

# Abstract

## Research Goals

### Study Purpose

The Hampden County Correctional Center (HCCC) in Springfield Massachusetts has developed a “public health model of correctional health care”. HCCC promotes continuity of care for inmates and releasees by using dually-based physicians and case managers working at the jail and at four community health centers. The model emphasizes five elements: early detection, effective treatment, education, prevention, and continuity of care. HCCC and Abt Associates Inc. collaborated on an evaluation of the model.

### Research Subjects

To be eligible, inmates had to have been admitted to HCCC and released to the community between April 5, 2000 and September 16, 2001 and had a serious medical or mental health condition. 336 individuals were recruited into the study and 200 of these were released during the study period.

## Design and Methodology

### Methods

Baseline interviews were conducted at HCCC 3-5 days after admission. Follow-up interviews were conducted by telephone 30 days and six months post-release. Study outcomes included changes from baseline to follow-up in community healthcare utilization (i.e., primary care, emergency rooms, hospitals), high-risk behaviors, and health status. Patterns of recidivism and barriers and facilitators to engagement in care were also measured.

The intervention comprised five jail services: physician visits, mental health provider visits, case management, discharge planning, and appointments for post-release care. Intervention data were abstracted from jail medical records.

### Data Analysis

Descriptive statistics and frequencies were used to analyze absolute changes for all outcomes. Multivariate models were used to estimate the effects of participation in the HCCC intervention on healthcare utilization post-release. In the absence of an experimental design, an instrumental variable was developed to provide consistent estimates of treatment effect to control for selection bias.

## Results and Conclusions

### Results

#### *Participants With Medical Conditions:*

- 53% had an appointment to see a community-based provider set up prior to release, 65% kept the appointment. 55% of all participants saw a provider in the 30 days post-release.

- Significantly more ( $p=0.0176$ ) saw a provider in the 6 months post-release than before; significantly fewer ( $p=0.0046$ ) were hospitalized.
- Program participation was associated with increased post-release physician visits ( $p=0.02$ ). Having an appointment set up with a community provider was predictive of increased post-release healthcare utilization ( $p=0.01$ ).

***Participants With Mental Health Conditions:***

- 36% had an appointment set up, 70% kept the appointment. 61% of all participants saw a provider in the 30 days postrelease.
- Program participation was associated with increased post-release visits to mental health providers ( $p=0.001$ ).

**Conclusions**

Participation in the HCCC intervention increased utilization of health and mental health primary care from baseline to 6-month follow-up. The making of appointments may be the most important, cost-effective, and replicable portion of the model.