Résumé

Les soins de santé de transition offerts aux ex-détenus après leur mise en liberté aux États-Unis

Nancy A. Flanagan

La planification des soins destinés aux détenus après leur mise en liberté peut favoriser la continuité des soins, car elle permet d'améliorer l'accès au système de santé, de réduire les épisodes de soins actifs, de contenir la propagation de maladies transmissibles et de limiter les répercussions financières sur les systèmes publics de santé. Ce projet visait à décrire les soins de santé de transition destinés aux détenus souffrant du sida, de tuberculose, d'hépatite, de maladie mentale ou de toxicomanie. Également, on a étudié le lien entre la taille de la prison et la coordination des soins. Les programmes de soins de transition varient considérablement; on n'a trouvé aucun lien significatif entre le nombre de détenus mis en liberté annuellement dans chaque État et la coordination des soins de santé qui leur sont destinés. Tous les répondants ont rapporté l'existence d'une forme ou autre de planification des soins de transition, habituellement pendant la période précédant de un à six mois la mise en liberté. Les plans tiennent tous compte de la prestation des médicaments, de l'aiguillage vers des organismes de santé communautaire, de l'établissement de rendez-vous et de la recommandation de mesures visant à prévenir la transmission. La majorité des répondants ont indiqué que la planification des soins de transition était coordonnée par des infirmières autorisées. Ils ont aussi fait état de l'établissement de mesures spécifiques à l'intention des détenus souffrant du VIH/sida, de tuberculose, de maladie mentale ou de toxicomanie. Ces données permettront aux infirmières et aux autres prestataires de soins de cerner les tendances en matière de planification des soins de transition et d'assurer la continuité des soins offerts aux ex-détenus.

Mots clés : mise en liberté, soins de santé de transition

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Transitional Health Care for Offenders Being Released from United States Prisons

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Ex-offender managed health care can enhance post-release continuity of care by increasing access, decreasing acute-care episodes, controlling the spread of communicable diseases, and reducing the financial impact on public health-care systems. This study describes transitional health care for inmates with AIDS, tuberculosis (TB), hepatitis, mental illness, and substance abuse. The relationship between size of prison system and coordination of care was also investigated. A mail survey was completed by 33 chief medical officers of prison systems in the United States. Transitional health-care programs for ex-offenders vary widely and no significant relationship was found between number of inmates released per state annually and state coordination of transitional health care for supervised ex-offenders. All respondents reported some type of transitional health-care planning, usually either 1 month or 6 months prior to release. This included provision of post-release medication, referral to community health agencies, scheduling of appointments, and instruction in prevention of transmission. The majority of respondents reported that transitional health-care planning was coordinated by registered nurses. Specific measures for inmates with HIV/AIDS, TB, mental illness, and substance abuse were reported. Information about existing transitional health-care programs can help nurses and other health-care providers identify trends in transitional health-care planning and ensure continuity of care for released offenders.

Keywords: prison discharge planning, correctional health care, vulnerable populations model, transitional health care

In 2001 approximately 592,000 Americans were returned to communities after release from prison (Hughes & Wilson, 2003). Offenders have a higher prevalence of tuberculosis (TB), substance abuse, chronic medical conditions, AIDS, and mental health problems than the general population in the United States (Hammett, Harmon, & Maruschak, 1999; National Commission on Correctional Health Care [NCCHC], 2002). The higher prevalence of illness is related to pre-arrest poverty, poor living conditions, intravenous drug use, and inadequate health-maintenance and disease-prevention practices (Hammett, Roberts, & Kennedy, 2001; Petersilia, 2000). Ex-offenders are a vulnerable population because of high-risk behaviours and lack of knowledge about health promotion and disease prevention. The release of vulnerable offenders presents a

challenge and threat to local, state, and national public health departments and criminal justice agencies.

Identification of offender health-care needs and development of transitional planning for post-release managed care may improve ex-offenders' accessibility to health services, reduce the threat to public health, and directly affect criminogenic behaviour that is related to substance abuse or mental illness. Outreach, discharge planning, entitlement security, and case management have been suggested as ways to improve the quality of ex-offender health care, reduce taxpayer costs, and lower recidivism rates. Managed health care for newly released offenders may also decrease the spread of communicable diseases such as AIDS, hepatitis, and TB.

The efficacy of transitional health care has been demonstrated by a small number of community drug treatment and mental health programs for ex-offenders. Such programs may reduce the current recidivism rate of 40%. The recidivism rate is the measure of offenders who are returned to state or federal institutions within 3 years (General Accounting Office [GAO], 2001).

Health-Care Needs of Offenders

In 1996, between 98,500 and 145,500 HIV-positive inmates were released from US prisons and jails. The prevalence of HIV and AIDS is estimated to be higher among the prison population than among the general US population. The estimated prevalence of other infectious diseases among prisoners in the United States includes 566,000 cases of TB, 1.3 to 1.4 million cases of hepatitis C, and 155,00 cases of hepatitis B (Hammett et al., 1999; Klopf, 1998; Leh, 1999; NCCHC, 2002). It is also estimated that 84% of inmates released from state prisons in 1999 had substance-abuse problems and 14% had diagnosed mental health problems (Bureau of Justice Statistics, 2002).

Larger prison systems, with their greater numbers of offenders, are estimated to harbour concomitantly more infectious diseases (Hammett et al., 1999). The age of persons in prison has also advanced due to longer prison sentences. Advanced age and poor health-promotion and disease-prevention practices before incarceration increase the offender's likelihood of developing a chronic illness (Maruschak & Beck, 1997). Increased prevalence of infectious disease and chronic illness in larger prisons highlights the need for pre- and post-release continuity of care in larger prison systems. Large prison systems such as those of California, New York, Pennsylvania, and Texas supervise more than half of the offenders released in the United States (Petersilia, 2003). The need for large systems to address continuity of care and potentially reduce the prevalence of infectious disease, substance abuse, and mental illness in the community

becomes even greater when one considers their disproportionate share of high-risk releases that can impact community health and public health systems.

Correctional nurses report that offenders need education in basic health, medications, self-care, hygiene, nutrition, dental care, exercise, disease prevention, and screening (Flanagan & Flanagan, 2001). Offenders also need information on communicable diseases (AIDS, sexually transmitted diseases, TB, hepatitis) and common chronic diseases such as hypertension, diabetes, and asthma. Only 35% of offenders in state prisons participate in education programs (GAO, 2001) and only 27% participate in vocational programs (Petersilia, 2001). Educational programming may be affected by the fact that 70% of inmates function at the two lowest levels of prose and numeric literacy (Petersilia, 2001, p. 366). Community social support can affect treatment compliance. One of the main sources of social support is family, and family contact decreases from 54% during the first year of incarceration to 39% after the fifth year (Lynch & Sabol, 2001).

At release, ex-offenders have little money, few unemployment benefits such as Medicaid, Supplemental Security Income, or welfare benefits, and limited job opportunities. Public housing opportunities are reduced for ex-offenders who have been charged with a drug offence unless the ex-offender can document participation in a treatment program. Ex-offender education and vocational skills are also weak. Low literacy and numeracy levels mean that ex-offenders lack the basic life skills needed to complete application forms, write business letters, calculate price discounts, or read a bus schedule.

Ex-offenders continue to underutilize the health care that is available and lack the political and economic resources to coordinate their care (Pollack, Khoshnood, & Altice, 1999). Their reluctance to connect with community services is a result of lack of awareness and poor practices regarding health promotion and disease prevention, anxiety and distrust related to pre-incarceration health-care experiences, and lack of political and economic resources (Conklin, Lincoln, & Flanigan, 1998; Hammett, Gaiter, & Crawford., 1998). Loss of health-care benefits and lengthy enrolment periods for health coverage also limit their access to care. Dual or multiple diagnoses such as HIV/AIDS, mental illness, and substance abuse make treatment compliance difficult due to competing physical and emotional needs. Mental illness may increase suspicions regarding treatment services, continuing substance abuse may serve to reduce the money and programs available for the treatment of HIV/AIDS, and the treatment regimen for those with HIV/AIDS is lengthy and costly. The prevalence of communicable disease, weak social supports, lack of education, poor job skills, lack of housing, and low

financial status make ex-offenders a vulnerable population that can have a great impact on local, state, and federal public health departments and social service agencies.

Transitional Health-Care Planning

Transitional health care, as recommended by the National Commission on Correctional Health Care (NCCHC, 2002), includes continuation of support services and medical treatments. Transitional health-care planning activities begin while an offender is in prison and continue in the community after he or she is released. Its short-term goals include accurate assessment of health-care needs, seamless transfer from the prison health-care provider to the community provider to ensure continuity of care, and interagency collaboration and communication. The long-term goals of transitional health care include maintenance of treatment regimens, promotion of health for the individual and the community, and reduction of recidivism related to health problems such as mental illness or substance abuse. Jail or prison programs that include transitional health-care planning serve as a bridge between the correctional facility and the community (Rich et al., 2001). Identification of offender health-care needs and development of pre-release managed care can facilitate use of community services and continuation of treatment (Conklin et al., 1998). Continuity of care can improve treatment compliance, which reduces the person's likelihood of transmitting disease to the community and developing drug resistance due to failure to follow drug protocols (Glaser & Greifinger, 1993).

Outreach, discharge planning, entitlement security, and case management have been suggested as ways to improve quality and reduce the cost of health care for ex-offenders and the community (Conklin et al., 1998; Pollack et al., 1999). Case management can include establishing an offender treatment plan; making appointments for medical conditions and providing accompaniment to appointments; referral to community services for assistance with housing (homeless shelters, boarding houses, care homes, halfway houses), nutrition, and entitlement; community programs; transitional post-release residential treatment programs; substance abuse assessment and treatment; case conferences; teleconference or telemedicine technologies to link inmates with community providers; providing transportation to appointments/treatments; and mental illness or substance abuse assessment and treatment (NCCHC, 2002; Rich et al., 2001). Some models simply incorporate transfer to a pre-release facility near anticipated community return sites, to facilitate community linkages with health services for follow-up care and re-supply of medication (Hammett et al., 2001).

In a study of 51 state and federal prison systems, over 50% of participating facilities referred inmates for Medicaid benefits, HIV monitoring, counselling, medications, and substance abuse treatment (Hammett et al., 1999). Referral can range from distribution of pamphlets to scheduling and providing pre-release meetings with service providers. Simply recommending a visit to a community agency is just a small part of transitional health-care planning and does not ensure continuity of services or treatment.

Studies of health-care coverage for post-release services and medications have found that delay in benefit coverage may affect continuation of services (Hammett et al., 2001).

The federal government is providing funding to support a variety of general transitional health-care models. The goal of the Going Home Re-entry Initiative for Serious and Violent Ex-offenders, developed by the United States Department of Justice (2002), is to reduce recidivism by supporting the development of model re-entry programs that encourage individuals, government agencies, social service organizations, community organizations, and faith-based organizations to make re-entry of the offender population a priority. Funding supports three phases of activity — collaboration, mentoring, and local involvement between correctional agencies and community organizations — to provide a bridge between prison and community. The first phase, Protect and Prepare, takes place within the prison and includes education, mental health treatment, substance abuse treatment, and assessment. Both the second phase, Control and Restore, and the third phase, Sustain and Support, take place in the community and can include monitoring, mental health and substance abuse treatment, mentoring, and community service networking.

A model developed by the National Institutes of Corrections and Abt Associates Inc., called Transition from Prison to Community Initiative (TPCI) (Parent & Barnett, 2002), includes assessment and classification, planning, release supervision, provision of services, reinforcement or response to offender behaviour, and discharge. In the assessment and classification phase, which takes place within the prison, the inmate's strengths and weaknesses are identified so that treatment and programming can be determined. This phase is continuously evaluated for appropriate programming changes. The second phase, development of the Transition Accountability Plan (TAP), requires collaboration among the prison, the offender, and the community. The TAP specifies activities that must occur before the identified release date, participants' responsibilities, a timetable, outcomes, and a case management plan. The case manager role moves from the prison, through parole, to the community support or human service agency. The case manager coordinates, facilitates, and monitors services. The release phase includes identification of a release

date, which takes into account risk assessment and risk management. The fourth phase of the TPCI consists of supervision and services. A case manager monitors the offender, intervenes to provide offender accountability or rewards, functions as advocate for both the offender and the community, and makes referrals. Offenders receive continuous feedback about positive and negative behaviours in the response phase. The discharge phase of TPCI releases the ex-offender from supervision and indicates full reintegration into the community. After discharge, the ex-offender uses community services for assistance.

Transitional health-care planning is complicated by type of prisoner release. Offenders who complete their entire prison sentence can be released with no post-release supervision or reporting requirements (unconditional release). Nineteen percent of offenders are released without supervision (Petersilia, 2003). Lack of post-release supervision eliminates the parole officer as a source of community support, hinders post-release follow-up, and can serve to prevent mandated post-release care. Offenders who are released with conditions such as parole or post-release supervision may be easier to follow after release. A mandate for treatment may be imposed post-release but usually applies only to offenders for whom conditional release is appropriate.

Offenders released without discharge planning have difficulty connecting with community services and can have treatment initiated within the correctional setting disrupted post-release. Linkage with community services and continuation of treatment are further hindered if the ex-offender is reluctant to use community health services. Ex-offenders released without planning repeat the pre-incarceration practices of underusing health services, engaging in a poor health-promotion and disease-prevention lifestyle, and relying on costly emergency treatment.

Cost of Transitional Health-Care Planning

The 1996 US Supreme Court case of *Estelle v Gamble* established that prisoners have the right to reasonable access to and provision of health care that meets minimal standards of adequacy. The fastest-growing portion of correctional agency budgets is health care. An average of 10–15% of each state operating budget is devoted to health care (Petersilia, 2003). Increases in prison health-care costs are attributable to increased numbers of inmates who are sick and old and have multiple health problems. Increased spending for health care may strain the resources of states with diminished tax bases and reduced budgets.

The Hampden County Correctional Center in Ludlow, Massachusetts, is proof that a well-managed transitional health-care program can have excellent results (Conklin et al., 1998). The program had an overall oper-

ating cost of 8.5% of the total $42-million operating budget of the correctional centre. Cooperative agreements between public health departments, regional medical centres, local health-care agencies, and schools of medicine, dentistry, social work, optometry, and nursing facilitated a cost-effective health-care program. Any increased costs to correctional facilities or public health departments may be offset by decreased costs due to lowered transmission of communicable disease, lower recidivism rates secondary to untreated substance abuse and mental illness, and decreased use of expensive emergency medical care (Hammett et al., 2001; NCCHC, 2002; Vigilante et al., 1999). The efficacy of transitional health care in reducing costs has been demonstrated by ex-offender community drug treatment programs (Travis, 2000), intensive case management for HIV-positive ex-offenders in Rhode Island (Rich et al., 2001), and a prototype managed-care model in Massachusetts (Conklin et. al.). There are no published reports on cost reduction or cost benefit of transitional health-care planning in larger prison systems with a higher prevalence of infectious disease and concomitantly higher health-care costs.

Transitional Health Care and Interdepartmental Coordination

Pre-release health-care planning requires communication between the institution and the community. Coordination among correctional facilities, parole departments, local, state, and federal public health agencies, judicial organizations, police, health-care providers, and social service agencies is necessary to ensure continuation of health care and to avoid duplication of services. Court interventions may be needed to facilitate reintegration of mentally ill offenders. Court-ordered participation in treatment programs, drug testing, electronic monitoring, restraining orders, and curfew limits are some suggested measures (California Board of Corrections [CBC], 2000). Comprehensive interagency transitional health-care programming may entail interagency agreements, interconnected information systems, and cross-training (CBC). Transitional health-care planning was not initiated until a few years ago and no studies have been published on the interdepartmental coordination and communication strategies that facilitate it.

Public Health Implications of Transitional Health-Care Planning

Correctional health-care providers have a prime opportunity to interact with vulnerable offender populations. If incarcerated offenders are viewed as part of the community, then a community-health perspective requires inclusion of offenders to ensure the well-being and health of all citizens. Transitional prevention, screening, and treatment activities that begin within the correctional setting are a first line of defence for public

health. Those who provide prisoner health care can begin the "institutional phase" (Taxman, Byrne, & Young, 2002, p. 5) of transitional health-care planning. Managed offender health care can serve to decrease or control the spread of communicable diseases such as AIDS and TB.

Conceptual Framework

The theoretical context for this study was the Vulnerable Populations Conceptual Model (Flaskerud & Winslow, 1998). Vulnerable populations are groups that "have increased relative risk or susceptibility to adverse health outcomes" (p. 69). Ex-offenders are a vulnerable population due to their increased relative risk for adverse health outcomes as evidenced by the high incidence of HIV/AIDS, TB, mental illness, and substance abuse.

The Vulnerable Populations Conceptual Model describes the interactive relationship among resource availability, relative risk, and health status. The availability of socio-economic and environmental resources influences the risk of poor health and low health status. Ex-offender transitional health care is defined as measures taken prior to and following release to increase access to and ensure continuity of health care for inmates of correctional facilities. The model theorizes that increased resource availability may decrease the risks and improve health status. A study of measures to improve ex-offender resource availability may provide the information necessary to test the relationship between increased resource availability and health status for vulnerable ex-offenders.

This study was designed to further our understanding of current prison transitional health-care planning. The research questions were: (1) *What transitional health-care planning measures do prison systems provide for inmates with a diagnosis of substance abuse, mental illness, TB, or HIV/AIDS?* (2) *What administrative and organizational measures are associated with transitional health-care programs?* (3) *Is there a relationship between annual number of inmates released per state and individual state coordination of transitional health-care programs for supervised ex-offenders?*

Method

Design and Sample

The study was a national descriptive survey that assessed the organization and types of transitional health-care measures for male and female adult ex-offenders in prisons throughout the United States. The survey was mailed to the chief medical officer in each of the 50 state corrections departments in the United States. The chief medical officer oversees health care in all prisons within the state. The number of total prisons is

dependent on the prison population and size of each state. Thirty-three chief medical officers returned the survey, for a 66% response rate. One third (n = 9) of the responding states had released fewer than 5,000 inmates in 2001, one third (n = 10) had released between 5,001 and 9,999, and one third (n = 9) had released between 10,000 and 133,782.

Measures

The survey contained a partially closed-ended checklist of 32 questions related to transitional health-care planning within the prison system. In order for the researcher to assess the variation in annual data collection and reporting, respondents were asked to indicate the time frame for annual reporting. Response selections included calendar year, fiscal year with beginning and end dates, and "other." The "other" category allowed respondents to describe alternative annual reporting methods. Respondents were also asked to indicate the number of inmates released during the most recent year who were HIV positive, under treatment for TB, or had a diagnosis of AIDS, hepatitis B, hepatitis C, mental illness, or substance abuse. Information on specific types of pre-release facilities and timing of transfer to these facilities was also collected.

General questions about types, coordination, and time of transitional health-care measures were included. Specific questions about measures for HIV-positive inmates and those diagnosed with AIDS, TB, mental illness, or substance abuse yielded information on transitional health-care planning for specific medical diagnoses. Administrative questions were included to identify persons responsible for program coordination of supervised and non-supervised ex-offenders, budget, presence of innovative transitional health-care planning measures, and legislative requirements for transitional health-care planning. An open-ended response section, marked "other, please describe," was included at the end of each question so that the respondent could provide information not included in the checklist for that question.

The instrument was pilot tested among the prison health-care staff and transitional care department in one state.

Procedures

After obtaining approvals regarding the participation of human subjects, the researcher telephoned chief medical officers to describe the survey, solicit participation, and verify names and addresses. In July 2000 a covering letter, the survey, and a self-addressed, stamped envelope were mailed to the medical officer in each of 50 state correctional departments. The covering letter, on official letterhead, described the study, its purpose, and its significance, and the costs and benefits of participation. Return of the survey indicated consent to participate. No surveys con-

tained individual names or state identifiers. All were coded and a code identification sheet was kept separate from the surveys. Three weeks after the survey was mailed, chief medical officers who had not returned it were contacted by telephone to encourage participation and pose questions. A second mailing was sent to chief medical officers who had not previously returned the survey.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences, Version 10. Descriptive statistics were used to answer the research questions related to the administration and types of transitional health-care planning measures. Pearson product moment correlation statistical analysis was used to answer the question: Is there a relationship between annual number of inmates released per state and individual state coordination of transitional health-care programs for supervised ex-offenders?

Results

Two of the 33 returned surveys were discarded because they lacked significant amounts of information. Therefore, the results are based on 31 surveys. The number of respondents who completed the item on specific diagnoses was variable. Sixteen reported the HIV status of released inmates, 15 reported the number of released inmates with TB, 10 the number with AIDS, 7 the number with hepatitis B, and 9 the number with hepatitis C; 10 included information on mental illness and 10 reported substance abuse rates. One respondent provided estimates of released offender diagnoses based on the inmate total; these were not included in the count of specific diagnoses. Among those who reported specific rates, the most frequently reported diagnoses were substance abuse (*median* = 4,007), mental illness (*median* = 495), and hepatitis C (*median* = 180). Fewer than half of prison systems (n = 14; 45%) transfer inmates to a pre-release facility, and of those that do, 33% or less of the total population are transferred to such a facility. Over 85% of inmates were transferred to a pre-release facility no more than 6 months prior to their release.

All participating states reported some type of transitional health-care planning in one or more of their facilities even though only five respondents reported a state statute requiring transitional health-care planning. There was no significant relationship between annual number of inmates released per state and coordination of transitional health-care planning in each state (r = .064, p = .751).

Respondents were provided five options regarding the initiation of pre-release planning: on admission, 1 year before release, 6 months before

release, 3 months before release, or 1 month before release. The most frequent responses were 1 month (8/31 responses) or 6 months before release (7/31 responses). Six respondents completed the "other" category for this question: two reported that planning took place 45 days prior to release, one that it began 4 months before the expiration of the sentence or upon the granting of parole, and three that it took place 120 days prior to release. One respondent commented that planning took place within 10 days of receipt of an approved pre-parole plan. Another indicated that one prison in the state began planning 3 or 4 months before release and the other prisons did nothing (see Table 1).

In general, transitional health-care planning included referral to community agencies (n = 27; 87%), provision of post-release medication (n = 29; 94%), scheduling of post-release health-care appointments (n = 19; 61%), provision of printed instructions (n =16; 52%), and coordination of health-care case management (n = 14; 45%). Sixteen states (52%) assisted with Medicaid application before release and 15 (48%) made a referral to social service for Medicaid application after release. Five respondents reported that discharge planning was focused primarily on HIV-positive inmates.

Transitional health-care planning within prisons was coordinated by registered nurses (n = 17; 54.8%), social workers (n = 12; 39%), physicians (n = 4; 12.9%), nurse practitioners (n = 4; 12.9%), counsellors (n = 4; 12.9%), case managers (n = 2; 6%), and health services administrators (n = 2; 6%). States reported coordination of transitional health-care planning with community public health agencies (n = 22; 71%), state parole agencies (n = 17; 55%), community hospitals (n = 10; 32%), or faith-based community organizations (n = 5; 16%).

In general, transitional health-care planning applied only to inmates released under supervision, but seven states (22%) engaged in some plan-

Table 1 ***Initiation of Transitional Health-Care Planning in US State Prison Systems***

Time	Number of Respondents (n = 31)
Admission/reception	4
1 year before release	1
6 months before release	7
3 months before release	5
1 month before release	8
Other	6

ning for unsupervised ex-offenders upon request. Twenty-two respondents provided no information on the budget allocated for transitional health-care planning, the most common reason being inability to separate transitional health-care costs from the overall health-care budget.

Transitional health-care planning for HIV-positive inmates included referral to community health agencies (n = 29; 94%), instruction in prevention of transmission (n = 27; 87%), scheduling of community health-provider appointments (n = 21; 68%), referral to community counselling (n = 17; 55%), and provision of condoms (n = 5; 16%) (see Table 2). In the "other" category for this diagnosis, seven respondents (23%) indicated provision of antiretroviral therapy. One respondent reported a comprehensive continuity-of-care plan that included housing, financial assistance, and mental health referrals for HIV-positive inmates who volunteered to participate. Another reported an interdepartmental relationship between the department of corrections and the department of health; in this state, department of health physicians and registered nurses visited HIV-positive inmates before release and coordinated the transitional health-care plan. Two other respondents reported assistance with entitlement applications such as Medicaid, SSI, vocational rehabilitation, or free medication programs. One state also assisted with the transportation needs of HIV-positive releases.

Inmates with AIDS received transitional health care, including medications (n = 30; 97%), referral to community health (n = 25; 81%), instruction in prevention of transmission (n = 25; 81%), scheduling of appointments with community health agencies (n = 19; 61%), referral to community counselling (n =14; 45%), and provision of condoms (n = 4; 13%) (see Table 2). The state that had instituted a transitional program for HIV-positive inmates, coordinated with the department of health, offered the same program for inmates with AIDS. Three states referred inmates to community-based AIDS programs and one state provided assistance with applications for free medications. One state each provided assistance with entitlement applications, a comprehensive handbook of community resources, transportation to services, and a chest X ray if required for housing. Forty-one percent of states provided a 30-day supply of medications at release and 29% (9 states) did not indicate how many days were provided; the range of supply was 7 to 60 days, with most respondents indicating either 14 (n = 7) or 30 days (n = 13).

Twenty-seven states (87%) provided medications to offenders with TB at release but 11 (35%) provided less than 14 days of medication. Other transitional health-care measures for offenders with TB included referral to community health agencies (n = 25; 81%), instruction in prevention (n = 23; 74%), scheduling of appointments with community health agencies (n = 13; 42%), and TB skin testing prior to release (n = 9; 29%)

Table 2 ***Number of US State Prison Systems Reporting Specific Transitional Health-Care Planning Activities for Soon-to-Be-Released Offenders with Specified Medical Diagnoses***

Activity	HIV+	AIDS	TB	Mental Illness	Substance Abuse
Provision of medications after release	–	30	27	31	20
Medication supply (number of days)	–	23★	22★	22★	25★
Referral to community health agency	29	25	25	28	20
Scheduled appointment with community provider/agency	21	19	13	22	13
Instruction in prevention of transmission	27	25	23	–	–
Provision of condoms	5	4	–	–	–
Referral to community counselling	17	14	–	–	–
Chest X ray before release	–	–	8	–	–
TB skin test before release	–	–	9	–	–
Referral to community residence	–	–	–	19	–
Referral to state mental health agency	–	–	–	22	–
Referral to faith-based agency	–	–	–	–	–
Referral to state substance abuse agency	–	–	–	–	15
Other	12	9	7	5	0

– Option not available for this diagnosis based on common referral activities for the diagnosis.
★ Mean number of days reported.

(see Table 2). In the "other" category, five respondents reported that they notified the state public health department about the inmate and one reported that the state did not release an inmate until the culture was negative. One also reported a regular schedule of testing at intake, during the inmate's birth month, and as needed when facility conditions indicated testing.

All of the respondents reported that medications were given to mentally ill inmates upon release. Thirteen states (43%) provided a supply of 2 weeks or less, 11 (36%) provided a 30-day supply, and one provided a 60-day supply. Six respondents (19%) did not indicate the amount of medication provided. Referral to community health agencies was reported by 28 respondents (90%). Transitional health-care planning for the mentally ill also included scheduling of appointments with community mental health agencies (n = 22; 71%), referral to a state mental health agency (n = 22; 71%), and referral to a community residence (n = 19; 61%). In the "other" category, it was reported that three states assisted with entitlement applications such as SSI or the state health insurance plan prior to release, one state committed mentally ill inmates to the hospital, and one state referred inmates to a department of health case manager for post-release follow-up.

For inmates with substance abuse problems, the most prevalent transitional health-care planning measures were referral to community substance abuse agencies (n = 20; 65%) and provision of medication (n = 20; 65%). One state provided 60 days of medication, six provided 30 days, one provided 15 days, five provided 2 weeks, and the remainder did not report the amount provided. Thirteen states (42%) scheduled appointments with community counsellors, 11 (36%) provided referrals to faith-based substance abuse programs, and 15 (48%) provided referrals to state substance abuse agencies (see Table 2).

Ten respondents (32%) reported innovative transitional health-care programs. These unique measures included housing and after-care treatment for released inmates with HIV/AIDS (n = 5; 50%). Two states had instituted a community-based program of volunteers to assist female offenders by providing HIV education and support. Another had in place a community transition/placement program initiated in the courts. One correctional services department had established a pilot program with the department of human resources that permitted the pre-release enrolment of 25 medically needy and mentally ill inmates into the state health plan. The goal of this program was to decrease delays for those in need of health care immediately upon release. One state had initiated a pilot transitional health-care project with a health-care vendor. Another state had initiated a unique program to ease the transition of mentally ill offenders to community-based care.

Discussion and Recommendations

Generalizability of these findings is limited to the state prison systems that responded to the survey. A response rate of 66% was achieved. There is no identified minimum acceptable response rate for survey research (Fowler, 1993), but unsolicited mail surveys commonly yield no more than a 20% response rate after the first mailing (Bourque & Fielder, 1995; Fink, 1995). Future studies may increase response rates by including follow-up mailings, monetary or gift incentives, or telephone calls (Dillman, 2000). There were two mailings of this survey, 3 weeks apart. The number of returned surveys increased by 38% after a follow-up telephone call and the second mailing. Therefore, it is strongly recommended that future mail surveys incorporate at least two mailings.

Half of the respondents reported that diagnostic data for released offenders were not available in their state department of correctional services. At least four respondents indicated that data on offender diagnoses were not collected at release. The lack of diagnostic information for soon-to-be-released offenders was a limitation of this study and is an issue for future correctional health-care research. Inmate screening and diagnosis at intake and throughout incarceration is essential for disease surveillance, health promotion, and disease prevention. Pre- and post-release diagnostic data must be collected in order to provide the basis for future correctional health-care studies, monitoring of diseases and disease-related recidivism trends, development of efficient budgets, and evaluation of program effectiveness. The ability to identify medical diagnoses is essential to the identification of offender health needs and the planning of appropriate care (Conklin et al., 1998). Studies that explore issues related to inadequate reporting and recording, identify problems, and suggest remedies are greatly needed in the area of correctional health-care research.

Prison medical data are collected at intake but frequently are either not tracked throughout the inmate's incarceration or not included in the inmate's release data. Each state prison system comprises numerous facilities, some of which may not provide the state medical administrative offices with specific diagnostic data on inmates scheduled for release. Respondents also commented on the difficulty of tracking data because of numerous inmate transfers within the system. Correctional facilities need to implement a uniform screening, reporting, and storage system so that accurate data are available for use in treatment planning, program development, and program evaluation or revision. Interdisciplinary collaboration will be facilitated by uniform reporting of easily accessible diagnostic information.

We need studies that investigate techniques for collecting medical data in correctional settings, such as screening, uniform reporting, and information storage/retrieval. Information on uniform reporting and storage/retrieval techniques could facilitate intra/interagency communication and ensure continuity of care among prison facilities; local, state, and federal governments; and public and private health-care agencies.

Only a few state prison systems responding to this survey transferred inmates to a pre-release facility, and those that did so sent only a third of their inmates to the facility. The literature recommends transfer of inmates to pre-release facilities near anticipated community return sites. Such transfer can facilitate community linkages with health-care services for follow-up and re-supply of medication (Hammett et al., 2001). We need studies of correctional programs that transfer inmates to facilities close to community support systems in order to investigate community resource networking and utilization by offenders before and after release. The relationship between recidivism and communicable disease rates in correctional facilities with this type of pre-release program in place might provide justification for further use of geographically placed transitional-care programs and pre-release facilities.

All participating chief medical officers reported some type of transitional health-care planning, which is consistent with the NCCHC (2002) recommendations for continuity of care. These recommendations were developed to facilitate continuation of support services and health care post-release. The large number of states reporting transitional health-care planning is consistent with the literature, which reports that 50% of state and federal prisons engage in some discharge planning (Hammett et al., 1999; Rich et al., 2001). Studies of model transitional health-care programs should be undertaken to provide evidenced-based practice data that other states can use in developing effective transitional health-care programs.

The programs for mentally ill inmates reported by the respondents correspond with the results of previous studies, which identify jail-to-community programming, links to not-for-profit agencies prior to release, medication monitoring, and post-release residential monitoring of mentally ill offenders (Aman, O'Keefe, & Kovacs, 1998; CBC, 2000; Morris, Steadman, & Veysey, 1997). The data are also consistent with the NCCHC (2002) report to Congress, which states that "a majority of State adult prisons provide screening, medication and medication monitoring, counseling or verbal therapy, and access to inpatient care" (Vol. 2, p. x). Post-release follow-up studies might provide information about the efficacy of pre-release planning for the mentally ill offender.

Participation by mentally ill offenders in post-release programs, incidence of emergent acute-care visits, and information about interaction with community corrections/service agencies should be collected in order to study the relationship of these data with pre-release transitional health-care planning.

In the present study, "community reintegration" measures for offenders with substance abuse problems included relapse-prevention programs facilitated by community support networks and volunteers. This finding is consistent with Byrne, Taxman, and Young's (2002) conclusion that community collaboration with the offender serves to maximize successful transition.

Lack of information about the cost of transitional health-care programs made it difficult for the respondents to assess the relationship between transitional health care and reduced costs. Community drug treatment programs for ex-offenders (Travis, 2000), intensive case management for HIV-positive ex-offenders in Rhode Island (Rich et al., 2001), and a prototype managed-care model in Massachusetts (Conklin et al., 1998) all utilized cost-benefit analyses to justify expenditures on transitional health-care planning. Data that specifically identify costs of transitional health-care programs should be collected in order to facilitate cost-reduction and cost-benefit studies as suggested in the NCCHC (2002) report to Congress. Transitional health-care planning budgets with specific line item costs should be developed in order to provide data for future program development and assessment.

The respondents most frequently reported registered nurses as the coordinators of transitional health-care planning measures. Studies that assess the role perceptions of correctional nurses are relevant to the planning and delivery of transitional health care, since most correctional departments rely on registered nurses to coordinate this care. Nurses are in a unique position to study, plan, administer, and evaluate transitional health-care programs for ex-offenders. Because of both the familiarity of the correctional nurse with the offender and the health-care needs of this population, nurses are uniquely equipped to develop programs for offenders; their education and experience in community health serve to enhance their ability to monitor and evaluate such programs. The nurse can provide insight based on an understanding of the unique needs of both ex-offenders and the communities into which they are to be released (Flanagan & Flanagan, 2002). The dual perspective of community and correctional health care affords nurses a unique opportunity to study transitional health-care programs that are efficacious for both the community and the ex-offender.

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