5
   JOHNSON LIFE CENTER (MASON SQUARE) .............................................6
   MT TOM MENTAL HEALTH CENTER (BOBOLA RD)..............................7
   PIONEER VALLEY MENTAL HEALTH CENTER (MAPLE ST) ...............8
   PRIVATE PHYSICIAN ...............................................................................9
   BAYSTATE MEDICAL CENTER (SPRINGFIELD) ......................................10
   BERKSHIRE MEDICAL CENTER  (PITTSFIELD) ................................ ........11
   COOLEY DICKINSON HOSPITAL (NORTHAMPTON) ............................12
   HOLYOKE HOSPITAL (HOLYOKE) ..........................................................13
   MARY LANE HOSPITAL (WARE) ...............................................................14
   MERCY HOSPITAL (SPRINGFIELD) ............................................................15
   NOBLE HOSPITAL (WESTFIELD) ...............................................................16
   PROVIDENCE HOSPITAL (HOLYOKE) ......................................................17
   VETERAN'S ADMINISTRATION HOSPITAL (NORTHAMPTON) ..........18
   WING MEMORIAL HOSPITAL (PALMER) ...............................................19
   OTHER IN-STATE HOSPITAL (specify: ______________) ......................94
   OTHER OUT-OF-STATE HOSPITAL (specify: ______________) .............95
   OTHER HEALTH CARE PROVIDER(specify: ______________) ............96
   REFUSED ..............................................................................................97
   DON'T KNOW ....................................................................................98

4. Overall, how would you rate the quality of the mental health care you have received since your release?
   <CAREQUAL> <V0464>

   [Base: <PSYCH> = YES OR <B2DOC> = 1 OR <INMENTL> = 1 OR <GO2ER> = 1]

   Poor ....................................................................................................... 1
   Fair....................................................................................................... 2
   Good ..................................................................................................... 3
   Very good ............................................................................................ 4
   Or excellent .......................................................................................... 5
   REFUSED ............................................................................................ 7
   DON'T KNOW .................................................................................... 8
5. Have you had any specific problem with the mental health care that you received since your release?

\[ \text{SPCPRBL} \]

\[ \text{Base: } \text{<CAREQUAL> = (1 OR 2) OR ( <DOCSAT> = 2 AND <GOTSHRNK> = 1 ) } \]

YES ....................................................................................................... 1
NO ........................................................................................................ 2 (SKIP TO SECTION VI)
REFUSED ............................................................................................. 7
DON’T KNOW ........................................................................................... 8

6. What has been your main problem with these services?

\[ \text{PRBMES1-PRBMES3} \]

\[ \text{Base: } \text{SPCPRBL} = 1 \]

REFUSED ........................................................................................... 97
DON’T KNOW .................................................................................... 98

VI. Tobacco

Now, I’m going to ask you about cigarette smoking, meaning tobacco, but not marijuana.

1. During the last 30 days, have you smoked any cigarettes?

\[ \text{CIG30} \]

\[ \text{Base: ALL} \]

YES ....................................................................................................... 1
NO ......................................................................................................... 2 (SKIP TO Q3)
REFUSED ............................................................................................. 7
DON’T KNOW ........................................................................................... 8

2. On average, how many cigarettes have you usually smoked a day? (20 CIGARETTES IN A PACK)

\[ \text{PERDAY} \]

\[ \text{Base: CIG30 = 1} \]

If the respondent answers "less then 1 cigarette per day" enter "0".

\[ \text{NUMBER OF CIGARETTES} \] (SKIP TO SECTION VII)

DON’T KNOW .................................................................................... 1
REFUSED ............................................................................................. 2

3. Have you smoked cigarettes at all since your release from jail in (MONTH)?

\[ \text{SMKSINS} \]

\[ \text{Base: CIG30 = 2,7,8} \]

YES ....................................................................................................... 1
NO ......................................................................................................... 2
REFUSED ............................................................................................. 7
DON’T KNOW ........................................................................................... 8
VII. Alcohol

Now I'm going to ask you about your alcohol use. What you tell me is confidential. A drink is a can or bottle of beer, a shot of liquor, or a glass of wine.

1. During the last 30 days, have you had any alcoholic drinks?
   \[\text{DRINK30} \] [Base: all]
   
   YES .............................................................................................................. 1
   NO ............................................................................................................. 2 (SKIP TO SECTION VIII)
   REFUSED ............................................................................................... 7
   DON'T KNOW ........................................................................................ 8

2. During the last 30 days, on how many days a week have you usually had an alcoholic beverage?
   \[\text{ALCOL} \] [Base: \text{DRINK 30} =1]
   
   We are asking the respondent how many days a week (not a month) he/she drinks. Answer
   Can not be > 7 days. If the respondent drinks an alcoholic beverage less than 1 day per week, enter "0".

   ______ NUMBER OF DAYS  0 < 1 DAY PER WEEK
   
   DON'T KNOW ...................................................................................... -1
   REFUSED ............................................................................................... -2

3. On days that you drink, how many cans or bottles of beer, shots of liquor, or glasses of wine do you usually drink? PROBE: Usually, most often? NOTE: IF RESPONDENT GIVES ANSWERS IN UNITS OTHER THAN "DRINKS" (E.G., "HALF A BOTTLE OF WINE") RECORD BOTH THE AMOUNT (HALF) AND THE UNITS (ONE LITER BOTTLE OF WINE)

   ______ NUMBER OF DRINKS <SHOTS>
   [Base: \text{DRINK 30} =1 AND ( \text{BOTTL} AND \text{DRNKUNT} = BLANK]

   00 = RESPONDENT SAYS HALF
   -3 = OTHER THEN DRINKS
   OR  [Base: \text{SHOTS} = -3]

   <BOTTL>  <DRNKUNT>

   ______ # (UNITS)

   DON'T KNOW ...................................................................................... -1
   REFUSED ............................................................................................... -2
VIII. Street Drugs and Drug and Alcohol Treatment

Now I'm going to ask you a few questions about street drug use. I want to remind you that your answers are confidential and cannot be used against you in any way.

1. During the last 30 days have you used … IF YES, ASK: On how many days a week do you usually use it?

   We are asking the respondent how many days a week (not a month) he/she usually use drugs. Answer Can not be > 7 days a week. If the respondent uses drugs less than 1 day per week, enter "0".

<table>
<thead>
<tr>
<th>Drug</th>
<th>Yes</th>
<th>No</th>
<th>DK</th>
<th>REF</th>
<th># of Days/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>&lt;USE1&gt;________</td>
</tr>
<tr>
<td>Crack or rock</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>&lt;USE2&gt;________</td>
</tr>
<tr>
<td>Cocaine?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>&lt;USE3&gt;________</td>
</tr>
<tr>
<td>Powdered cocaine?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>&lt;USE4&gt;________</td>
</tr>
<tr>
<td>Heroin?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>&lt;OTHERUSE&gt;____</td>
</tr>
<tr>
<td>Any other street Drug?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>&lt;OTHERUSE&gt;____</td>
</tr>
</tbody>
</table>

Base for <USER1> is <DRUG1>=1
Base for <USER2> is <DRUG2>=1
Base for <USER3> is <DRUG3>=1
Base for <USER4> is <DRUG4>=1
Base for <OTHERUSE> is <OTHDRG>=1

2. During the last 30 days have you injected any drugs, not including prescription drugs?

   <INJEC30> [BASE: ALL]

   YES ....................................................................................................... 1
   NO ......................................................................................................... 2
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

   (IF Q2=NO, SKIP TO Q7)

3. During the last 30 days, how many times a week did you inject drugs?

   <TMINJK> [BASE: <INJEC30>=1]

   We are asking the respondent how many TIMES a week (not a month) he/she injects drugs.

   NUMBER OF TIMES
   DON’T KNOW/REMEMBER.................................................................-1
   REFUSED ..........................................................................................-2
4. During the last 30 days, how many times did you use a new needle when injecting drugs?  
   \texttt{<NEWNEDL> [BASE: <INJEC30> = 1]}  
   \hline
   \text{NUMBER OF TIMES} & \text{DON’T KNOW} & -1 & \text{REFUSED} & -2 & \text{EVERYTIME} & -3 \\
   \end{tabular}

5. During the last 30 days, when you didn’t use a new needle, how many times did you clean a used needle before injecting drugs? \texttt{<CLEANIT> [BASE: <INJEC30> = 1 and <NEWNEDL> <> -3]}  
   \hline
   \text{NUMBER OF TIMES} & \text{DON’T KNOW} & -1 & \text{REFUSED} & -2 \\
   \end{tabular}

6. During the last 30 days, with how many different people did you share needles or works? \texttt{<SHARET> [BASE: <INJEC30> = 1]}  
   \hline
   \text{NUMBER OF PEOPLE} & \text{DON’T KNOW} & -1 & \text{REFUSED} & -2 \\
   \end{tabular}

IF RESPONDENT COMPLETED THE 30-DAY INTERVIEW, INTERVIEWER WILL ASK “SINCE WE LAST SPOKE WITH YOU IN (MONTH)...” IF RESPONDENT DID NOT COMPLETE THE 30-DAY INTERVIEW, INTERVIEWER WILL ASK “SINCE YOUR RELEASE...”

7. Since [we last spoke with you in (MONTH OF 30-DAY INTERVIEW)/ your release in (MONTH)] have you participated in any type of drug or alcohol treatment program, including AA, NA, detox, methadone, or anything else because of your own drinking or drug use? \texttt{<AANA> [Base: ALL]}  
   \hline
   \text{YES} & 1 & \text{NO} & 2 & \text{ON WAITING LIST FOR A PROGRAM} & 3 & \text{Tried, but there was no room} & 4 & \text{Wanted to but didn’t know where to go} & 5 & \text{Refused} & 7 & \text{Don’t know} & 8 \\
   \end{tabular}
8. What type of treatment program was it? (ALL THAT APPLY)
(IF RESPONDENT USED BOTH DRUGS AND ALCOHOL,
AND DOESN’T SPECIFY IF IT WAS DRUG OR ALCOHOL TREATMENT)
ASK: “Was that for drugs or alcohol?” [Base: <AANA> = (1,3,4)]
<V0491S01-V0491S10>

AATYPE <AANA> <V0491S01-V0491S10>

AN AA, NA OR OTHER 12-STEP MEETING
FOR ALCOHOL USE ............................................................ 1
AN AA, NA OR OTHER 12-STEP MEETING
FOR DRUG USE .............................................................. 2
DETOX ............................................................................... 3
A METHADONE MAINTENANCE PROGRAM ................... 4
ANOTHER TYPE OF OUT-PATIENT DRUG TREATMENT
PROGRAM (NOT MMTP) .................................................. 5
AN OUT-PATIENT ALCOHOL TREATMENT PROGRAM ............. 6
A RESIDENTIAL DRUG TREATMENT PROGRAM,
INCLUDING A HALFWAY HOUSE ................................... 7
A RESIDENTIAL ALCOHOL TREATMENT PROGRAM,
INCLUDING A HALFWAY HOUSE .................................... 8
OTHER (Specify type and drug vs. alcohol:_____ .............. 95
REFUSED .......................................................................... 97
DON’T KNOW ..................................................................... 98

IX. a. Female Sexual Partners (Male Version)

Now, I'm going to ask you a few questions about your sexual behavior.

Only men respondents are asked this section
1. Since your release from jail in (MONTH), have you had vaginal or anal sex with a female partner?

<HOMVAG> [Base: <GENDER> = MALE]

Yes ......................................................................................................... 1
No ........................................................................................................... 2
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

2. With how many different women have you had sex since your release?

<NUMWOMN> [Base: <HOMVAG> = 1]

_______ NUMBER OF WOMEN (IF ONE, SKIP TO Q. 4)

DON’T KNOW .............................................................................. -1
REFUSED ......................................................................................... -2
3. With how many different women in the last 30 days?  
\[ \text{<WOMN30>} \quad [\text{Base: <NUMWOMN> > 1}] \]

\[ \underline{\text{NUMBER OF WOMEN (IF ZERO, SKIP TO Q10)}} \]

DON’T KNOW .......................................................................................... -1
REFUSED ................................................................................................. -2

4. In total, how many times did you have vaginal or anal sex with a woman in the last 30 days?  
[Base: <HOMVAG> = 1 and <WOMN30> <> 0]

\[ \underline{\text{NUMBER OF TIMES}} \quad <\text{TOTAL30}> \]

DON’T KNOW .......................................................................................... -1
REFUSED ................................................................................................. -2

Now I'm going to ask you about condom use. Condom use is counted only if you put the condom on before penetration and continued using it throughout sex. Do not include times when the condom broke or slipped off.

5. Did you use a condom any of these (XX) times in the last 30 days?  (XX=ANSWER FROM Q4)  
\[ \text{<USEHAT>} \]

[Base: <HOMVAG> = 1 and <WOMN30> <> 0]

YES ........................................................................................................... 1
NO ........................................................................................................... 2 (SKIP TO Q8)
REFUSED .................................................................................................. 7 (SKIP TO Q8)
DON’T KNOW/REMEMBER .................................................................. 8

6. How many times did you use a condom?  
\[ \text{<TIMESHAT>} \quad -1 = \text{DK}, -2 = \text{REFUSED}, -3 = \text{EVERYTIME} \]

[Base: <HOMVAG> = 1 and <WOMN30> <> 0 AND <USEHAT> =1]

\[ \underline{\text{NUMBER OF TIMES}} \]

DON’T KNOW .......................................................................................... -1
REFUSED ................................................................................................. -2

(IF Q3=1, SKIP TO Q8) or (IF Q2 = 1 OR Q6 = -3 then SKIP to Q8)

7. With how many of these (XX) women did you use a condom at least once in the last 30 days?  
(XX=ANSWER FROM Q3)  
\[ \text{<WOMNHAT>} \]

[Base: <WOMN30> >1 OR <NUMWOMN> >1 OR <TIMESHOT> <> -3]

\[ \underline{\text{NUMBER OF WOMEN}} \]

DON’T KNOW .......................................................................................... -1
REFUSED ................................................................................................. -2
IF Q.3(# PARTNERS) > 1, SAY ("any of") AND ("partners in the last 30 days") AND ("were")
8. Do you think that (any of) your female sexual partner(s in the last 30 days) (was/were) HIV positive?
   [Base: <HOMVAG> =1 AND <WOMN30> <> 0 AND <NUMWOMN> >0]

   <SHEPOZ>
   YES ....................................................................................................... 1
   NO ........................................................................................................ 2
   REFUSED ............................................................................................. 7
   DON'T KNOW ..................................................................................... 8

9. Do you think that (any of) your female partner(s in the past 30 days) was an injection drug user?
   [Base: <HOMVAG> =1 AND <WOMN30> <> 0 AND <NUMWOMN> >0]

   <SHEINJK>
   YES ....................................................................................................... 1
   NO ......................................................................................................... 2
   REFUSED ............................................................................................. 7
   DON'T KNOW ..................................................................................... 8

10. Since your release from jail in (MONTH), when you have had vaginal or anal sex with a woman, how often
    had you been drinking or using street drugs…
    [Base: <HOMVAG> =1]

    <OUTOFIT>
    Never or rarely....................................................................................... 1
    About a quarter of the time.................................................................... 2
    About half the time................................................................................ 3
    About three-quarters of the time............................................................ 4
    Always or almost always....................................................................... 5
    REFUSED ............................................................................................. 7
    DON'T KNOW ..................................................................................... 8

Since your release…

11. Have you had vaginal or anal sex with a woman you didn't know very well?
    [Base: <HOMVAG> =1]

    <NOTKNOW>
    YES ....................................................................................................... 1
    NO ........................................................................................................ 2
    REFUSED ............................................................................................. 7
    DON'T KNOW ..................................................................................... 8
12. Have you talked about safe sex with a female partner?
   [Base: <HOMVAG> =1]
   <SAFESEX>
   YES ................................................................. 1
   NO ................................................................. 2
   REFUSED ...................................................... 7
   DON’T KNOW ............................................... 8

13. Have you used a condom because your female partner asked you to?
   <FEMASK>[Base: <HOMVAG> =1]
   YES ................................................................. 1
   NO ................................................................. 2
   REFUSED ...................................................... 7
   DON’T KNOW ............................................... 8

14. Have you convinced a female partner that a condom should be used when you had sex?
   <CONVINCED> [Base: <HOMVAG> =1] <V0505>
   YES ................................................................. 1
   NO ................................................................. 2
   REFUSED ...................................................... 7
   DON’T KNOW ............................................... 8

15. Now, think back to the last time you had sex, did you or your partner use a condom?
   <FEMHAT> [Base: <HOMVAG> =1 AND <TIMEHAT < > -3]
   YES ................................................................. 1
   NO ................................................................. 2
   REFUSED ...................................................... 7
   DON’T KNOW ............................................... 8

16. The last time you had sex, was it with someone you consider to be your regular partner?
   <REGULAR> [Base: <HOMVAG> =1]
   YES ................................................................. 1
   NO ................................................................. 2
   REFUSED ...................................................... 7
   DON’T KNOW/REMEMBER ................................. 8
b. Male Sexual Partners (Male Version)

Now I'm going to ask you a few questions about your sexual behavior with men since you were released from jail.

Only Male respondents are asked this section

17. Since your release from jail in (MONTH), have you had any male sexual partners? [Base: GENDER = MALE]
   <MAN2MAN>
   YES .......................................................... 1
   NO ............................................................ 2 (SKIP TO SECTION XI)
   REFUSED .......................................................... 7
   DON’T KNOW ..................................................... 8

Before we go further, I want to define anal sex. Anal sex includes both insertive and receptive sex. Insertive sex is when you have your penis in another man's anus, and receptive sex is when a man has his penis in your anus. PROBE: Other terms for this are being a “top” (insertive partner) or a “bottom” (receptive partner).

18. Since your release in (MONTH), have you had anal sex with a male partner? <ANLMAN> [Base: <MAN2MAN> = 1]
   YES .......................................................... 1
   NO ............................................................ 2 (SKIP TO SECTION XI)
   REFUSED .......................................................... 7
   DON’T KNOW ..................................................... 8

19. With how many different male partners have you had anal sex since your release? <NUMMALE> [Base: <ANLMAN> = 1]
   ______ NUMBER OF MEN (IF ONE, SKIP TO Q. 21)
   DON’T KNOW ..................................................... -1
   REFUSED .......................................................... -2

20. With how many different male partners in the last 30 days? <MULTMILE> [Base: <MAN2MAN> =1 OR <ANLMAN> =1 AND <NUMMALE> <> 1]
   ______ NUMBER OF MEN (IF ZERO, SKIP TO Q27)
   DON’T KNOW ..................................................... -1
   REFUSED .......................................................... -2

21. In total how many times have you had anal sex with a man in the last 30 days? <M4MTOT> [Base: <MAN2MAN> =1 And <ANLMAN> =1]
   ______ NUMBER OF TIMES
   DON’T KNOW ..................................................... -1
   REFUSED .......................................................... -2
READ ONLY IF SKIPPED OUT OF QUESTION 4:
Now I'm going to ask you about condom use. Condom use is counted only if you put the condom on before penetration and continued using it throughout sex. Do not include times when the condom broke or slipped off.

Was a condom used by the insertive partner any of those (XX) times in the last 30 days? (XX=ANSWER TO Q21)  

22.  

<TOPHAT> [Base: <MULTMLE> <> 0 AND <MAN2MAN> =1 And <ANLMAN> =1]  

YES ....................................................................................................... 1  
NO ......................................................................................................... 2 (SKIP TO Q25)  
REFUSED ............................................................................................ 7 (SKIP TO Q25)  
DON’T KNOW/REMEMBER.............................................................. 8

23. How many times was a condom used?  

<HATIME>  
[Base: <TOPHAT> =1 AND <MULTMLE> <> 0]  

NUMBER OF TIMES  
DON’T KNOW .................................................................................... -1  
REFUSED ............................................................................................ -2

(IF Q 20=1, SKIP TO Q25)

24. With how many of these (XX) men was a condom used at least once by the insertive partner during the past 30 days? (XX=ANSWER TO Q20)  

<HAT30>  
[Base: <TOPHAT> =1 AND <MULTMLE> > 1]  

NUMBER OF MEN  
DON’T KNOW .................................................................................... -1  
REFUSED ............................................................................................ -2

25. Do you think that (any of) your male partner(s in the past 30 days) (was/were) HIV positive?  

<POZMAN> [Base: <MULTMLE> <> 0 AND <MAN2MAN> =1 And <ANLMAN> =1]  

YES ....................................................................................................... 1  
NO ......................................................................................................... 2  
REFUSED ............................................................................................ 7  
DON’T KNOW ..................................................................................... 8

26. Do you think that (any of) your male partner(s in the past 30 days) was an injection drug user?  

<MANINJK>> [Base: <MULTMLE> <> 0 AND <MAN2MAN> =1 And <ANLMAN> =1]  

YES ....................................................................................................... 1  
NO ......................................................................................................... 2  
REFUSED ............................................................................................ 7  
DON’T KNOW ..................................................................................... 8
27. Since your release from jail in (MONTH), when you have had anal sex with a man, how often had you been drinking or using street drugs... <WHODAT>
[Base: <MAN2MAN> = 1 AND <ANLMAN> =1]

Never or rarely.............................................................. 1
About a quarter of the time............................................ 2
About half the time...................................................... 3
About three-quarters of the time................................. 4
Always or almost always............................................. 5
REFUSED ........................................................................... 7
DON'T KNOW ..................................................................... 8

Since your release...

28. Have you had receptive anal sex with a man you didn't know very well?
<CAZSEX> [BASE: <ANLMAN> =1]

YES ................................................................................. 1
NO ..................................................................................... 2
REFUSED ........................................................................... 7
DON’T KNOW ................................................................. 8

29. Have you talked about safe sex with a male partner?
<MANSafe> [BASE: <ANLMAN> =1]

YES ................................................................................... 1
NO ..................................................................................... 2
REFUSED ........................................................................... 7
DON’T KNOW ................................................................. 8

30. Have you convinced a male partner that a condom should be used when having anal sex?
<MANCONVD> [BASE: <ANLMAN> =1] <V0521>

YES ................................................................................... 1
NO ..................................................................................... 2
REFUSED ........................................................................... 7
DON’T KNOW ................................................................. 8

31. Have you exchanged sex for money or drugs?
<HUSTLR> [BASE: <ANLMAN> =1]

YES ................................................................................... 1
NO ..................................................................................... 2
REFUSED ........................................................................... 7
DON’T KNOW ................................................................. 8
32. Now, thinking back to the last time you had anal sex, did you or your partner use a condom?

<HATLAST> [BASE: <ANLMAN> =1]

YES ....................................................................................................... 1
NO ......................................................................................................... 2
REFUSED ............................................................................................. 7
DON’T KNOW/REMEMBER .............................................................. 8

33. The last time you had anal sex, was it with someone you consider to be your regular partner?

<REGMAN> [BASE: <ANLMAN> =1]

YES ....................................................................................................... 1
NO ......................................................................................................... 2
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

X. Male Sexual Partners (Female Version)

Now, I'm going to ask you a few questions about your sexual behavior with men.

1. Since your release from jail in (MONTH), have you had vaginal or anal sex with a male partner?

<MUJSEX> [BASE: GENDER=FEMALE]

YES ....................................................................................................... 1
NO ......................................................................................................... 2 (SKIP TO Q18)
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

2. With how many different men have you had vaginal or anal sex since your release?

[NUMHOM] [BASE: <MUJSEX> = 1]

_______ NUMBER OF MEN
DON’T KNOW .................................................................................... -1
REFUSED ............................................................................................ -2

3. With how many different men in the last 30 days?

<HOM30> [BASE: <MUJSEX> = 1 AND <NUMHOM> >1]

_______ NUMBER OF MEN (IF ZERO, SKIP TO Q.10)
DON’T KNOW ..................................................................................... -1
REFUSED ............................................................................................ -2
4. In total, how many times have you had vaginal or anal sex with a man in the last 30 days?
   \(<VAGI30>\) [BASE: \(<NUMHOM> = 1 \text{ AND } HOM30 > 0\)]
   _____ NUMBER OF TIMES
   DON’T KNOW ................................................................. -1
   REFUSED ........................................................................ -2

Now I'm going to ask you about condom use. Condom use is counted only if the male or female condom was put on before penetration and continued to be used throughout sex. Do not include times when the condom broke or slipped off.

5. Did you use a condom any of these (XX) times in the last 30 days? \((XX=\text{ANSWER FROM Q4})\)
   \(<PUTHAT>\) [BASE: \(<NUMHOM> > 1 \text{ AND } <HOM30> > 0\)]
   YES ........................................................................ 1
   NO ........................................................................... 2 (SKIP TO Q8)
   REFUSED ..................................................................... 7
   DON’T KNOW .............................................................. 8

6. How many times did you use a condom? \(<QUANHAT>\)
   [BASE: \(<PUTHAT> = 1\)]
   _____ NUMBER OF TIMES
   DON’T KNOW ................................................................ -1
   REFUSED ........................................................................ -2
   ALWAYS ...................................................................... -3

   (IF Q3=1, SKIP TO Q8)

7. With how many of these (XX) men did you use a condom at least once in the last 30 days? \((XX=\text{ANSWER FROM Q3})\)
   \(<HATNMAN>\) [BASE: \(<HOM30> \neq 1 \text{ OR } <QUANT> > -3\)]
   _____ NUMBER OF MEN
   DON’T KNOW ................................................................ -1
   REFUSED ........................................................................ -2

8. Do you think that (any of) your male sexual partner(s in the last 30 days) (was/were) HIV positive?
   \(<POZHOM>\) [BASE: \(<NUMHOM> = 1 \text{ OR } HOM30 > 0\)]
   YES ........................................................................ 1
   NO ........................................................................... 2
   REFUSED ..................................................................... 7
   DON’T KNOW .............................................................. 8
9. Do you think that (any of) your male sexual partner(s in the last 30 days) was an injection drug user?

<INJKMAN> [BASE: <NUMHOM> = 1 OR HOM30 > 0]

YES ........................................................................................................... 1
NO ........................................................................................................... 2
REFUSED ............................................................................................... 7
DON’T KNOW ........................................................................................ 8

10. Since your release from jail in (MONTH), when you have had vaginal or anal sex with a man how often had you been drinking or using street drugs… [BASE: <HOM30> >0 OR <NUMHOM> = 1]

<PASSOUT>

Never or rarely ....................................................................................... 1
About a quarter of the time ................................................................. 2
About half the time .............................................................................. 3
About three-quarters of the time ....................................................... 4
Always or almost always ..................................................................... 5
Not sure ................................................................................................ 6
REFUSED ............................................................................................. 7
DON’T KNOW .................................................................................... 8

Since your release…

11. <CAZVAG>[BASE: <HOM30> >0 OR <NUMHOM> = 1]

Have you had vaginal or anal sex with a man you didn't know very well?

YES ....................................................................................................... 1
NO ........................................................................................................ 2
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

12. Have you talked about safe sex with a male partner?

<SAFHOM>[BASE: <HOM30> >0 OR <NUMHOM> = 1]

YES ....................................................................................................... 1
NO ........................................................................................................ 2
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8

13. Have you used a condom because your male partner asked you to?

<HOMASK>[BASE: <HOM30> >0 OR <NUMHOM> = 1]

YES ....................................................................................................... 1
NO ........................................................................................................ 2
REFUSED ............................................................................................. 7
DON’T KNOW ..................................................................................... 8
14. Have you convinced a male partner that a condom should be used when you had sex?

**<HOMMND>[BASE: <HOM30> >0 OR <NUMHOM> = 1]**

YES ............................................................................................................... 1
NO ............................................................................................................... 2
REFUSED ..................................................................................................... 7
DON’T KNOW .......................................................................................... 8

15. Have you exchanged sex for money or drugs?

**<FORCASH>[BASE: <HOM30> >0 OR <NUMHOM> = 1]**

YES ............................................................................................................... 1
NO ............................................................................................................... 2
REFUSED ..................................................................................................... 7
DON’T KNOW .......................................................................................... 8

16. Now, thinking back to the last time you had sex, did you or your partner use a condom?

**<ULTHAT>[BASE: <HOM30> >0 OR <NUMHOM> = 1 AND <QUANHAT> <> -3]**

YES ............................................................................................................... 1
NO ............................................................................................................... 2
REFUSED ..................................................................................................... 7
DON’T REMEMBER/KNOW ....................................................................... 8

17. The last time you had sex, was it with someone you consider to be your regular partner?

**<REGCLNT>[BASE: <HOM30> >0 OR <NUMHOM> = 1]**

YES ............................................................................................................... 1
NO ............................................................................................................... 2
REFUSED ..................................................................................................... 7
DON’T KNOW .......................................................................................... 8

18. During the last 30 days, have you had any female sexual partners?

**<FEM2FEM> [BASE: GENDER = FEMALE]**

YES ............................................................................................................... 1
NO ............................................................................................................... 2
REFUSED ..................................................................................................... 7
DON’T KNOW/REMEMBER ...................................................................... 8
XI. HIV RISK

PRE-POPULATED FIELD: IF RESPONDENT HAS HIV OR AIDS AS CHRONIC DISEASE, SKIP TO SECTION XII.

1. Have you ever tested positive for HIV? I want to remind you that all the information you give me is confidential.
   <UPOZ> [BASE: CHR1_DX <> HIV/AIDS OR CHR2_DX <> HIV/AIDS]  
   Or HIV = 1
   YES ....................................................................................................... 1
   NO ........................................................................................................ 2 (SKIP TO Q. 3)
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

2. How long ago did you first test positive? ________________ (SKIP TO SECTION XII)  
   <TIMEPOZ> IF NEEDED PROBE: WAS THAT IN MONTHS OR IN YEARS?  
   [UPOZ> ≠ 2]  
   1….. MONTH  2……..YEARS
   <POZUNT> [BASE: <TIMEPOZ> NE BLANK ND <> -2, -1 ]  
   DON’T KNOW .................................................................................... -1
   REFUSED ............................................................................................ -2

3. Given the way you’ve been living your life since your release from jail, do you think your chances of getting HIV are…  
   <HIVRSK> [BASE: UPOZ> =2, 7 OR 8]
   High....................................................................................................... 1
   Medium ................................................................................................. 2
   Low........................................................................................................ 3
   No chance at all ..................................................................................... 4
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

4. Compared to other problems in your life, how much do you worry about getting HIV…  
   <HIVWORY> [BASE: UPOZ> =2, 7 OR 8]
   A lot less .............................................................................................. 1
   A little less ............................................................................................ 2
   A little more .......................................................................................... 3
   A lot more............................................................................................. 4
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8
XII. Violence and Abuse

Now I'm going to ask you a few questions about violence and abuse. Some of these questions may be sensitive, but I'm not going to ask for any details. If any of the questions make you uncomfortable, just let me know.

IF PERSON GETS UPSET DURING THESE QUESTIONS, INTERVIEWER SHOULD PROVIDE PHONE NUMBER FOR REFERRAL FOR COUNSELING. SOURCES OF COUNSELING:

PSYCH CRISIS SERVICE: 733-6661 IN SPRINGFIELD
MT TOM INSTITUTE: 536-2251 IN HOLYOKE
WESTFIELD: 568-6386 IN WEST SPRINGFIELD, WESTFIELD
YWCA- ABUSE & RAPE HOTLINE: 733-7100 OR 800-992-2600

1. Has anyone kicked, punched, beaten or otherwise physically hurt you since you were released from jail in (MONTH)? <PHYHURT> [BASE:ALL]

   YES ....................................................................................................... 1
   NO ......................................................................................................... 2 (SKIP TO Q3)
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

2. Was this…

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>NO</th>
<th>REF</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>A spouse or partner?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>A close relative?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>A friend or acquaintance?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>A stranger?</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Or someone else?</td>
<td>2</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(specify relationship: _____________)

3. Have you kicked, punched, beaten or otherwise physically hurt someone since you were released from jail? <UABUSE> [BASE: ALL]

   YES ....................................................................................................... 1
   NO ......................................................................................................... 2 (SKIP TO SECTION XIII)
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8
4. Was this…

<table>
<thead>
<tr>
<th>A spouse or partner? [BASE: &lt;UABUSE&gt;= 1]</th>
<th>1</th>
<th>2</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>A close relative? [BASE: &lt;PHYHURT&gt; = 1]</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>A friend or acquaintance? [BASE: &lt;PHYHURT&gt; = 1]</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>A stranger? [BASE: &lt;PHYHURT&gt; = 1]</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Or someone else? [BASE: &lt;PHYHURT&gt; = 1]</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

(specify relationship: _________________)

XIII. Household

Next, a few questions about your living arrangements.

<V0560S1> - <V0560S9>

1. Are you currently living… ALL THAT APPLY [BASE: ALL]

   With your spouse or partner? ................................................................. 1
   With other family members? ................................................................. 2
   With non-family adults? (PROBE: friends or roommates) .................. 3
   Alone ..................................................................................................... 4
   Or in a supervised group situation? (specify: ____________) ............. 5  (SKIP TO Q3)
   PROBE: A halfway house or group home or residential drug or alcohol treatment
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

2. Are you currently living… [BASE: <LIVING> =1-4, 7, 8]

   In your own home or apartment .............................................................1
   In the home of friends or relatives, or ....................................................2
   Somewhere else? Where? (ALL THAT APPLY)
   RENTING A ROOM ..................................................................................3
   A SHELTER OR WELFARE RESIDENCE ..........................................4
   A RESIDENTIAL DRUG OR ALCOHOL TREATMENT CENTER ........5
   A HALFWAY HOUSE OR GROUP HOME ..........................................6
   HOMELESS/IN AN ABANDONED BUILDING/A CAR/
   ON THE STREET/IN A PARK .............................................................7
   OTHER (SPECIFY________________) ............................................95
   REFUSED .............................................................................................97
IF RESPONDENT COMPLETED THE 30-DAY INTERVIEW, INTERVIEWER WILL ASK “SINCE WE LAST SPOKE WITH YOU IN (MONTH OF 30-DAY INTERVIEW)…”. IF RESPONDENT DID NOT COMPLETE 30-DAY INTERVIEW, INTERVIEWER WILL ASK “SINCE YOUR RELEASE”.

3. Since (we last spoke in (MONTH OF 30-DAY INTERVIEW)/your release), have you stayed one or more nights at….

IF RESPONDENT ALREADY CITED ONE OF THESE ANSWERS IN Q.1 OR Q.2, DON’T ASK AGAIN, JUST CIRCLE YES WHERE APPLICABLE AND ASK ABOUT REMAINING PLACES.

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>REF</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>A shelter or welfare residence?&lt;NIGHTS1&gt; [BASE:ALL]</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>A halfway house or group home?&lt;NIGHTS2&gt; [LIVQRTR &lt;= 6]</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>An abandoned building, a car, on the street or in a park?&lt;NIGHTS3&gt; [LIVQRTR &lt;= 7] (PROBE: Were you homeless?)</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

4. Since you were released from jail in (MONTH), have you been back to jail or in prison?

<BACKIN>[BASE:ALL]

YES ............................................................................................................... 1

NO .............................................................................................................. 2 (SKIP TO Q6)

REFUSED ..................................................................................................... 7

DON’T KNOW .............................................................................................. 8

5. For about how many days in total were you back in jail or prison?  <DAYSIN> [BASE: <BACKIN> = 1]

_______ TOTAL DAYS

DON’T KNOW ..............................................................................................-1

REFUSED .....................................................................................................-2

6. How many children under 18 are currently in your care and custody?

(BASE: ALL)

_______ NUMBER OF CHILDREN <UNDER18>

DON’T KNOW ..............................................................................................-1

REFUSED .....................................................................................................-2

7. In the last 30 days, how many times have you participated in religious activities?

<RELIGN> [BASE: ALL]

_______ TIMES

DON’T KNOW ..............................................................................................-1
Finally, a few general questions about employment.

8. Are you currently working at all, either full or part time, on or off the books? 
   PROBE: Including odd jobs. On or off the books means reported or unreported income (legal or illegal). 
   <WORKIN> [BASE: ALL]

   Full time work is 35 or more hours per week.
   
   YES ....................................................................................................... 1
   NO ......................................................................................................... 2 (SKIP TO Q10)
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

9. Is that full or part-time work? <FULPRT> [BASE: <WORKIN> =1]

   FULL-TIME .......................................................................................... 1
   PART-TIME OR ODD JOBS ............................................................... 2
   REFUSED ............................................................................................. 7
   DON’T KNOW ..................................................................................... 8

10. Do you currently receive… [BASE:ALL] FOR ENTIRE GRID

   A common response for this question may be TANF which is a governmental welfare program.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>DK</th>
<th>REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any welfare or cash assistance from the government?&lt;GET_A&gt;</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Any disability income?&lt;GET_B&gt;</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Or any support from a relative or friend?&lt;GET_C&gt;</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

CLOSE:

Thank you very much for your participation in the study. This was the final interview. As a sign of our appreciation, we would like to send you a $30 gift certificate redeemable at any store in the Ingleside Mall.

   Where is the best address to send this?
## Appendix 3: Comparison of Respondents and Non-Respondents

### Table A3.1
Demographic Characteristics of Respondents\(^a\) (N=151) and Non-Respondents (N=49)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>(x^2) p</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>134 88.7%</td>
<td>44 89.8%</td>
<td>0.042 0.84</td>
</tr>
<tr>
<td>Female</td>
<td>17 11.3%</td>
<td>5 10.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td>2.46 0.12</td>
</tr>
<tr>
<td>17-34</td>
<td>78 51.7%</td>
<td>19 38.8%</td>
<td></td>
</tr>
<tr>
<td>35+</td>
<td>73 48.3%</td>
<td>30 61.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Race(^b)</strong></td>
<td></td>
<td></td>
<td>1.51 0.47</td>
</tr>
<tr>
<td>White</td>
<td>52 34.4%</td>
<td>16 32.7%</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>31 20.5%</td>
<td>6 12.2%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>67 44.4%</td>
<td>24 49.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td>0.32 0.57</td>
</tr>
<tr>
<td>Hispanic</td>
<td>67 44.4%</td>
<td>24 49.0%</td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>84 55.6%</td>
<td>25 51.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td></td>
<td></td>
<td>0.71 0.7</td>
</tr>
<tr>
<td>English</td>
<td>110 72.8%</td>
<td>35 71.4%</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>40 26.5%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1 0.7%</td>
<td>1 2.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Status at Admission</strong></td>
<td></td>
<td></td>
<td>0.85 0.36</td>
</tr>
<tr>
<td>Pretrial</td>
<td>97 64.2%</td>
<td>35 71.4%</td>
<td></td>
</tr>
<tr>
<td>Sentenced</td>
<td>54 35.8%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Length of Stay(^c)</strong></td>
<td></td>
<td></td>
<td>1.45 0.49</td>
</tr>
<tr>
<td>&lt;31 Days</td>
<td>39 25.8%</td>
<td>10 20.4%</td>
<td></td>
</tr>
<tr>
<td>31-90 Days</td>
<td>46 30.5%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>91+ Days</td>
<td>65 43.0%</td>
<td>26 53.1%</td>
<td></td>
</tr>
<tr>
<td><strong>Health Center Team</strong></td>
<td></td>
<td></td>
<td>2.27 0.52</td>
</tr>
<tr>
<td>Neighborhood</td>
<td>37 24.5%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>Brightwood</td>
<td>37 24.5%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>Holyoke</td>
<td>44 29.1%</td>
<td>9 18.4%</td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>33 21.9%</td>
<td>13 26.5%</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Respondents include those who completed the 30-day interview, the 6-month interview, or both.

\(^b\) 1 missing value (Respondents) and 3 missing values (Non-Respondents) for Race.

\(^c\) 1 missing value (Respondents) for Length of Stay.
Table A3.2
Self-Reported Health Status of Respondents (N=151) and Non-Respondents (N=49)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>x²</td>
</tr>
<tr>
<td><strong>Self-Rated Health (Last 30 Days)</strong></td>
<td></td>
<td></td>
<td>2.33</td>
</tr>
<tr>
<td>Poor</td>
<td>38 25.2%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>43 28.5%</td>
<td>15 30.6%</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>40 26.5%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>Very Good</td>
<td>17 11.3%</td>
<td>2 4.1%</td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>13 8.6%</td>
<td>5 10.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Physical Pain (Last 30 Days)</strong></td>
<td></td>
<td></td>
<td>1.39</td>
</tr>
<tr>
<td>None</td>
<td>42 27.8%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>Minimal</td>
<td>25 16.6%</td>
<td>11 22.4%</td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>22 14.6%</td>
<td>7 14.3%</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>32 21.2%</td>
<td>11 22.4%</td>
<td></td>
</tr>
<tr>
<td>Severe</td>
<td>30 19.9%</td>
<td>7 14.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Help Available From Family/Friends/Neighbors</strong> (Last 30 Days)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Much As Wanted</td>
<td>52 34.4%</td>
<td>14 28.6%</td>
<td>8.96</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>26 17.2%</td>
<td>5 10.2%</td>
<td></td>
</tr>
<tr>
<td>Some</td>
<td>32 21.2%</td>
<td>6 12.2%</td>
<td></td>
</tr>
<tr>
<td>A little</td>
<td>13 8.6%</td>
<td>6 12.2%</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>28 18.5%</td>
<td>18 36.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Bothered by Emotional Problems (Last 30 Days)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>18 11.9%</td>
<td>9 18.4%</td>
<td>1.61</td>
</tr>
<tr>
<td>Slightly</td>
<td>18 11.9%</td>
<td>5 10.2%</td>
<td></td>
</tr>
<tr>
<td>Moderately</td>
<td>16 10.6%</td>
<td>6 12.2%</td>
<td></td>
</tr>
<tr>
<td>Quite a bit</td>
<td>42 27.8%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>Extremely</td>
<td>57 37.7%</td>
<td>16 32.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Physical Limitations On Usual Activities (Last 6-Months)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>71 47.0%</td>
<td>18 36.7%</td>
<td>1.58</td>
</tr>
<tr>
<td>No</td>
<td>80 53.0%</td>
<td>31 63.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Mental Health Limitations On Usual Activities (Last 6-Months)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>64 42.4%</td>
<td>21 42.9%</td>
<td>0.0005</td>
</tr>
<tr>
<td>No</td>
<td>86 57.0%</td>
<td>28 57.1%</td>
<td></td>
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Table A3.3
Medical and Mental Health Utilization of Respondents (N=151) and Non-Respondents (N=49)

<table>
<thead>
<tr>
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<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n%</td>
<td>n%</td>
<td>x^2</td>
</tr>
<tr>
<td><strong>Last Medical Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-6 Months</td>
<td>116 76.8%</td>
<td>32 65.3%</td>
<td>2.55</td>
</tr>
<tr>
<td>7 Months or More</td>
<td>35 23.2%</td>
<td>17 34.7%</td>
<td>2.02</td>
</tr>
<tr>
<td><strong>Doctor Visits (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 Times</td>
<td>46 30.5%</td>
<td>17 34.7%</td>
<td></td>
</tr>
<tr>
<td>3 or More Times</td>
<td>55 36.4%</td>
<td>11 22.4%</td>
<td></td>
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<tr>
<td><strong>Hospital Admissions (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td>0.79</td>
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<tr>
<td>None</td>
<td>114 75.5%</td>
<td>40 81.6%</td>
<td></td>
</tr>
<tr>
<td>One or More</td>
<td>37 24.5%</td>
<td>9 18.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Emergency Room Visits (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td>0.12</td>
</tr>
<tr>
<td>None</td>
<td>82 54.3%</td>
<td>28 57.1%</td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>39 25.8%</td>
<td>12 24.5%</td>
<td></td>
</tr>
<tr>
<td>Two or More</td>
<td>30 19.9%</td>
<td>9 18.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Medicaid Paid Last Care</strong></td>
<td></td>
<td></td>
<td>1.49</td>
</tr>
<tr>
<td>Yes</td>
<td>103 68.2%</td>
<td>29 59.2%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>47 31.1%</td>
<td>20 40.8%</td>
<td></td>
</tr>
<tr>
<td><strong>Medicare Paid Last Care</strong></td>
<td></td>
<td></td>
<td>3.93</td>
</tr>
<tr>
<td>Yes</td>
<td>19 12.6%</td>
<td>12 24.5%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>131 86.8%</td>
<td>37 75.5%</td>
<td></td>
</tr>
<tr>
<td><strong>Prior Mental Health Care</strong></td>
<td></td>
<td></td>
<td>0.82</td>
</tr>
<tr>
<td>Yes</td>
<td>94 62.3%</td>
<td>34 69.4%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>57 37.7%</td>
<td>15 30.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Last Mental Health Care</strong></td>
<td></td>
<td></td>
<td>3.26</td>
</tr>
<tr>
<td>1-6 Months</td>
<td>66 70.2%</td>
<td>18 52.9%</td>
<td></td>
</tr>
<tr>
<td>7 or More Months</td>
<td>26 27.7%</td>
<td>15 44.1%</td>
<td></td>
</tr>
<tr>
<td><strong>Mental Health Visits Last 6 Months</strong></td>
<td></td>
<td></td>
<td>3.97</td>
</tr>
<tr>
<td>None</td>
<td>29 30.9%</td>
<td>17 50.0%</td>
<td></td>
</tr>
<tr>
<td>One or More</td>
<td>65 69.1%</td>
<td>17 50.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Mental Health Overnight Care</strong></td>
<td></td>
<td></td>
<td>0.10</td>
</tr>
<tr>
<td>None</td>
<td>77 81.9%</td>
<td>27 79.4%</td>
<td></td>
</tr>
<tr>
<td>One or More</td>
<td>17 18.1%</td>
<td>7 20.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Mental Health Emergency Care</strong></td>
<td></td>
<td></td>
<td>0.045</td>
</tr>
<tr>
<td>None</td>
<td>73 77.7%</td>
<td>27 79.4%</td>
<td></td>
</tr>
<tr>
<td>One or More</td>
<td>21 22.3%</td>
<td>7 20.6%</td>
<td></td>
</tr>
</tbody>
</table>

(Continues)
<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid Paid Mental Health Care Last Time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>58 (38.5%)</td>
<td>17 (50.0%)</td>
<td>0.22</td>
</tr>
<tr>
<td>No</td>
<td>10 (10.6%)</td>
<td>2 (5.9%)</td>
<td></td>
</tr>
<tr>
<td>Medicare Paid Mental Health Care Last Time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11 (11.7%)</td>
<td>8 (23.5%)</td>
<td>5.85</td>
</tr>
<tr>
<td>No</td>
<td>57 (60.6%)</td>
<td>11 (32.4%)</td>
<td></td>
</tr>
</tbody>
</table>

脚注：

a 21 missing values (Non-Respondents) for Doctors Visits.
b 1 missing value (Respondents) for Medicaid Paid Last Care.
c 1 missing value (Respondents) for Medicare Paid Last Care.
d Among baseline interview participants who had ever received mental health care prior to the interview (n=94: Respondents; n=34: Non-Respondents).
e 2 missing values (Respondents) and 1 missing value (Non-Respondents) for Last Mental Health Care.
f 2 missing values (Respondents) for Medicaid Paid Mental Health Care Last Time.
g 2 missing values (Respondents) for Medicare Paid Mental Health Care Last Time.
### Table A3.4
**Tobacco, Drug and Alcohol Use History of Respondents (N=151) and Non-Respondents (N=49)**

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>$\chi^2$</td>
</tr>
<tr>
<td>Smoked Cigarettes (Last 30 Days)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>124 82.1%</td>
<td>42 85.7%</td>
<td>0.34 0.56</td>
</tr>
<tr>
<td>No</td>
<td>27 17.9%</td>
<td>7 14.3%</td>
<td></td>
</tr>
<tr>
<td>Cigarettes Per Day&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>1.55 0.46</td>
</tr>
<tr>
<td>&lt;20</td>
<td>44 35.5%</td>
<td>11 26.2%</td>
<td></td>
</tr>
<tr>
<td>One Pack</td>
<td>47 31.1%</td>
<td>20 40.8%</td>
<td></td>
</tr>
<tr>
<td>More Than One Pack</td>
<td>33 21.9%</td>
<td>11 22.4%</td>
<td></td>
</tr>
<tr>
<td>Would Like to Stop&lt;sup&gt;a,c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>0.1 0.75</td>
</tr>
<tr>
<td>Yes</td>
<td>93 61.6%</td>
<td>31 63.3%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>29 19.2%</td>
<td>11 22.4%</td>
<td></td>
</tr>
<tr>
<td>Used Alcohol (Last 30 Days)</td>
<td></td>
<td></td>
<td>0 1</td>
</tr>
<tr>
<td>Yes</td>
<td>114 75.5%</td>
<td>37 75.5%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>37 24.5%</td>
<td>12 24.5%</td>
<td></td>
</tr>
<tr>
<td>Days Per Week Drink&lt;sup&gt;d,e&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>2.57 0.28</td>
</tr>
<tr>
<td>1-2 Days</td>
<td>26 17.2%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>3-6 Days</td>
<td>37 24.5%</td>
<td>10 20.4%</td>
<td></td>
</tr>
<tr>
<td>7 or More Days</td>
<td>35 23.2%</td>
<td>10 20.4%</td>
<td></td>
</tr>
<tr>
<td>Number Drinks Per Sitting&lt;sup&gt;d,f&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>3.93 0.14</td>
</tr>
<tr>
<td>1-4 Drinks</td>
<td>29 19.2%</td>
<td>9 18.4%</td>
<td></td>
</tr>
<tr>
<td>5-10 Drinks</td>
<td>25 16.6%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>11 or More Drinks</td>
<td>56 37.1%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>Ever Attend AA/12-Step Program for Self&lt;sup&gt;g&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>0.22 0.64</td>
</tr>
<tr>
<td>Yes</td>
<td>80 53.0%</td>
<td>24 49.0%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>35 23.2%</td>
<td>12 24.5%</td>
<td></td>
</tr>
<tr>
<td>Ever Attend Inpatient Treatment Program&lt;sup&gt;h&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>1.17 0.28</td>
</tr>
<tr>
<td>Yes</td>
<td>36 23.8%</td>
<td>15 30.6%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>77 51.0%</td>
<td>21 13.9%</td>
<td></td>
</tr>
<tr>
<td>Used Marijuana (Last 30 Days)&lt;sup&gt;i&lt;/sup&gt;</td>
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<td></td>
<td>0.062 0.8</td>
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<tr>
<td>Yes</td>
<td>58 38.4%</td>
<td>19 38.8%</td>
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</tr>
<tr>
<td>No</td>
<td>80 53.0%</td>
<td>24 49.0%</td>
<td></td>
</tr>
<tr>
<td>Used Crack/Rock Cocaine (Last 30 Days)&lt;sup&gt;j&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>1.41 0.24</td>
</tr>
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<td>Yes</td>
<td>46 30.5%</td>
<td>15 30.6%</td>
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</tr>
<tr>
<td>No</td>
<td>39 25.8%</td>
<td>7 14.3%</td>
<td></td>
</tr>
<tr>
<td>Used Powdered Cocaine (Last 30 Days)&lt;sup&gt;k&lt;/sup&gt;</td>
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<td></td>
<td>1.17 0.28</td>
</tr>
<tr>
<td>Yes</td>
<td>39 25.8%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>62 41.1%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>Used Heroin Last (30 Days)&lt;sup&gt;l&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>0.18 0.67</td>
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<tr>
<td>Yes</td>
<td>55 36.4%</td>
<td>18 36.7%</td>
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<tr>
<td>No</td>
<td>30 19.9%</td>
<td>8 16.3%</td>
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(continues)
Table A3.4
Tobacco, Drug and Alcohol Use History of Respondents (N=151) and Non-Respondents (N=49)

<table>
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<th>Non-Respondents</th>
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<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>x²</td>
</tr>
<tr>
<td>Used Other Street Drug (Last 30 Days)²</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9 6.0%</td>
<td>48 8.2%</td>
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</tr>
<tr>
<td>No</td>
<td>46 30.5%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>Used Any Street Drug (Last 30 Days)³</td>
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<td></td>
</tr>
<tr>
<td>None</td>
<td>10 6.6%</td>
<td>6 12.2%</td>
<td></td>
</tr>
<tr>
<td>Marijuana only</td>
<td>26 17.2%</td>
<td>12 24.5%</td>
<td></td>
</tr>
<tr>
<td>Hard Drugs</td>
<td>115 76.2%</td>
<td>31 63.3%</td>
<td></td>
</tr>
<tr>
<td>Days Per Week Used Hard Drugs</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>&lt;1</td>
<td>59 39.1%</td>
<td>16 32.7%</td>
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</tr>
<tr>
<td>1-2</td>
<td>13 8.6%</td>
<td>6 12.2%</td>
<td></td>
</tr>
<tr>
<td>3-6</td>
<td>6 4.0%</td>
<td>2 4.1%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>73 48.3%</td>
<td>25 51.0%</td>
<td></td>
</tr>
<tr>
<td>Ever Injected Drugs²</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>57 37.7%</td>
<td>21 42.9%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>93 61.6%</td>
<td>28 57.1%</td>
<td></td>
</tr>
<tr>
<td>Injected Drugs (Last 30 Days)</td>
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</tr>
<tr>
<td>Yes</td>
<td>28 18.5%</td>
<td>12 24.5%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>29 19.2%</td>
<td>9 18.4%</td>
<td></td>
</tr>
<tr>
<td>Ever Shared Needles When Injecting</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>27 17.9%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>30 19.9%</td>
<td>7 14.3%</td>
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</tr>
<tr>
<td>Current or Past Drug of Choice²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td>42 27.8%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>Crack/Rock Cocaine</td>
<td>15 9.9%</td>
<td>8 16.3%</td>
<td></td>
</tr>
<tr>
<td>Powdered Cocaine</td>
<td>13 8.6%</td>
<td>1 2.0%</td>
<td></td>
</tr>
<tr>
<td>Heroin</td>
<td>45 29.8%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>Other Street Drug</td>
<td>0 0.0%</td>
<td>1 2.0%</td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>27 17.9%</td>
<td>5 10.2%</td>
<td></td>
</tr>
</tbody>
</table>

² Among baseline interview participants who smoked in the 30 days prior to the interview (n=124: Respondents; n=42: Non-Respondents).
³ 7 missing values (Non-Respondents) for Cigarettes Per Day.
⁴ 2 missing values (Respondents) and 7 missing values (Non-Respondents) for Would Like to Stop.
⁵ Among baseline interview participants who drank in the 30 days prior to the interview (n=114: Respondents; n=37: Non-Respondents).
⁶ 16 missing values (Respondents) and 3 missing values (Non-Respondents) for Days Per Week Drink.
⁷ 4 missing values (Respondents) and 1 missing value (Non-Respondents) for Number of Drinks Per Sitting.
⁸ 36 missing values (Respondents) and 13 missing values (Non-Respondents) for Ever Attend 12-Step Program.
⁹ 38 missing values (Respondents) and 13 missing values (Non-Respondents) for Ever Attend In-Patient Program.
¹⁰ 13 missing values (Respondents) for Used Marijuana.
¹¹ 66 missing values (Respondents) and 21 missing values (Non-Respondents) for Used Crack/Rock Cocaine.
¹² 50 missing values (Respondents) and 15 missing values (Non-Respondents) for Used Powder Cocaine.
Table A3.4
Tobacco, Drug and Alcohol Use History of Respondents (N=151) and Non-Respondents (N=49)

1 66 missing values (Respondents) and 17 missing values (Non-Respondents) for Used Heroin.
2 96 missing values (Respondents) and 25 missing values (Non-Respondents) for Used Other Street Drugs.
3 1 missing value (Respondents) for Ever Injected Drugs.
4 6 missing values (Non-Respondents) for Current/Past Drug of Choice.
### Table A3.5
Sexual Risk Behavior of Respondents (N=151) and Non-Respondents (N=49)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>x^2</td>
</tr>
<tr>
<td><strong>Number of Sex Partners (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td>4.15</td>
</tr>
<tr>
<td>Zero</td>
<td>33 21.9%</td>
<td>14 28.6%</td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>74 49.0%</td>
<td>16 32.7%</td>
<td></td>
</tr>
<tr>
<td>Two or More</td>
<td>43 28.5%</td>
<td>19 38.8%</td>
<td></td>
</tr>
<tr>
<td><strong>Used Condom (Last 30 Days)</strong></td>
<td></td>
<td></td>
<td>1.8</td>
</tr>
<tr>
<td>Yes</td>
<td>48 59.3%</td>
<td>11 44.0%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>33 40.7%</td>
<td>14 56.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Drinking/Drugs With Sex (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td>4.8</td>
</tr>
<tr>
<td>Never</td>
<td>46 39.3%</td>
<td>22 62.9%</td>
<td></td>
</tr>
<tr>
<td>Often</td>
<td>35 29.9%</td>
<td>17 48.6%</td>
<td></td>
</tr>
<tr>
<td>Almost Always</td>
<td>36 30.8%</td>
<td>10 28.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Sex With a Partner Not Well Known (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td>6.45</td>
</tr>
<tr>
<td>Yes</td>
<td>15 12.8%</td>
<td>11 31.4%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>101 86.3%</td>
<td>24 68.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Discuss Safe Sex (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td>0.009</td>
</tr>
<tr>
<td>Yes</td>
<td>64 54.7%</td>
<td>19 54.3%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>52 44.4%</td>
<td>16 45.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Used Condom Because Partner Asked (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td>0.18</td>
</tr>
<tr>
<td>Yes</td>
<td>29 24.8%</td>
<td>10 28.6%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>87 74.4%</td>
<td>25 71.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Convinced Partner to Use Condom (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td>0.78</td>
</tr>
<tr>
<td>Yes</td>
<td>47 40.2%</td>
<td>17 48.6%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>70 59.8%</td>
<td>18 51.4%</td>
<td></td>
</tr>
</tbody>
</table>

^a Among baseline interview participants who had sex in the 30 days prior to the interview (n=116: Respondents; n=35: Non-Respondents).
Table A3.6
HIV Testing and Awareness of Respondents (N=151) and Non-Respondents (N=49)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever Tested for HIV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>111 (73.5%)</td>
<td>45 (91.8%)</td>
<td>7.24 0.007</td>
</tr>
<tr>
<td>No</td>
<td>40 (26.5%)</td>
<td>4 (8.2%)</td>
<td></td>
</tr>
<tr>
<td>Ever Tested Positive for HIV&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>0.29 0.59</td>
</tr>
<tr>
<td>Yes</td>
<td>16 (10.6%)</td>
<td>5 (10.2%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>93 (61.6%)</td>
<td>39 (79.6%)</td>
<td></td>
</tr>
<tr>
<td>Perceived Chances of Contracting HIV&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>1.51 0.22</td>
</tr>
<tr>
<td>Possibility</td>
<td>63 (41.7%)</td>
<td>25 (51.0%)</td>
<td></td>
</tr>
<tr>
<td>No Chance</td>
<td>70 (46.4%)</td>
<td>18 (36.7%)</td>
<td></td>
</tr>
<tr>
<td>Worry About HIV vs. Other Problems&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>3.17 0.075</td>
</tr>
<tr>
<td>Less</td>
<td>90 (59.6%)</td>
<td>23 (46.9%)</td>
<td></td>
</tr>
<tr>
<td>More</td>
<td>44 (29.1%)</td>
<td>21 (42.9%)</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Among participants who ever tested for HIV (n=111: Respondents; n=45: Non-Respondents)

<sup>b</sup> 2 missing values (Respondents) and 1 missing value (Non-Respondents) for Ever Tested positive for HIV.

<sup>c</sup> Among participants who reported not having been tested for HIV or not testing positive for HIV (n=133: Respondents, n=43: Non-Respondents).
### Table A3.7
Violence and Abuse History of Respondents (N=151) and Non-Respondents (N=49)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>x², p</td>
</tr>
<tr>
<td>Someone Physically Hurt You (Last 6 Months)</td>
<td></td>
<td></td>
<td>1.63, 0.2</td>
</tr>
<tr>
<td>Yes</td>
<td>41 27.2%</td>
<td>18 36.7%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>110 72.8%</td>
<td>31 63.3%</td>
<td></td>
</tr>
<tr>
<td>You Physically Hurt Someone (Last 6 Months)</td>
<td></td>
<td></td>
<td>0.28, 0.6</td>
</tr>
<tr>
<td>Yes</td>
<td>46 30.5%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>105 69.5%</td>
<td>36 73.5%</td>
<td></td>
</tr>
<tr>
<td>Physically Hurt as a Child By Caretakera</td>
<td></td>
<td></td>
<td>0.12, 0.73</td>
</tr>
<tr>
<td>Yes</td>
<td>65 43.0%</td>
<td>20 40.8%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>84 55.6%</td>
<td>29 59.2%</td>
<td></td>
</tr>
<tr>
<td>Sexually Abused as Child By Caretakerb</td>
<td></td>
<td></td>
<td>0.09, 0.76</td>
</tr>
<tr>
<td>Yes</td>
<td>21 13.9%</td>
<td>6 12.2%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>129 85.4%</td>
<td>43 87.8%</td>
<td></td>
</tr>
</tbody>
</table>

a 2 missing values (Respondents) for Physically Hurt as Child By Caretaker.

b 1 missing value (Respondents) for Sexually Abused by Caretaker as Child.

### Table A3.8
Housing, Education and Employment Status of Respondents (N=151) and Non-Respondents (N=49)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>x², p</td>
</tr>
<tr>
<td>Living Situation</td>
<td></td>
<td></td>
<td>11.6, 0.003</td>
</tr>
<tr>
<td>With Other Adults</td>
<td>121 80.1%</td>
<td>28 57.1%</td>
<td></td>
</tr>
<tr>
<td>Alone</td>
<td>25 16.6%</td>
<td>15 30.6%</td>
<td></td>
</tr>
<tr>
<td>Homeless</td>
<td>5 3.3%</td>
<td>6 12.2%</td>
<td></td>
</tr>
<tr>
<td>Education Completed</td>
<td></td>
<td></td>
<td>1.68, 0.43</td>
</tr>
<tr>
<td>&lt;12 Years</td>
<td>71 47.0%</td>
<td>24 49.0%</td>
<td></td>
</tr>
<tr>
<td>High School Graduate</td>
<td>50 33.1%</td>
<td>12 24.5%</td>
<td></td>
</tr>
<tr>
<td>Some College or College Graduate</td>
<td>30 19.9%</td>
<td>13 26.5%</td>
<td></td>
</tr>
<tr>
<td>Full Time Employment</td>
<td></td>
<td></td>
<td>3.72, 0.054</td>
</tr>
<tr>
<td>Yes</td>
<td>61 40.4%</td>
<td>12 24.5%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>90 59.6%</td>
<td>36 73.5%</td>
<td></td>
</tr>
</tbody>
</table>
Table A3.9
Interest in Participating in HCCC Programs Among Respondents (N=151) and Non-Respondents (N=49)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Respondents</th>
<th>Non-Respondents</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>x²  p</td>
</tr>
<tr>
<td>HIV Prevention*</td>
<td></td>
<td></td>
<td>2.24 0.13</td>
</tr>
<tr>
<td>Yes</td>
<td>64 (42.4%)</td>
<td>15 (30.6%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>86 (57.0%)</td>
<td>34 (69.4%)</td>
<td></td>
</tr>
<tr>
<td>Disease Education*</td>
<td></td>
<td></td>
<td>0.006 0.94</td>
</tr>
<tr>
<td>Yes</td>
<td>56 (37.1%)</td>
<td>18 (36.7%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>94 (62.3%)</td>
<td>31 (63.3%)</td>
<td></td>
</tr>
<tr>
<td>Anger Management</td>
<td></td>
<td></td>
<td>0.98 0.32</td>
</tr>
<tr>
<td>Yes</td>
<td>77 (51.0%)</td>
<td>21 (42.9%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>74 (49.0%)</td>
<td>26 (53.1%)</td>
<td></td>
</tr>
<tr>
<td>Adult Education</td>
<td></td>
<td></td>
<td>0.24 0.62</td>
</tr>
<tr>
<td>Yes</td>
<td>77 (51.0%)</td>
<td>23 (46.9%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>74 (49.0%)</td>
<td>26 (53.1%)</td>
<td></td>
</tr>
<tr>
<td>Job Training</td>
<td></td>
<td></td>
<td>0.2 0.66</td>
</tr>
<tr>
<td>Yes</td>
<td>87 (57.6%)</td>
<td>30 (61.2%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>64 (42.4%)</td>
<td>19 (38.8%)</td>
<td></td>
</tr>
<tr>
<td>Smoking Cessation</td>
<td></td>
<td></td>
<td>0.63 0.43</td>
</tr>
<tr>
<td>Yes</td>
<td>62 (41.1%)</td>
<td>17 (34.7%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>89 (58.9%)</td>
<td>32 (65.3%)</td>
<td></td>
</tr>
<tr>
<td>Substance Abuse Treatment*</td>
<td></td>
<td></td>
<td>1.49 0.22</td>
</tr>
<tr>
<td>Yes</td>
<td>99 (65.6%)</td>
<td>27 (55.1%)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>51 (33.8%)</td>
<td>21 (42.9%)</td>
<td></td>
</tr>
</tbody>
</table>

*1 missing value (Respondents) for HIV Prevention.

**1 missing value (Respondents) for Disease Education.

***1 missing value (Respondents) and 1 missing value (Non-Respondents) for Substance Abuse Treatment.
Appendix 4: Comparison of Interviewed and Referred Inmates and Community Follow-up Referral Rates by a Number of Key Descriptive Characteristics

Table A2.1
Self-Reported Health Status of Interviewed (n=336) and Referred Inmates (n=200) and Community Follow-up Referral Rates (59.5%)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Interviewed</th>
<th>Referred</th>
<th>Referred as % of Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>TOTAL SAMPLE</td>
<td>336</td>
<td>100.0</td>
<td>200</td>
</tr>
<tr>
<td>Self-Rated Health (Last 30 Days)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>78</td>
<td>23.2%</td>
<td>52</td>
</tr>
<tr>
<td>Fair</td>
<td>102</td>
<td>30.4%</td>
<td>59</td>
</tr>
<tr>
<td>Good</td>
<td>95</td>
<td>28.3%</td>
<td>52</td>
</tr>
<tr>
<td>Very Good</td>
<td>31</td>
<td>9.2%</td>
<td>19</td>
</tr>
<tr>
<td>Excellent</td>
<td>30</td>
<td>8.9%</td>
<td>18</td>
</tr>
<tr>
<td>Physical Pain (Last 30 Days)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>100</td>
<td>29.7%</td>
<td>54</td>
</tr>
<tr>
<td>Minimal</td>
<td>60</td>
<td>17.9%</td>
<td>36</td>
</tr>
<tr>
<td>Mild</td>
<td>44</td>
<td>13.1%</td>
<td>29</td>
</tr>
<tr>
<td>Moderate</td>
<td>70</td>
<td>20.8%</td>
<td>44</td>
</tr>
<tr>
<td>Severe</td>
<td>62</td>
<td>18.5%</td>
<td>37</td>
</tr>
<tr>
<td>Help Available From Family/Friends/Neighbors (Last 30 Days)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Much As Wanted</td>
<td>119</td>
<td>35.4%</td>
<td>65</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>50</td>
<td>14.9%</td>
<td>31</td>
</tr>
<tr>
<td>Some</td>
<td>54</td>
<td>16.1%</td>
<td>38</td>
</tr>
<tr>
<td>A little</td>
<td>35</td>
<td>10.4%</td>
<td>20</td>
</tr>
<tr>
<td>None</td>
<td>78</td>
<td>23.2%</td>
<td>46</td>
</tr>
<tr>
<td>Bothered by Emotional Problems (Last 30 Days)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>50</td>
<td>14.9%</td>
<td>27</td>
</tr>
<tr>
<td>Slightly</td>
<td>43</td>
<td>12.8%</td>
<td>23</td>
</tr>
<tr>
<td>Moderately</td>
<td>37</td>
<td>11.0%</td>
<td>22</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>97</td>
<td>28.9%</td>
<td>55</td>
</tr>
<tr>
<td>Extremely</td>
<td>109</td>
<td>32.4%</td>
<td>73</td>
</tr>
<tr>
<td>Physical Limitations on Usual Activities (Last 6 Months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>135</td>
<td>40.3%</td>
<td>90</td>
</tr>
<tr>
<td>No</td>
<td>200</td>
<td>59.7%</td>
<td>110</td>
</tr>
<tr>
<td>Mental Health Limitations on Usual Activities (Last 6 Months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>139</td>
<td>41.4%</td>
<td>87</td>
</tr>
<tr>
<td>No</td>
<td>197</td>
<td>58.6%</td>
<td>113</td>
</tr>
<tr>
<td>Variable Identified</td>
<td>Interviewed</td>
<td>Referred</td>
<td>Referred as % of Interviewed</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------</td>
<td>----------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td><strong>Last Medical Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-6 Months</td>
<td>229</td>
<td>68.6</td>
<td>146</td>
</tr>
<tr>
<td>7 Months or More</td>
<td>105</td>
<td>31.4</td>
<td>52</td>
</tr>
<tr>
<td><strong>Doctor Visits (Last 6 Months)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
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Table A2.2
Medical and Mental Health Care Utilization of Interviewed (n=336) and Referred Inmates (n=200) and Community Follow-up Referral Rates (59.5%)

| a  | 2 missing values for Interviewed and 2 missing values for Referred for Last Medical Care |
| b  | 2 missing values for Interviewed and 2 missing values for Referred for Doctor Visits |
| c  | 2 missing values for Interviewed for Hospital Admissions |
| d  | 2 missing values for Interviewed for Emergency Room Visits |
| e  | 3 missing values for Interviewed and 1 missing value for Referred for Medicaid Paid Last Care |
| f  | 1 missing value for Referred for Last Mental Health Care |
| g  | 1 missing value for Interviewed for Medicaid Paid Last Mental Health Care |
### Table A2.3
Tobacco, Drug and Alcohol Use History of Interviewed (n=336) and Referred Inmates (n=200) and Community Follow-up Referral Rates (59.5%)

<table>
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<tr>
<th>Variable Identified</th>
<th>Interviewed</th>
<th>Referred</th>
<th>( % ) of Interviewed</th>
<th>( \chi^2 )</th>
<th>( p )</th>
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<td>Smoked Cigarettes (Last 30 Days)</td>
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<td>Cigarettes Per Day</td>
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<td>40 24.5</td>
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<td>19 12.8</td>
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<td>45 30.4</td>
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<td>Used Crack/Rock Cocaine (Last 30 Days)</td>
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<td>32 (17.5)</td>
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*1 missing value (Interviewed) and 1 missing value (Referred) for Number of Drinks Per Sitting.

b 79 missing values (Interviewed) and 38 missing value (Referred) for Ever Attended 12-Step Programs.

c 79 missing values (Interviewed) and 38 missing value (Referred) for Ever Attended Inpatient Treatment.
(continues)
Table A2.3
Tobacco, Drug and Alcohol Use History of Interviewed (n=336) and Referred Inmates (n=200) and Community Follow-up Referral Rates (59.5%)

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<td>e</td>
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<td>f</td>
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<td>Two Or More</td>
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<tr>
<td>Often</td>
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<tr>
<td>Almost Always</td>
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Table A2.5
HIV Testing and Awareness of Interviewed (n=336) and Referred Inmates (n=200) and Community Follow-up Referral Rates (59.5%)

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^a 24 missing values (Referred) for Ever Tested Positive for HIV.
^b Among participants who reported ever being tested for HIV (n=260: Interviewed; n=156: Referred)
^c Among participants who reported not having been tested for HIV or not testing positive for HIV (n=298: Interviewed, n=182: Referred).
^d 3 missing values (Referred) for Perceived Chances of Contracting HIV.
^e 6 missing values (Interviewed) for Worry About HIV vs. Other Problems.
### Table A2.6

**History of Violence and Abuse of Interviewed (n=336) and Referred Inmates (n=200) and Community Follow-up Referral Rates (59.5%)**

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Interviewed</th>
<th>Referred</th>
<th>Referred as % of Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Someone Physically Hurt You (Last 6 Months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>98</td>
<td>29.2</td>
<td>59</td>
</tr>
<tr>
<td>No</td>
<td>238</td>
<td>70.8</td>
<td>141</td>
</tr>
<tr>
<td>You Physically Hurt Someone (Last 6 Months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
<td>28.3</td>
<td>59</td>
</tr>
<tr>
<td>No</td>
<td>241</td>
<td>71.7</td>
<td>141</td>
</tr>
<tr>
<td>Physically Hurt As Child By Caretaker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>152</td>
<td>45.2</td>
<td>88</td>
</tr>
<tr>
<td>No</td>
<td>184</td>
<td>54.8</td>
<td>112</td>
</tr>
<tr>
<td>Sexually Abused As Child By Caretaker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>42</td>
<td>12.5</td>
<td>29</td>
</tr>
<tr>
<td>No</td>
<td>294</td>
<td>87.5</td>
<td>171</td>
</tr>
</tbody>
</table>

### Table A2.7

**Housing, Education and Employment Status of Interviewed (n=336) and Referred Inmates (n=200) and Community Follow-up Referral Rates (59.5%)**

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Interviewed</th>
<th>Referred</th>
<th>Referred as % of Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Living Situation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Other Adults</td>
<td>267</td>
<td>79.4</td>
<td>149</td>
</tr>
<tr>
<td>Alone</td>
<td>57</td>
<td>17.0</td>
<td>40</td>
</tr>
<tr>
<td>Homeless</td>
<td>12</td>
<td>3.6</td>
<td>11</td>
</tr>
<tr>
<td>Education Completed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;12 Years</td>
<td>171</td>
<td>50.9</td>
<td>95</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>105</td>
<td>31.3</td>
<td>62</td>
</tr>
<tr>
<td>Some College or College Graduate</td>
<td>60</td>
<td>17.9</td>
<td>43</td>
</tr>
<tr>
<td>Full Time Employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>129</td>
<td>38.6</td>
<td>73</td>
</tr>
<tr>
<td>No</td>
<td>205</td>
<td>61.4</td>
<td>126</td>
</tr>
</tbody>
</table>

* a 2 missing values (Interviewed) and 1 missing value (Referred ) for Full Time Employment.
Table A2.8
Interest in Participating in HCCC Programs Among Interviewed (n=336) and Referred Inmates (n=200) and Community Follow-up Referral Rates (59.5%)

<table>
<thead>
<tr>
<th>Variable Identified</th>
<th>Interviewed</th>
<th>Referred</th>
<th>Referred as % of Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Interested In HIV Prevention Program a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>151</td>
<td>45.1</td>
<td>80</td>
</tr>
<tr>
<td>No</td>
<td>184</td>
<td>54.9</td>
<td>120</td>
</tr>
<tr>
<td>Interested In Disease Education Program b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>139</td>
<td>41.5</td>
<td>75</td>
</tr>
<tr>
<td>No</td>
<td>196</td>
<td>58.5</td>
<td>125</td>
</tr>
<tr>
<td>Interested In Anger Management Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>167</td>
<td>49.7</td>
<td>98</td>
</tr>
<tr>
<td>No</td>
<td>169</td>
<td>50.3</td>
<td>102</td>
</tr>
<tr>
<td>Interested In Adult Education Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>181</td>
<td>53.9</td>
<td>99</td>
</tr>
<tr>
<td>No</td>
<td>155</td>
<td>46.1</td>
<td>101</td>
</tr>
<tr>
<td>Interested In Job Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>204</td>
<td>60.7</td>
<td>117</td>
</tr>
<tr>
<td>No</td>
<td>132</td>
<td>39.3</td>
<td>83</td>
</tr>
<tr>
<td>Interested In Smoking Cessation Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>142</td>
<td>42.3</td>
<td>79</td>
</tr>
<tr>
<td>No</td>
<td>194</td>
<td>57.7</td>
<td>121</td>
</tr>
<tr>
<td>Interested In Substance Abuse Treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>215</td>
<td>64.0</td>
<td>127</td>
</tr>
<tr>
<td>No</td>
<td>121</td>
<td>36.0</td>
<td>73</td>
</tr>
</tbody>
</table>

a 1 missing value (Interviewed) for HIV Prevention.
b 1 missing value (Interviewed) for Disease Education.