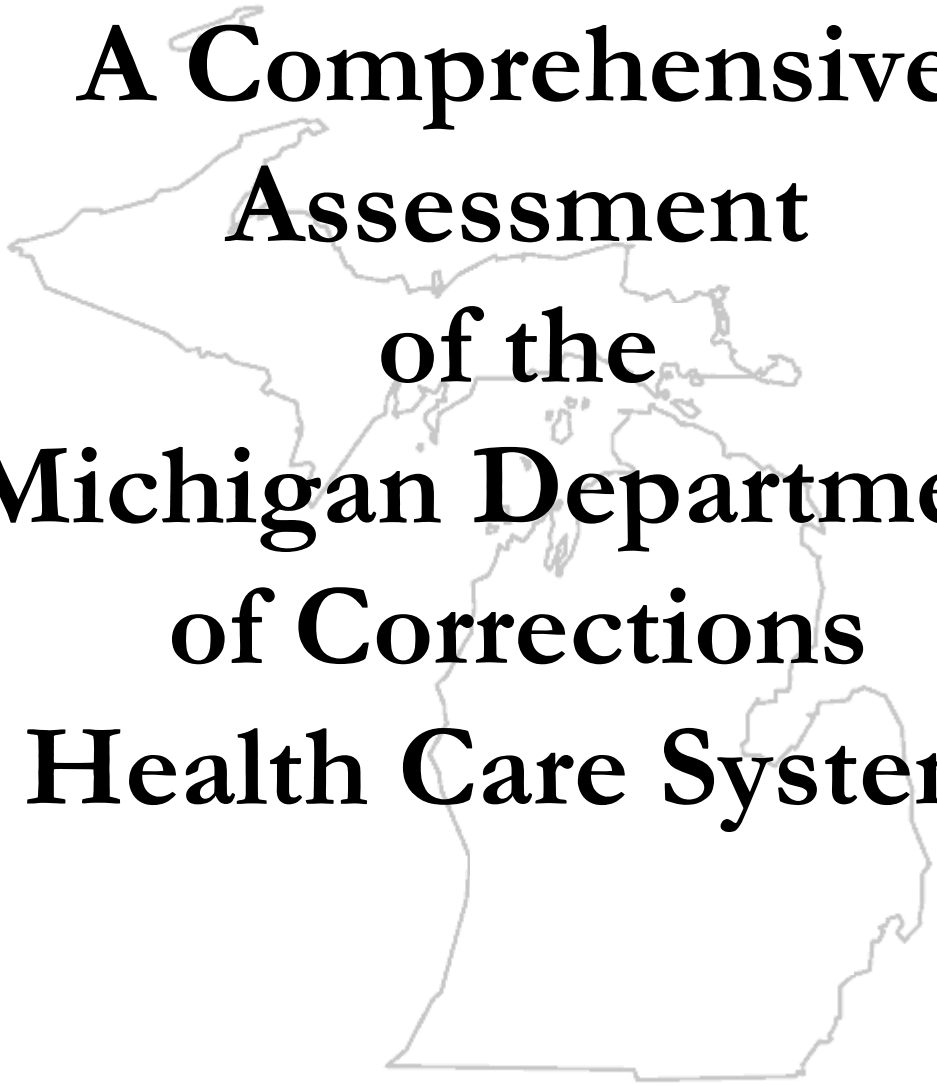
A Comprehensive Assessment of the Michigan Department of Corrections Health Care System



National Commission on Correctional Health Care
Chicago, Illinois

A Comprehensive Assessment

Of the

Michigan Department of Corrections

Health Care System

January 2008

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FOREWORD

Throughout the country, few areas of concern are more important to state government's leadership and prison administrators than providing health services for inmates. Particularly in today's difficult economy, the sometimes complicated interplay of managing inmates' special health needs, staffing, custody-medical interfacing, legal matters, ethical concerns, and cost containment are of vital importance to every state department of corrections.

The Michigan Department of Corrections asked the National Commission on Correctional Health Care to determine if medical, dental, and mental health care were being provided appropriately to inmates within their system and to suggest ways to provide care more effectively and efficiently. To develop this report, we employed a team of highly respected experts in the field of correctional health care and used the nationally recognized NCCHC *Standards for Health Services in Prisons* as a guide. The end product is a review of management options that should help the department identify directions for future efforts and determine a best course of action. We also have included a number of recommendations that should help the State effectively manage its resources.

We are confident that, with the guidance and recommendations provided by this report, the Michigan Department of Corrections will better be able to provide effective and efficient health care to its inmates.

Edward A. Harrison
President

January 2008

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Abbreviations

AFB	Acid-fast bacillus
AOPP	Assaultive Offender Program
ARDS	Acute Respiratory Distress Syndrome
ARF	Acute respiratory failure
BHCS	Bureau of Health Care Services
BPRS	Brief Psychiatric Rating Scale
CCC	Chronic Care Clinic
CCP	Chronic Care Program
CMHP	Corrections Mental Health Program
CML	Chronic Myelogenous Leukemia
CMS	Correctional Medical Services
CNA	Certified Nursing Assistant
CPR	Cardiopulmonary resuscitation
CQI	Continuous Quality Improvement
CURE	Michigan Citizens United for the Rehabilitation of Errants
CV	Cardiovascular
DCH	Department of Community Health
DNR	Do not resuscitate
DRF	Carson City
DWHC	Duane Waters Health Center
EMS	Emergency Medical Services
ER	Emergency room/department
ERD	Expected Release Date
ESRD	End-Stage-Renal-Disease
FSBG	Finger-stick blood glucose
GERD	Gastro-esophageal reflux disease
GYN	Gynecology
H & P	History and physical
HCV	Hepatitis C Virus
HER	Electronic health record
HIV	Human Immunodeficiency Virus
HP	History and physical
HVM	Huron Valley Men's Facility
HUM	Health Unit Manager
JCF	G. Robert Cotton Correctional Facility
KOP	Keep-on-person
LCF	Lakeland Correctional Facility
LFT	Liver function tests
MAC	Medical Advisory Committee
MAR	Medication Administration Record
MDOC	Michigan Department of Corrections
MBP	Marquette Branch Prison
MI	Myocardial infarction (heart attack)
MRSA	Methicillin-resistant *Staphylococcus Aureus*
MSAC	Medical Services Administrative Committee
MSP	Medical service provider
NCCHC	National Commission on Correctional Health Care
NP	Nurse practitioner
NPH	Normal pressure hydrocephalus
OTC	Over-the-counter
PA	Physician assistant
PI	Performance Improvement
PSA	Prostate Specific Antigen
PSU	Psychological Services Unit
PVC	Paroxysmal ventricular contractions
RGC	Charles E. Egeler Reception and Guidance Center
RMO	Regional Medical Officer
RTP	Residential treatment program
RUQ	Right upper quadrant
SASSI	Substance Abuse Subtle Screening Inventory
SCF	Scott Correctional Facility
SMF	Standish Correctional Facility
SMHU	Special Mental Health Unit
SOAP	Subjective, Objective, Assessment and Plan
SOP	Sexual Offender Program
SRF	Saginaw Correctional Institution
TM	Telemedicine
TSH	Thyroid Stimulating Hormone
TST	Tuberculin skin test
UM	Utilization management
UP	Upper Peninsula
URF	Kinross Correctional Facility
WHV	Huron Valley Women's Facility
WNL	Within normal limits

Report

Introduction

In January of 2007, the National Commission on Correctional Health Care (NCCHC) received a contract from the Michigan Department of Corrections (MDOC) to determine whether medical, dental, and mental health care could be provided more effectively and efficiently. B. Jaye Anno, PhD, CCHP-A, co-founder of NCCHC, served as the project director. R. Scott Chavez, PhD, CCHP-A, Vice President of NCCHC, served as the project manager.

Methodology

NCCHC used a variety of methodologies to assess the efficiency and effectiveness of the MDOC's health care delivery system. We interviewed a number of central office staff, regional office staff, and staff at selected ten correctional facilities. We also interviewed several external stakeholders and conducted an on-line survey of MDOC employees.

We interviewed a number of MDOC's Central Office staff to obtain their views on the strengths and weaknesses of the current health care delivery system. They included:

Patrick Barrie, Deputy Director, Department of Community Health (DCH)
Teresa Bingman, JD, representative of the Michigan Governor's Office
Royal Calley, Director of Corrections Mental Health Program (CMHP)
Patricia Caruso, Director, MDOC
James Dillon, MD, Chief Clinical Advisor
Leo Friedman, Assistant Attorney General
David McLaury, Chief Deputy Director, DCH
George Pramstaller, DO, Chief Medical Officer, Bureau of Health Care Services
Richard Russell, former administrator of BHCS

Dennis Staub, Deputy Director, MDOC
Tony Straseske, PhD, BHCS
Ray Tamminga, CMS Contract Monitor

We interviewed a number of external stakeholders by telephone to obtain their impressions of the current health care delivery system. They included:

John Lazet, chief of staff for State Senator Alan Cropsey
Kay Perry, Michigan Citizens United for the Rehabilitation of Errants (CURE)
Penny Rider, American Friends Service Committee
State Representative Alma Wheeler Smith
State Senator Liz Bader
Janet Olszewski, Director, Michigan Dept of Community of Health
Cindy Kelly, Michigan Dept of Community of Health
Family members of some individual inmates.

In general, these external stakeholders raised the same type of issues with health services as did MDOC staff. A summary of their concerns is found in Appendix E.

In addition to Central Office staff and external stakeholders, several individuals were interviewed at each institution generally including regional staff, the warden, the medical providers, the health unit managers, the nursing director and other nursing staff, the pharmacy technician, the outpatient mental health staff, psychological services staff, dental staff, health information staff, and the custody transportation coordinator.

We also solicited input on health services from MDOC staff via an on-line survey. A total of 1114 correctional, health, and administrative staff responded. There comments are summarized in Appendix E under the section on internal stakeholders.

Our evaluation of the health services provided by MDOC also included reviewing several documents such as policies and procedures, staffing and credentials, meeting minutes, statistical reports, outside contracts, nursing protocols, medical provider productivity reports, offsite specialty referrals, dental waiting lists, etc. Our physician reviewers also looked at 283 medical records selected from the chronic care lists at 10 facilities. To measure the quality of care provided, they used forms developed from NCCHC's Chronic Care Guidelines for asthma, diabetes, epilepsy, HIV, hyperlipidemia, and hypertension (see Appendix C). They also reviewed 15 inpatient records at DWHC, six denials of off-site specialty referrals, and the records of 38 inmates who died during 2006. Our psychiatrist reviewed the records of 79 patients with serious mental disorders, and two suicides.

NCCHC also used additional experts to review specific areas such as deaths at the ten facilities during 2006, the formulary, and the Sexual Offender Program/Assaultive Offender Program (AOP/SOP).

To obtain a good mix of facilities to review, NCCHC wanted to ensure that the ten institutions selected included some from each of the MDOC's three regions, had different medical missions, held different custody levels, and included both male and female inmates. After discussion with MDOC's Central Office administration, the following facilities were selected for review:

Name	Region	Gender	Security Level	Medical Mission
Carson City Correctional Facility	II	Male	I, II, & IV	Ambulatory Care
G. Robert Cotton Correctional Facility	III	Male	I, II & IV	Ambulatory Care
Charles E. Egeler Reception and Guidance Center	III	Male	I	Intake Guidance Center Ambulatory Care, Duane Waters Health Center
Huron Valley Complex—Men	III	Male	IV	Ambulatory Care; Inpatient Mental Health
Huron Valley Complex—Women	III	Female	I & II	Ambulatory Care; Inpatient Mental Health
Kinross Correctional Facility	I	Male	I, & II	Ambulatory Care
Lakeland Correctional Facility	II	Male	II	Ambulatory Care
Marquette Branch Prison	I	Male	I & V	Ambulatory Care
Robert Scott Correctional Facility	III	Female	I, II, IV & V	Intake, Ambulatory Care
Standish Correctional Facility	I	Male	V	Ambulatory Care

Each of the facilities was visited for two to three days by a team of NCCHC reviewers generally consisting of a correctional health care administrator, a physician, a nurse, and a psychiatrist. The list of reviewers along with their credentials is found in Appendix B.

The report that follows contains our findings and recommendations regarding ways we believe the MDOC can improve the effectiveness and efficiency of its health care delivery system.

Findings and Recommendations

The Medical Program

Organizational Structure. The medical program has a somewhat complicated organizational structure. The medical providers (physicians and physician assistants [PAs]) are independent contractors hired by Correctional Medical Services (CMS). Nurses, dentists, and support staff are employees of the MDOC. Pharmacy services are contracted out to PharmaCorr, a CMS subsidiary. The electronic medical record, Serapis, is also provided through a contract with another CMS subsidiary. Finally, the MDOC also contracts with CMS to provide its utilization review for offsite specialty care.

With a handful of exceptions, the MDOC relies on an all RN nursing staff to provide sick call, do lab tests, and deliver medications. This is a very expensive way to deliver care. Additionally, there is a nationwide RN shortage, which makes it difficult to recruit RNs. Most of the facilities we visited had one or more vacant RN positions. Most of those vacancies were filled by contract RNs, which is even more expensive. In most states, LPNs or even Certified Nursing Assistants (CNAs) can deliver medications. This would be a considerable cost-savings over a RN's salary. To be sure, RNs are still needed to conduct sick call, but many other tasks can be performed by lower level personnel.

NCCHC recommends that the MDOC: ***Convert some of its vacant RN positions to LPNs or CNAs. One RN position in each complex should be converted to a lab tech.*** Information on developing staffing patterns can be found in Correctional Health Care: Guidelines for the Management of an Adequate Delivery System edited by B. J. Anno and available from NCCHC.

Contracting out the providers leads to other organizational problems. As an example, one of our reviewers became concerned about the level of cognitive functioning of one provider. He had difficulty tracking the logical threads of the provider's responses to his questions. Some of his documentation had so many errors of language or spelling as to make parts of them incomprehensible. The provider also had significant problems navigating Serapis, despite years of using it and supposed fluency.

There were obvious implications for patient safety in this situation. For example, our physician reviewed the case of a patient followed in seizure clinic. At each of the past couple of visits, the practitioner indicated there had been no seizures since the last visit. There was no indication of when the last seizure actually was, which is important, according to this chronic disease protocol, for determining when it is time to consider discontinuing medications. When the practitioner was questioned about this issue, he had difficulty trying to, and was ultimately unable to, figure out when the last seizure took place.

Because our reviewer considered this a potentially serious issue requiring immediate attention, during the course of our visit, he engaged various staff members in leadership positions to both verify his findings as well as share them. What he discovered in these conversations was that his observations were not surprising to any of them. Each had made similar observations anywhere from three months to a year ago. One person took significant steps to address his/her concern; another made one comment to the staff member; and the third took no action. Apparently, it is not clear to the people in this system who is in charge and how change can be effectuated. Any system can have, from time to time, an employee with a functional impairment. There is nothing frightening about that. What is frightening here, however, is that the system failed to self-correct. Part of the problem is that the providers are not employees. None of the supervisors our physician spoke with felt they had the power to correct this situation.

Staffing and Credentials. The credentials of all professional staff were checked at each facility. All staff were licensed, registered, and/or certified as required by law.

The Intake Process. There are two reception centers in the MDOC: Egeler for males and Scott for females. The intake process is similar at both facilities. On the day of arrival, the new admissions receive an extensive intake screening along with vital signs, a PPD (a tuberculosis skin test), a suicide screening, and a special needs screening. Individuals who are on medications for a chronic disease are scheduled to see a medical service provider (MSP) the next day for a physical exam and a treatment plan. MSP is the collective term used by the MDOC to refer to a physician, a nurse practitioner (NP), or a physician assistant (PA). Under NCCHC's standards, the intake physical should occur within seven days of an inmate's arrival. The MDOC allows ten days. Regardless of which standard is used, it was seldom met at either Egeler or Scott. Many times, it took up to a month for the physical to be completed. The review of patients' systems in Serapis (the electronic health record) is very detailed. We also noted at Egeler that one provider did not actually do a physical exam on healthy individuals. Instead, he simply did a SOAP note noting that the inmate was healthy. Other providers checked a single box stating that all findings were negative when, in fact, they had not examined all areas listed (see Health Information section). This gives the appearance of falsifying records and raises a potential legal liability.

NCCHC recommends that the MDOC: ***Develop a simplified physical for healthy individuals. Because the seriously ill prisoners are seen by an MSP the day after arrival, a simplified physical for healthy individuals would allow the providers to conduct their intake physicals on a timelier basis.***

We also questioned the need to do routine annual exams on everyone in the MDOC. The MDOC should consider doing routine annual exams only on inmates who are age 50 and older, and exams every five years on inmates under 50 who are not part of the chronic disease program. This is closer to the community standard.

The Sick Call Process and Nursing Issues. Timeliness of sick call and the appropriateness of the nursing response varied by institution as did other nursing issues such as use of nursing protocols,

orientation, and in-service training. We did not identify any systemic issues that needed to be addressed across the MDOC.

Management of Chronic Care Patients. The management of chronic care patients also varied by institution. One systemic issue we did identify is that problem lists are often not updated. This is not a problem unique to the MDOC. Training should emphasize the need to keep these valuable tools updated. In the MDOC, the problem is further complicated by Serapis for two reasons. First, there is both a paper and an electronic problem list, which creates difficulty in keeping both lists simultaneously current. Second, the Serapis problem list function is difficult to use and update.

Mortality Review. Our physician reviewer concluded that the MDOC mortality reviews had been performed in accordance with accepted medical standards of care for all 38, or 100% of the cases he reviewed. He agreed in full with the Michigan DOC's conclusions and plans for 25 out of 38 (66%) of the reviews. Our reviewer also agreed with the conclusions of, but made comments on, an additional 8 of the 38 (21%) reviews.

There was disagreement with 5 of the 38 (13%) Michigan DOC mortality reviews. In conclusion, the Michigan DOC's mortality review process is professionally performed with appropriate corrective action plans that fit the situations in most cases. Details on the cases reviewed are found in Appendix D.

NCCHC recommends that the MDOC: ***Maintain a log of corrective action plans that tracks the plans to completion. This will complete the documentation cycle.***

Off-site Referrals for Specialty Care. The MDOC has a contract with CMS to provide utilization review. All ten facilities followed the same process. An MSP fills out a referral form, which is faxed to CMS. A physician at their regional office reviews the request and either approves or denies it, or defers a decision pending receipt of additional information. We believe such requests should be

answered within one week. Often, however, we found it took two weeks to a month for CMS to provide a response.

NCCHC recommends that the MDOC: ***Specify, when the new managed care contract is written, that requests for off-site specialty care must be responded to within one week.***

We also looked at the timeliness of off-site referrals from the date of CMS's approval to the date of the appointment with the specialist. This turned out not to be an issue, because the MSPs note the urgency of the referral at the time they make their requests. All of the CMS schedulers (who, despite their title, are MDOC employees) told us that if they are unable to schedule the appointment within the timeframe specified by the MSP, they return the chart to the MSP for further instructions.

We also looked at the BHCS process for reviewing the specialty requests denied by CMS. Because Regions I and II are smaller and less problem-prone, the Regional Medical Officers (RMO) there are able to review all denials. This is as it should be. In Region III, however, there are two RMO positions, but only one was filled at the time of our audits. Additionally, this region holds some of the sickest patients, because of its proximity to Duane Waters Health Center (DWHC). Owing to the lack of one RMO and the sheer volume of referrals, the Region III RMO is not able to review all denials of specialty care. Nonetheless, someone should. As stated above, these are among the sickest patients in the prison system. In addition, under the current MDOC/CMS contract, CMS pays for off-site specialty care. The BHCS needs to ensure that its clinical directors agree with the decisions being made.

We realize there is an appeal process for MSPs who disagree with CMS's denial of specialty care. However, this option is seldom used. We were told that the Medical Services Administrative Committee (MSAC) hears only 3-7 denials per month for the entire MDOC. Cotton alone had 138 denials in 2006. The MSPs at the prisons work for CMS. Most of them are not willing to appeal the decisions made by the CMS administration.

NCCHC recommends that the MDOC: ***Aggressively recruit a physician for the vacant RMO position.***

Telemedicine. The facilities we visited had telemedicine (TM) units that would be the envy of any correctional system. The unit at URF had peripheral devices such as an electronic stethoscope, skin camera, electronic otoscope, and document camera. Yet, these TM units are seldom used for specialty consultations, except for the occasional HIV/ID-related consultations. None of the facilities exploits the technology to a fraction of its potential. No facility conducts any emergency department visits by TM. TM is a powerful cost-saving tool. In the experience of the New York DOC, using TM reduced out-trips by 13-24%. Once again, organizational incentives are misaligned under the current MDOC structure. CMS is responsible for off-site medical costs. However, they are not responsible for the associated custody transportation costs. Since consultant fees for TM may be equal to (or sometimes greater than) their fees for in-office face–to–face visits, CMS has little incentive to expand the use of TM. Consistent with this reasoning, the most utilized TM service is for HIV/ID, which is perfectly aligned with CMS's incentives. These TM consults are conducted by CMS's own medical director, avoiding the cost to CMS of sending the patient to a non-CMS consultant. Increasing the use of telemedicine, however, could result in substantial cost savings to the MDOC in reducing custody time and transportation associated with community specialty referrals.

NCCHC recommends that the MDOC: ***Explore ways to expand its use of telemedicine. More fundamentally, though, the MDOC should seek to create a new organizational structure that would provide incentives for the use of TM.***

On a positive note, at MBP, the practitioner occasionally accompanies his or her patients during telemedicine encounter with a specialist. This is an excellent clinical practice for several reasons. It increases the efficiency of the visit, because the practitioner can quickly find data the specialist asks for. It increases the quality of care, because the practitioner knows more about the patient than may be in the medical record and can provide richer data to the specialist. It also increases the quality of

care, because the practitioner can hear the specialist's recommendations first hand, understand the subtleties of the issues, and clarify any questions. Finally, it is a superb learning opportunity for the practitioner, potentially leading to avoided specialty consults in the future.

Hospital Care. We conducted a comprehensive review of the Duane Waters Hospital, recently renamed the Duane Waters Health Center. This report contains a number of recommendations to improve the efficiency and effectiveness of DWHC.

Pharmacy Management. Pharmacy services are provided through a contract with an outside firm, PharmaCorr, a subsidiary of CMS. Staff indicated a number of problems with the current pharmacy contract including the lack of a consulting pharmacist, delays in receiving "same day" medications, and the number of medications that are now off-formulary since PharmaCorr took over.

Pharmacy information was a particular challenge. Within Serapis, the physicians' orders for medication several times were found to be inconsistent with the current medication list, and it was difficult to verify that an ordered medication was actually given. Although a renewal system is in place, during this brief review, we found one HIV patient at Cotton on antiretroviral therapy, whose medication was not refilled, and who suffered a break of almost three weeks in therapy, attended to only after the patient reported having to file two kites.

The medication ordering system is complex. After the physician writes the order in Serapis, the clinic staff prints it out and places it in a batch, which is picked up by the pharmacy and separately entered into the pharmacy Frameworks system. Non-formulary medications are dispensed with a 10 day supply, pending approval by the appropriate RMO. When the RMO approves, this approval goes to the MSP, who then forwards the approval to the pharmacy, along with a copy of the original order. The pharmacy does not maintain a list of off-formulary requests that are pending approval, and the system is fraught with the potential for problems.

NCCHC recommends that the MDOC: ***Add the first level review of off-formulary requests to the utilization management responsibilities in the new contract***.

Pharmacy staff we interviewed identified other inefficiencies with the medication ordering system. For example, if a provider wants to titrate a dose and then taper off, that requires two separate orders instead of one. Similarly, if the medication dosage differs by time (e.g. Seraquil, 200 mg a.m., 600 mg HS [nb hour of sleep]), this also requires two separate orders instead of one.

Automatic Refills. Staff working in the prison pharmacies almost universally complained that they have to refill prescriptions manually, which is labor-intensive. The inmate is supposed to kite (request) for a refill 10 days before the prescription is needed. Pharmacy staff then removes the refill sticker and faxes it to PharmaCorr. Apparently, the PharmaCorr computer system does have the capability of sending automatic refills, but this feature has never been turned on. We are not sure it should be.

At the Region I facilities we visited, inmates are not required to kite for medication renewals for six months. Instead, pharmacy staff "automatically" renews them using the same manual process described above. We observed hundreds of medication tablets being discarded after patients received them, but having no intention of taking them, they went unused. This is a tremendous waste of money. Patients should receive renewed medications only when they request them. Competent adult patients in prison are autonomous with regard to medical decision-making. In other words, they are free to decide to be compliant with doctor's instructions or not. There is no obligation for departments of corrections to automatically renew medications.

Some staff also said many prisoners are under the impression that the Parole Board will not release someone on chronic medications. As a result, patients return unused medications (which must be discarded) as they get close to parole, and their medical conditions worsen. The MDOC should determine whether this is true, and, if not, should educate the inmate population accordingly.

NCCHC recommends that the MDOC: ***Determine whether the Parole Board will not release someone on chronic medications, and if false, educate the inmate population.***

Disposal of Pharmaceutical Waste. At one facility, we observed all pharmaceutical waste being handled the same way, i.e., prepared for incineration. There is a class of waste which is considered "Federal Toxic" (for example, nitroglycerin) and may need to be disposed of by other means than incineration. The MDOC may be in violation of environmental regulations. The MDOC should research this issue with the appropriate environmental authorities to see if these regulations apply in Michigan. If so, the MDOC should determine whether this poor practice is also occurring at its other facilities.

NCCHC recommends that the MDOC: ***Research the issue of incinerating pharmaceutical waste with the appropriate environmental authorities to see if these regulations apply in Michigan, and change their practice if necessary.***

Formulary. Our review of MDOC's formulary concluded that the current content of the formulary lacks certain therapeutic categories and pharmacologic classes that are commonly prescribed and would normally be included in the formulary of a large health care organization providing mainly ambulatory and some infirmary or long-term care. The omissions that are of most concern include the following.

- Macrolide antibiotics, besides erythromycin, namely clarithromycin and azithromycin. (We noted that clindamycin was listed incorrectly in the formulary as a macrolide antibiotic. It is actually a lincosamide antibiotic used primarily to treat anaerobic infections).
- Angiotensin II Receptor Blockers, for example, Losartan and Valsartan.
- Clopidorel bisulfate (Plavix).
- Proton Pump Inhibitors, for example, Omeprazole and Lansoprazole.
- Antileukotrienes, for example, Montelukast
- Dutasteride for treatment of benign prostatic hypertrophy (Note - tamsulosin hydrochloride is already on the formulary).

- Diphenhydramine hydrochloride (Benedryl)
- Hydroxyzine hydrochloride (Vistaril)

The NCCHC recommends that the MDOC: ***Review the entire formulary to be certain that it contains all of the therapeutic categories and pharmacologic classes specified in the Model Guidelines for Medicare Prescription Drug Benefit, submitted by the United States Pharmacopeial Convention, Inc. on December 31, 2004.***

NCCHC recommends that the MDOC: ***Survey physicians practicing in the Michigan Department of Corrections to elicit further recommendations about other drugs they believe, on the basis of their experience, should be included in the formulary.***

The process for a clinician treating a patient to request approval for a non-formulary medication poses significant risk of a delay in a patient receiving an appropriate medication, unless the requesting clinician lists the request as "urgent," in which case the clinician may order up to a ten day supply followed by the phrase "Pending Medical Officer's Approval." The definition of "urgent" is not given. There are many instances when a non-formulary medication is necessary for the patient's comfort and condition, but may not be considered "urgent," one common definition of which is that a treatment is required to prevent an immediate deterioration in a person's health.

The NCCHC recommends that the MDOC: ***Promptly fill the initial order for the non-formulary medication for up to a ten day period, unless the ordering practitioner specifies "non-urgent." It is, after all, the ordering clinician who has examined the patient and concluded that a non-formulary medication is indicated and likely to be beneficial if given on a timely basis.***

Of particular concern in this process are patients on non-formulary medications initially entering the system and patients who are returning after a stay in an outside hospital. In both of these circumstances, an interruption of a non-formulary medication may pose significant safety concerns.

The NCCHC recommends that the MDOC: ***Clarify the formulary. On the copy of the formulary reviewed, pages 14 and 23 are blank. According to the Table of Contents, page 14 appears to be only the title page for psychiatric drugs. Page 23 is supposed to be Supplements – Minerals and Vitamins, none of which are listed in the copy given to us for review. This needs to be clarified.***

NCCHC recommends that the MDOC: ***Reinstitute its Pharmacy and Therapeutics Committee to provide an on-going mechanism for adding and deleting items from the formulary.***

Medication Administration. We also noted that in the Region I facilities we visited, medications are pre-poured in the pharmacy. While the regional administrator told us this was permissible by the Board of Pharmacy, we advise against it. To pre-pour, there are two sets of coin-envelopes for each patient. One set remains in the pharmacy and is used as a place holder for each patient. Medications are poured into unlabeled plastic cups on top of each envelope. Once this step is completed, the contents of each cup are transferred into the second envelope. This envelope is carried to the living unit (without the Medication Administration Record [MAR]) where the contents are given to the patients. There are a number of problems with this system:

1. The plastic cups are close together, light-weight, and slippery. We noticed some of them sliding away from their "parent" envelope towards other envelopes (of other patients). It would not be impossible to imagine two cups getting switched.

2. The nurse does not take the MAR with him/her to the patient. If the patient refuses some, but not all medications, it is harder to record this information and, therefore, easier to make a recording mistake when getting back to the pharmacy.

3. Since refused medications are already poured, they must be discarded, wasting money. If the medications were still in the blister cards, they could be used later.

This process is VERY time consuming and, therefore, wasteful. Consideration should be given to a simple solution: nurses should issue medications directly from blister cards and document directly on the MAR as they administer the medications. This is easily achieved with a series of simple materials such as cabinets to lock medications in the medical rooms located in the living units, a small rolling portable table, and a small medication box for each floor of each living unit.

NCCHC recommends that the MDOC: ***Issue medications directly from blister cards and document directly on the MAR as they administer the medications.***

Discharge Medications. We were also told that when inmates are released from the MDOC, they are given a 30-day supply of all of their prescription medications. This is more generous than we find in most other states.

Health Information. Clinical information is scattered and may be found in Serapis, in the current volume of the paper chart, in previous volumes, and in shadow charts maintained by dialysis and specialty providers. Serapis does not lend itself to organized searching. For example, there is no easy way within Serapis to review chronic care visits. Every encounter, including mental health and laboratory tests, must be examined in date-of-occurrence order to see if a CCC template was used. Because some providers do not use CCC templates to document CCC visits, identifying CCC visits is difficult. This is particularly challenging for physicians following up on clinical status trends, or just trying to figure out what happened on the previous CCC visit. The paper chart usually contains the CCC Serapis documentation, but since charts are purged regularly, and old consultation notes, admissions, and special studies such as angiography are not brought forward, MSPs may lose access to relevant historical information.

For routine management of patients in good control, the Serapis system supports performance requirements by prompting for required history and physical elements, and by providing a simple and rapid method for documenting pertinent negatives. However, where documentation requires access to information in old records, or information recorded in Serapis required intervention, many failures were observed. We suspect this was caused by a combination of factors, including the difficulty and time required to use Serapis to locate relevant information in old records, and the challenge of identifying pertinent clinical information in a Serapis record filled with many negative findings of questionable relevance.

The clinical documentation process in Serapis is achingly slow, and providers confirm that their productivity has dropped significantly as a result of having to document patient encounters in Serapis. It is time-consuming and, in some cases, impossible to retrieve and view data-relevant episodes of care or chronic disease spanning several visits or several years. All visit documents appear in a tree-like structure in sequential order, and the only way to determine the content of a visit is to open up each document in the tree to look at it. The tree includes lab draws, finger-stick blood glucoses, blood pressure checks, and mental health visits. Trying to review all of the chronic care visits for a complex patient with diabetes, for example, might require scrolling through 50-100 records. When did this patient have her last eye exam? Was she seen in urgent care for hypoglycemia? Is this visit a follow-up for an outside specialty service, and what was the recommendation? These questions are exceedingly time-consuming and difficult to answer within Serapis.

Serapis report documents contain large volumes of largely irrelevant negative findings, making it very difficult to find the "meat" of the visit. Serapis allows for the creation of long lists of negative findings by checking a single box, both for the history and for the physical examination. At every institution where we observed providers documenting within Serapis, we saw providers checking an "all findings negative" box when, in fact, they had not asked or examined all of the elements that were reported negative as a result. We believe providers are documenting in good faith. They conduct what they believe to be a complete evaluation, and if no problems are identified, they check

the "all negative" box. The problem is that Serapis then produces a report far more specific and detailed than justified by the history taken or the exam performed. The unacceptable result is a medical record containing false information.

Another problem arises when a patient has multiple chronic care problems. Providers generally choose a Serapis template based on the "primary" diagnosis. This template contains prompts relevant to the primary diagnosis, but often omits important data elements for other diagnoses. For example, a foot exam is required for diabetic patients on each follow-up visit, but this is not included in the cardiovascular template, and providers often fail to document a foot exam in diabetic patients with hypertension, if documented using the cardiovascular template. As another example, patients carrying both the diagnosis of hypertension and the diagnosis of hyperlipidemia are documented in a single template, "CV/HTN". This template provides for a single degree of control designation. For patients with both diagnoses, it is ambiguous whether this degree of control designation applies to the diagnosis of hypertension, the diagnosis of hyperlipidemia, or to both.

Particularly at Scott, we gained the impression that issues both with quality of care and with provider performance could frequently be attributed to the use of one template for managing a patient with multiple diseases. The alternative is to use multiple templates for a single visit, as we frequently found at Standish. This is very time consuming, leads to duplication within the record of care, and creates report documents that are long, and filled with so many negative findings of minimal relevance that usability for clinical management is compromised.

We noted several cases where the "all findings negative" checkbox produced findings contradicted by text entered directly by the provider. In one instance, for a patient with asthma, the history, created through use of a checkbox, stated "no change in use of inhalers" and inhaler frequency was listed as "none." But in the comments, the provider wrote "using Albuterol excessively." It is likely that a significant number of medical records contain information that is not justified by inquiry or examination of the patient, particularly with regard to pertinent negatives. This

presents a problem for good medical care, and is a risk management issue should the chart become the basis for defense in a legal proceeding.

The inventory of problems our reviewers encountered with Serapis is too long to list, but here are some examples:

1. On one of the chronic care templates, Serapis prompts the user to indicate

   Left lung clear Right lung clear

   When that information is translated to the progress note, it reads as

   Left side clear Right lung clear

   Since the "left side clear" statement comes right after information about the abdominal examination, the reader can't be sure if "left side" refers to the abdomen or lung.

2. The chronic care templates make it difficult to document a visit during which more than one chronic disease was addressed. It can be done, but it requires a good memory and a strong constitution.

3. Medication lists are displayed in different ways in different screens. For example, on some screens, start and stop dates are listed on top of each other. On other screens, they are next to each other; and on yet other screens only one of the two dates appears. Such inconsistency is the perfect way to get users to misread and make errors.

4. Serapis allows the same event to be documented with conflicting information. Data from a visit is entered into a template from which Serapis produces a more readable WORD-like document. However, after it produces the document, the user can edit the document, with the result that the template (still part of the legal record) and the document have different information. This is a software functionality that plaintiffs' attorneys put on their holiday wish lists.

5. It is VERY difficult to find information. There is no easy way to review a patient's history in the chronic care clinic without opening dozens of documents.

6. Medical Serapis is not integrated with the dental or pharmacy software packages requiring users to move from one system to another, sometimes also having to make duplicate entries. Even with the suite of three software products, all the health care documentation needs are not met. For example, there is no mechanism for scanning and filing outside records or consults. So a paper record must also be kept. And some data can be entered EITHER in the paper or electronic record. All this means that users are forced to look in both the electronic and paper record to be sure they have all the information they need. Thus, each patient has multiple, simultaneous, medical records. Not only is this inconsistent with the current national standard for medical records, it is time-consuming. Even if Serapis did the things it was designed to do well, if it cannot accommodate all health information, it might be safer and cheaper to revert to an all paper record.

7. Finally, based on discussions with staff, it is not clear what the plan is for the future if the contract with Serapis is not renewed or the company fails to continue supporting the product (including selling it, discontinuing it, or going out of business). Who owns the data? Does the MDOC have legal rights to the software code? How would the data in Serapis be incorporated into another electronic health record? If the MDOC decides to continue use of Serapis, these questions should be addressed in future contracts.

On the positive side, Serapis is very useful for order entry, for reviewing a patient's laboratory results, and for medication management.

NCCHC recommends that the MDOC: ***At a minimum, use of Serapis to document chronic care clinic visits should cease, and CCC visit documentation should revert to paper. Specifically, CCC clinic visits should be documented on the one-page paper form for multiple diagnoses that was in effective use prior to the transition to Serapis. Such records can be copied, or maintained, in the clinic, where providers can have rapid access to them in***

a timely fashion, and the originals saved in the paper medical record. Order entry, laboratory studies, and medication management could continue in Serapis, subject to the recommendation that at Scott, all patient medication lists be brought up-to-date within Serapis.

Implementing these recommendations will increase provider productivity, improve the quality of care for patients in the CCC, and reduce the risk inherent in a medical record that is known to contain false information.

Software Issues. Remarkably, there appeared to be no policy on the consistent deployment and utilization of the electronic health record (EHR), and staff were permitted to use or not use the EHR as they saw fit. At the time of our visit, we were informed that there was a new policy that everyone would use the EHR, but this had not yet been implemented. Although we did not have time to explore the product in detail, our expert found that its network performance was satisfactory, despite staff claims to the contrary. Records were retrieved and displayed very quickly. The laboratory module was a bit odd in that the laboratory vendor was unable to transmit laboratory results directly to the EHR in HL7 format – a feature universally available in other electronic health records system. As described by the staff, a laborious process occurs wherein laboratory results are transmitted to Saint Louis, converted, then uploaded to the EHR. In fact when looking at the laboratory test names, one can see the HL7 field separators (carots) still visible in the lab description field. This was somewhat disconcerting to read.

There was also some concern about the EHR's incomplete reporting capabilities. Report capabilities of any database are easily extended with many third-party tools. In fact, those third-party tools were available on the computer we utilized during our review. In this case, the product was Microsoft Access, which can easily be connected to the EHR database (MS SQLServer) through a simple ODBC connection. This simple tool would allow quite sophisticated data analysis and CQI – clearly an important objective in a state as large as Michigan where manual auditing is expensive and likely incomplete. Unfortunately, to do this, there is a requirement that one have knowledge of the

database schema. Apparently, this was not provided by the vendor of the product. Access to this simple database schema would likely extend the useful life of this EHR product for several to many years. This is especially important given the capital expense of a new software product.

To enhance the usability of Serapis, the NCCHC recommends that the MDOC:***Build query tools locally using MS Access and ODBC.***

NCCHC recommends that the MDOC: ***Write a concise EHR implementation policy and follow it.***

NCCHC recommends that the MDOC: ***Obtain the data schema.***

Paperwork Issues. The MDOC is one of the most bureaucratic systems we have ever encountered. This was true of the custody side of the house as well as health care. For example, we needed to place all loose items on the tray outside the main control booth prior to walking through the metal detector, but no one examined the contents of those loose items. For example, despite having NCIC clearance, official badges, a gate pass, a hand stamp, and an escort, a piece of paper called a "gate manifest" (signed by someone at a warden's level no less) needed to be generated and then handed off every time we entered and exited. For example, food from the outside was not allowed inside some facilities, but was okay elsewhere. For example, at one facility, all of our pens were confiscated, and we were issued clear ones.

While none of these procedures are dangerous in and of themselves, in the aggregate, they raise two concerns. First, is the system of governance working if such procedures-–which were likely responses to single or rare incidents–-can be put in place and continue unchecked? Second, if staff spends their time on procedures of dubious value, what procedures of real value are they not doing?

The situation in health care was even worse. For example, one HUM gave us a list of the monthly reports she must file with the warden, the regional office, or BHCS. There were 18

separate reports listed. Multiplied by 51 facilities, it seems highly unlikely that most of these reports are even read, let alone used to inform decision-making. For example, one psychologist showed us the four different forms/reports he has to complete when someone is identified as potentially suicidal. For example, the RMOs told us there are 22 separate steps needed in Serapis to process non-formulary requests. For example, we were told it takes four to six months to fill a new position, even if it is in the budget. Such inefficiencies clearly impact the timeliness and quality of patient care.

What generally is responsible for bureaucratic quagmires is a change in administrators or supervisors. New individuals come into the top positions and have their own ways of doing things. They issue new orders regarding procedures, forms, or reports without taking into consideration what paperwork staff are already completing.

NCCHC recommends that the MDOC: ***Appoint committees for both custody and health care to examine paperwork requirements with an eye toward simplifying and streamlining the processes.***

Medical Service Provider Productivity. MSP productivity at the ten facilities we visited ranged from a low of five patients per day for one physician to a high of 24 patients per day for one PA. Most providers averaged from 8-12 patients per day, which we consider low. Our correctional physician reviewers all thought providers should be able to see an average of 20 patients per day with proper system support, with the exception of providers serving primarily a Level V population, owing to the increased custody requirements (e. g., one patient at a time, belly chains and cuffs, two COs per inmate). Factors contributing to the lower productivity in the MDOC include the use of Serapis, which slows providers down (see the Health Information Section); different custody rules at different institutions (some will not allow providers to see patients during count and lunch, or to mix custody levels); and the fact that the providers are not MDOC employees. The latter point bears some discussion.

The providers have no incentive other than their own professionalism to see more patients. All MDOC facilities have been completing MSP Productivity Reports for several years. The BHCS administration says they cannot do anything about the situation, because they do not supervise the MSPs. They send the information on to the CMS administration, but nothing ever changes. We were told by several MDOC staff that CMS administrators say they cannot tell the MSPs what to do, because they are independent contractors and not employees. Whatever the truth is, this situation must change.

NCCHC recommends that the MDOC: ***Build in approval of hiring and firing decisions of MSPs into its new provider contract, if it decides to continue to contract these positions out.***

The MDOC should seriously reconsider the advantages and disadvantages of continuing to contract out provider services. There are two reasons to contract out. One is lack of expertise. The other is inability to recruit due to union/salary issues. We do not think the MDOC lacks internal expertise. As far as recruitment, the MDOC seemed to be able to fill positions before a self-imposed moratorium on physician hiring. If civil service salaries are non-competitive, the Governor/Director should have the authority or influence to be able to change that. If the State concludes that contracting is a necessity, serious consideration should be given to "going all the way" and contracting out all health services. At least that way, there would be a single chain of command.

NCCHC recommends that the MDOC: ***Seriously reconsider the advantages and disadvantages of continuing to contract out provider services.***

NCCHC recommends that the MDOC: ***Review its custody procedures regarding closing clinics during count and lunch, as well as ensure consistency throughout the system regarding which custody levels can be mixed in clinic waiting areas.***

Continuing Education Training. Our reviewers identified several areas where continuing education would improve staff performance.

NCCHC recommends that the MDOC: ***Train all nurses managing patients under protocols in use of the nursing protocols, including assessment, documentation, intervention and follow-up, and be required to demonstrate competency in the use of each protocol.***

NCCHC recommends that the MDOC: ***Train all MSPs in NCCHC's clinical guidelines, and develop a clinical quality management program where charts of chronic care patients can be reviewed for compliance with these guidelines. Emphasis should be placed on accurate determinations of the degree of control, the need for intervention when control is not good, and the importance of ordering follow-up based upon a patient's clinical needs***.

NCCHC recommends that the MDOC: ***Train staff, particularly some providers, in the use of Serapis. Health staff would benefit from the additional training.***

Continuous Quality Improvement. The MDOC does not have an effective CQI program; with the exception of one of the ten facilities we visited (Kinross). For about a year, until March of 2007, most of the facilities we audited were using a cumbersome six-page form to report their Performance Improvement activities on a monthly basis. Few of these forms were completed in their entirety and the usefulness of the information that was reported is questionable. Formal studies reporting sample size, timeframe, criteria, thresholds, results, analysis, and corrective action plans were seldom found. An effective CQI program should address problems with process and outcome unique to each facility. For the most part, what we found was "paper pushing" dictated by Central Office rather than "problem solving" specific to the needs of particular facilities.

NCCHC recommends that the MDOC: ***Create an effective CQI program that specifies how to conduct a formal CQI program, but does not specify what each facility should study.***

Information on developing a CQI process can be found in Correctional Health Care: Guidelines for the Management of an Adequate Delivery System.

Peer Review. Clinical care and provider morale would both benefit from a peer review quality management program, in which MSPs meet regularly to review patients, discuss challenging cases, critique each other's management, and share knowledge and experience. Such a program could also function as a first tier utilization management (UM) review, rather than having all UM performed by offsite medical directors.

NCCHC recommends that the MDOC: ***Develop an effective peer review process.***

Grievances. The number of Step I health care grievances filed in 2006 at the ten facilities we reviewed varied from a high of 63.5 per month at Scott to a low of 4.4 per month at HVM (see chart below).

Facility	Capacity	# of grievances	# per month	% of population filing monthly
DRF	1246	252	21	1.7
URF	1150	404	33.7	2.9
JCF	1854	636	53	2.9
RGC	1853	349	29.1	1.6
HVM	538	53	4.4	0.8
WHV	927*			
LCF	1344	223	18.6	1.4
MBP	1206	565	47.1	3.7
SCF	880	762	63.5	7.2
SMF	528	484	40.3	7.6

*Data not provided

Not surprisingly, in general, we found the highest number of health care grievances in those facilities with the least adequate care, and the lowest number of grievances in the facility providing inpatient mental health care. The only real anomaly was Cotton. This facility had the most

compromised care, yet the number of health care grievances fell in the lower range with facilities providing generally adequate care. We noted, however, that health staff at the Cotton facility had a real problem with responding to grievances on a timely basis. Some months, only one to two percent of the grievances were responded to within the two week timeframe set by the MDOC. Thus, the reported number of Step I grievances at Cotton is undoubtedly seriously understated.

The tone of the responses was generally respectful, and, for the most part, the responses were timely (except for Cotton). With the exception of Kinross, health staff at the other facilities we visited did not document whether the grievances were resolved or denied, or track trends. Health care grievances are a good way to identify problem areas in the health care delivery system that are ripe for a CQI study. Additionally, grievances can help identify problems with staff performance, attitudes, and level of professionalism.

There are two other steps in the grievance process. Those not resolved at the facility are referred to the regional office (Step II). Those not resolved at Step II are appealed to central office staff (Step III). While we only tracked Step I grievances, we were told that there were a substantial number of Step II grievances, because facility staff do not always answer Step I grievances in a timely fashion. Regional staff should track the number of Step II grievances that resulted from being unanswered at Step I, and address the need to follow grievance policy and procedures with institutional staff who are not complying with time requirements.

NCCHC recommends that the MDOC: ***Develop a process to track trends in grievances and identify whether grievances were resolved or denied. Also, regional staff should hold facility staff accountable for timely responses to Step I health care grievances.***

Other Cost-saving Strategies. Our reviewers identified other cost-saving strategies that do not fit easily into the categories listed above.

Over-ordering of Tests. Our physician reviewers found many examples of tests ordered that were unnecessary. Most of these were blood tests. While most blood tests are not expensive, this practice is not good for two reasons. First, if done often enough, the costs add up. Second, and more importantly, when a test is not ordered for good clinical reasons, and it produces a "positive" result, the meaning of the positive is not clear. In other words, an abnormal result means something different in a patient who has symptoms versus a person who has no symptoms. Unfortunately, we are not sure what it means in the latter case, so the doctor is often obligated to do more tests, even though the tests will most likely be normal. Not only do the additional tests cost money, the further tests are usually also invasive and can harm the patient (such as a CT scan with intravenous dye to which a patient can have an allergic reaction and die).

Over-ordering happens much more often in mid-levels' practices for several reasons. First, some of the patients they are seeing are sicker than should be assigned to a mid-level. Second, there is inadequate oversight by the physicians. Third, this is not stressed by CMS (which is one of the risks of a disjointed management/leadership structure). Fourth, this is not stressed by the MDOC. In fact, the message being heard by some (and this may not be the message sent, nor is it necessarily being heard by everyone) is that MDOC cannot tolerate providers missing things. So it is better to over-test than under-test. This impression seems to have proliferated in the aftermath of recent bad patient outcomes.

We believe this problem can be addressed, in part, by clear messaging and training from both the MDOC and CMS. Staff needs to hear that neither over- nor under-ordering is good. You want logical ordering based on good clinical judgment. If a practitioner uses good judgment, does not test, and a diagnosis is missed, he/she will be supported; bad outcomes sometimes happen to good clinicians. While CMS must play a role in this, it will be very difficult to align their priorities with the MDOC's under the existing disjointed structure. Much of the above also applies to physicians.

NCCHC recommends that the MDOC: ***Develop a utilization management program to track appropriate ordering of laboratory and diagnostic tests, and train providers who exhibit a pattern of over- or under-ordering.***

Transfers. We were told that current MDOC policy requires all transfers to be seen by an MSP within five days of arrival, even if they were just recently seen. Nurses at the receiving institutions do a record review to ensure continuity of care and meet face–to–face with new arrivals. In most systems, absent poor control issues, nurses would schedule new CCC patients for their next visit at the time specified by the sending institutions' provider.

NCCHC recommends that the MDOC: ***Revisit its policy regarding transfers. The revised policy can specify the proper intervals for patients to be seen, depending upon their level of disease control.***

Non-Medical Issues. Providers seem to be spending excessive time resolving issues of special shoes, mattresses, extra blankets or pillows, and other non-medical issues. Proper triage of sick call requests and referral of these kinds of issues to an ombudsman would increase provider efficiency.

Also, several staff told us that while there are guidelines for issuing such items, providers do not interpret the guidelines consistently. This leads, at best, to patient frustration and an increase in grievances.

NCCHC recommends that the MDOC: ***Clarify the guidelines for issuing non-medical items and appoint a single ombudsman to address these requests.***

Provider Coverage and Participation During Off-Hour Events. Many of the facilities we visited did not have a reliable on-call system for practitioners. The mid-level practitioners seemed willing to receive calls at home, but they are not always available. The physicians' back-up of the mid-level practitioners is looser, yet. Nurses often resort to calling the practitioner at Duane Waters, who

does not know the patients as well if at all. The practitioner's involvement in the case, whether the facility practitioner, or the one at Duane Waters, generally seems to stop after the initial call. Therefore, what doesn't happen is that there is no contact between the correctional and emergency department practitioners. All decisions are made independently by the emergency department without any input/advice from the prison. Invariably, such lack of communication classically leads to patients being admitted to the hospital who could be managed (less expensively) in the prison, and emergency department discharge plans are made that may be impractical for the prison to carry out, etc. In the absence of direct communication with the emergency department, most patients return from the emergency department with nothing more than a patient instruction sheet; no medical records are sent. This makes subsequent care of the patient riskier.

NCCHC recommends that the MDOC: ***Develop a clear and reliable on-call system. A mid-level practitioner can take "first call," but there must be a physician designated as a back-up. These staff must become actively involved in the management of patients who go to an emergency department.***

Documentation Issues. In general, our reviewers found instances of inadequate documentation even in those units where the health care was judged to be good to excellent. At MBP and URF, for example, among various providers–nurses, physicians, nurse practitioners, PAs, and dentists–there was a theme: episodes of poor documentation of the good to excellent care. This raises concerns regarding the MDOC's potential liability in litigation.

- A nurse at MBP wrote that a patient was on the floor of his segregation cell, unresponsive, for the first half of the shift. Staff went in to evaluate him and he was okay. What was (probably) missing was that this particular patient was known to staff to feign illness and the nurse was not aware of the situation until the middle of the shift when she was called. Read in front of a jury, however, the documentation tells the story of a nurse who knew about an unresponsive patient for four hours before finally doing something.

- A dentist at MBP was unable to get patients in to see the community oral surgeon owing to the surgeon's full schedule. The scheduling clerk kept trying to get him in. The dentist wisely saw the patient periodically while he waited, and told him to kite if the problem got worse. The only documentation in the medical record, however, was that the dentist ordered an oral surgeon evaluation on a certain date (which had passed), and there were periodic examinations. There was no documentation of the surgeon's office's response to requests for appointments, of the planned revisits to check on the patient's well-being, nor of instructions given to the patient to kite if there was any change in his condition. Read in front of a jury, the chart tells the story of an 8th Amendment violation by virtue of a doctor's order not being carried out and no plan to deal with it or any instructions to the patient to try to mitigate a situation not under the MDOC's control.

- A physician at MBP saw a patient for a 10 or 15 minute follow-up for an abdominal problem and a visit to the ER. In the progress note, he wrote that 51 separate body parts were examined and were "normal." These parts included 14 different arm and leg joints, five different parts of the mouth, etc. Clearly, he did not examine those parts. The problem is that in Serapis, if you check the box that says the "patient's exam was normal" Serapis automatically populates all the body part boxes as "normal." While this is partially a problem with Serapis, it is avoidable, even in Serapis. On the jury stand, after the plaintiff's attorney asks the doctor 51 separate times, "Doctor, did you, in fact, examine Mr. X's [left elbow] [right elbow] [left knee] … during this 10 minute examination for an abdominal problem?" and the doctor responds 51 times, "No," and the lawyer says, "So you lied in the medical record?" It won't matter how good the care was.

- A nurse at URF, documenting in a nursing protocol, did something almost identical to the last case.

- A physician at MBP saw a patient for jaw pain, which the patient claimed was so severe, it caused him to pass out. The thorough examination ended with a number of possible diagnoses including "possible syncope." The physician did not document any further symptoms,

examination, or plans with regard to the syncope other than to place the prisoner in a lower bunk. He told our physician reviewer he really did not believe the syncope history and was not worried. However, syncope, or losing consciousness, has many serious causes, including heart and brain problems. The fact that the doctor did not really think the patient had any serious heart or brain problems and did not warrant further work-up was not documented. Read at a deliberate indifference trial that might ensue after the patient had a bad outcome totally unrelated to the problem above, this medical record would show a physician who ignored a potentially serious problem.

Health Services Contracts. There may be serious flaws in the way the MDOC chooses vendors, and writes contracts with those vendors. An obvious example of a questionable contract is the choice of Serapis. There are many other products on the market, most of which function better. It is not clear that these other products were seriously considered. We were told that the Serapis contract was a "sole source."

Another example is the lack of firm requirements for physician coverage. We were repeatedly told that CMS can unilaterally choose to reduce provider staffing from five days a week to two days a week, if it has trouble recruiting, and that CMS is not subject to any penalty or disincentive. During our audits, we found several examples where CMS, in fact, took a full-time provider from one facility to cover two days a week at another. This, obviously, compromises care at both facilities.

Interestingly, however, when we read the contract between the MDOC and CMS, it states that: "…CMS shall…provide a minimum of 32 hours of coverage per MDOC pay period for each vacant position but as many hours as possible given existing staff availability until a new MSP is placed, trained and functional. If requested by the MDOC Chief Medical Officer, CMS shall provide any extra hours required to maintain services at a level satisfactory to the MDOC" (page 35, 15 b. 6.). This brings us to contract monitoring.

Until a few months ago, the MDOC had a full-time contract monitor for the CMS contract, but it is not clear what he actually did. This contract has been running for over ten years, and we were not provided with a single monitoring report. According to the contract with CMS, the MDOC was supposed to perform regularly scheduled audits, and liquidated damages were to be assessed at any facility where CMS's providers failed to achieve 90 percent compliance with essential outcomes (pages 38-39, 15 g-i.). No damages have ever been assessed.

We are not saying there is an improper relationship between the State of Michigan and Correctional Medical Services, Inc. However, there is *an appearance* of such an improper relationship in the field. Many staff verbalized that they have "heard from Lansing" that the MDOC simply needs to make the relationship with CMS "work." Whether or not anyone in the BHCS central office actually said this, this is what staff perceives. The most glaring example of this is practitioner staffing shortages. There are long lists of patients waiting to be seen at virtually all facilities we visited, yet many shifts remain unfilled by the vendor. Staff speculates that if the MDOC and CMS were operating in a truly arm's length relationship, there should be an immediate response from the MDOC followed by rapid resolution of the problem, legal action, and/or termination of the contract. Instead, the contract has continued for ten years.

We are aware that the MDOC took some steps this past summer to try to address some of these contractual issues. There has been a change in the leadership at the BHCS and the contract monitor retired. Nevertheless, we recommend the MDOC take a critical look at its contracting process.

NCCHC recommends that MDOC: ***Develop an effective contract monitoring system and hold its health services vendor accountable for meeting the contract terms.***

The Mental Health Program

Organizational Structure. The mental health program consists of two entities: the Corrections Mental Health Program (CMHP) administered by the Department of Community Health, and the

Psychological Services Unit (PSU) administered by MDOC psychologists and support staff. PSU is responsible for mental health intake screenings and evaluations at the reception centers. In the regular prison units, PSU staff is responsible for crisis intervention, bi-weekly segregation rounds, 30 and 90 day evaluations of inmates in segregation, parole evaluations, responding to kites requesting mental health care, and holding Assaultive Offender Program/Sexual Offender Program (AOP/SOP) groups. CMHP staff is responsible for the care and treatment of all individuals identified with a major mental illness.

The current organizational structure is not an efficient one. It is, in fact, cumbersome and results in duplication of administration, services, and materials. If an issue arises between CMHP and PSU staff at a given institution and they cannot resolve it, it must go up one chain of command to the regional level, across to the opposite regional level, and then back down the respective chains. Also, there is often disagreement between the two entities at specific institutions as to whether particular clients are or are not seriously mentally ill. Worse yet, this division in responsibility results in a "silo effect," allowing staff to claim in particular instances that a request for service is "not my job."

As another example, we were told of an incident in which an inmate attempted suicide by hanging. Medical services was notified and the nurse practitioner responded. By the time the nurse practitioner arrived, custody staff already had the inmate down. However, the inmate managed to crawl under the bed and held on to it yelling that she wanted to die, and continued to struggle with the staff. The psychiatrist was called, but failed to come. Upon repeated telephone calls, he stated that he only sees patients after they have been evaluated by a psychologist from PSU. Finally, a psychologist did come and evaluate the patient. The patient was then referred to the psychiatrist for inpatient admission. Nonetheless, the episode took more than 45 minutes, because the psychiatrist insisted that the mental health protocols be rigidly followed. While we were not told of any other incidents of this sort, this is an unacceptable response to an emergency situation, directly attributable to a faulty organizational structure.

There is also considerable duplication of services. As an example, several PSU's psychologists told us that in order to refer a patient to CMHP, they must do a full psychological work-up. This occurs in spite of the fact that all inmates receive a substantial battery of psychological tests as part of the mental health intake process, as well as a full psychological evaluation, if they have an identified serious mental illness. Worse yet, they are required to do such evaluations even if the inmate was previously on the CMHP case load. We were told of an instance where an inmate had been discharged from the CMHP case load, because she was non-compliant with her psychotropic medications. Later, she decided she wanted to resume care. The psychologist wrote a three and a half page evaluation to refer the patient back to CMHP. In most systems, this would have been accomplished with a simple phone call or referral form stating "Pt. wants back on meds."

NCCHC recommends that the MDOC: ***Give serious consideration to consolidating all mental health services under a single entity to avoid the inefficiencies inherent in the current organizational structures as well as the potential for compromising the quality of mental health care.***

The Intake Process. All new arrivals in the MDOC receive a battery of psychological tests at the reception centers. Those with assaultive or sexual offenses also receive a partial psychological evaluation. Those with identified serious mental heath needs receive a full psychological work-up. Under NCCHC's standards, mental health evaluations for new admissions must be completed within 14 days of the inmate's arrival in the prison system. We found that PSU staff at Egeler generally met this requirement, but those at Scott did not. At Scott, the medical intake process must be completed before the psychologists can do their intake evaluations. Because the MSPs at Scott are considerably behind in their intake exams, this puts the psychologists behind in completing their intakes. To correct this, the MDOC needs to immediately address the issue of lack of provider coverage at Scott and low provider productivity.

CMHP Quality of Care. Our psychiatrist was impressed with the quality of care provided by CMHP. He had no suggestions for system improvements.

CMHP Contracting Issues. The original contract between the MDOC and the DCH was signed in 1991. It was briefly amended in 1994 to reduce the number of interdepartmental representatives serving on an interdepartmental committee, but has not been amended since. We also saw no evidence of contract monitoring.

NCCHC recommends that the MDOC: ***Review its contract with the DCH to ensure that it continues to reflect the MDOC's needs regarding mental health services.***

NCCHC recommends that the MDOC: ***Appoint a contract monitor to oversee this contract. We noted that the psychologist in central office does not have any supervisory responsibilities for regional psychologists, who report to the regional health administrators. Perhaps this position could serve as the contract monitor.***

PSU Assaultive Offender Program (AOP) and Sexual Offender Program(SOP). One of the primary responsibilities of the PSU staff is to hold group sessions for inmates who have a history of either sexual or assaultive offenses. Apparently, inmates with such histories must complete the appropriate group prior to being considered eligible for parole. Most PSU staff members were holding a maximum of five groups per week, each for an hour and a half. Some PSU staff members were holding only one or two groups per week and some were not holding any. Each group takes approximately one year from beginning to end. There was a considerable waiting list to get into these groups at all of the facilities we visited. Not surprisingly, inability to enroll in an AOP or SOP group on a timely basis was the number one grievance against PSU.

We had a number of problems with the AOP/SOP group structure. For one thing, motivation to change past behavior was not a criterion for admission. The mental health literature is replete with studies showing that forced therapy does not work. For another, an inmate's poor

performance in group does not lead to his/her being discharged from the group. Also, while there is a general outline and some suggested materials, the curricula that are taught are not consistent throughout the system. Finally, the materials used are often not gender specific, which is particularly needed for female sexual offenders.

Our primary objection to the AOP/SOP groups, however, is that we were told they have been required by the Parole Board for the past 15 years, and yet, no one has ever evaluated them to see if they have any impact on recidivism. We recommend this occur as soon as possible. If the programs are not effective in reducing recidivism as currently structured, we recommend the MDOC change its criteria for admission to take into account both motivation and performance. Further, the curricula should be up-dated to include new and gender-specific materials that have proven effective elsewhere. A second evaluation should then occur. If the programs still have no impact on recidivism, they should be dropped.

If the MDOC decides to continue the AOP/SOP groups, a state-wide waiting list should be created to make the admission process more equitable. Further, the time spent in groups could be doubled to cut down on the time it takes to complete the process. This would double the number of inmates who could be served by these programs annually. We believe this is feasible, particularly if the referral process to CMHP is streamlined as suggested above.

NCCHC recommends that the MDOC: ***Evaluate the AOP/SOP impact on recidivism.***

NCCHC recommends that the MDOC: ***Change its criteria for admission into the AOP/SOP programs.***

NCCHC recommends that the MDOC: ***Create a state-wide waiting list into the AOP/SOP programs to make the admission process more equitable.***

Conflict of Interest in PSU: Forensics vs. Treatment. Psychologists working for the MDOC do both evaluations for the Parole Board and provide direct patient care. This situation puts the professional in an ethically untenable position. In his/her forensic role for the Parole Board, there is no patient-doctor therapeutic relationship and the psychologist's ethical obligation is to the State. In the latter role, the psychologist's ethical obligation is to the patient. It is difficult, if not impossible, for one person to fill both roles. We could argue that they should not even report through the same chains of command.

At the very least, NCCHC recommends that the MDOC: ***Identify psychologists who either provide patient care or perform evaluations for the Parole Board, but not both.***

The Dental Program

Organizational Structure. The organizational structure of the dental program is the least complex. All dental staff are employees of the MDOC. There are three regional dentists, who oversee the dental care in each region. They meet periodically to discuss the dental program. There is no dental director in Central Office, which appears to work fine.

Staffing and Credentials. The credentials of dentists and hygienists were checked. All were licensed, certified, and/or registered as required by law.

The Intake Process. The dental intake process works well, despite the inefficiencies associated with Serapis. Because the electronic dental record does not talk to Serapis, dental staff has to repeat the intake history. Any medications ordered by the dentists have to be entered into the dental record, entered again into Serapis, and then into the PharmaCorr program (see the Health Information section below for recommendations to address this problem).

New inmates coming into the MDOC are processed at Egeler (males) or at Scott (females). The dental intake process consists of inmates completing a medical history, having an x-ray taken, and

receiving a dental screening by a dentist. A full-mouth exam and x-rays are deferred until the inmate reaches his/her assigned facility. At that point, a treatment plan is developed and dental needs are prioritized.

According to BHCS policy, the dental intake is supposed to be completed within three days of arrival. NCCHC's standards allow 30 days for this process to be completed. We found most dental intakes were done within the first week of arrival.

Health Information. The management information system for the dental program is separate from Serapis, and the two programs are not linked. The dental computer system also is not linked to the pharmacy computer system. This results in duplication of efforts for the dental staff. For example, the reason inmates have to complete a new medical history for dental care, even though a complete receiving screening has already been done, is because dental staff does not have ready access to Serapis. Similarly, when dentists order medications, they not only chart in the dental record, but must then chart the order in the computerized pharmacy system and in Serapis.

NCCHC recommends that the MDOC: ***Print a copy of the receiving screening when it is completed, and forward a copy to the dental staff.***

NCCHC recommends that the MDOC: ***Explore the cost and feasibility of linking the computerized dental, medical, and pharmacy systems.***

Dentists' Productivity. We found similar problems with the dentists' productivity as we did with the MSPs'. Some dentists were seeing only five patients per day, on average, and some spent fewer than five hours per day seeing patients. It is difficult to determine the number of patients dentists should be able to see per day, because it all depends on the dental procedure. An extraction may well take an hour or more to do, while a simple filling may take only 20 minutes or so. Nonetheless, we know a dentist should be able to see more than five patients per day.

NCCHC recommends that the MDOC: ***Develop productivity guidelines for the dentists, and hold them accountable for meeting them.***

NCCHC recommends that the MDOC: ***Review its custody procedures regarding closing clinics during count and lunch, as well as ensure consistency throughout the system regarding which custody levels can be mixed in clinic waiting areas.***

While dental staff do a good job meeting inmates' urgent and emergent needs, routine services such as exams and fillings are often seriously delayed. In some Region III facilities, for example, we were told it could take up to two years to obtain routine care. All of the facilities we visited had dental waiting lists, but some were only two to three months behind rather than two years.

NCCHC recommends that the MDOC: ***Consider developing a state-wide dental waiting list to provide routine care on a more equitable basis.***

On the other hand, grievances about dental services were very low, usually only a handful each year in the facilities we visited.

Dental Water Sterility Checks. Owing to the fact that the hoses in dental chairs can accumulate bio-films that trap and breed bacteria, the water that comes out of the irrigator should be tested periodically. We found this was not being done at the Level V dental clinic in MBP. While we did not inquire about this at the other facilities, we recommend the MDOC do so.

NCCHC recommends that the MDOC: ***Periodically test water that comes out of dental irrigators at all its dental operatories.***

Summary of Recommendations

The National Commission on Correctional Health Care's comprehensive analysis of the Michigan Department of Corrections-Bureau of Health Care Services has led to a number of recommendations designed to improve the effectiveness and quality of the health care delivered to inmates, and to maximize efficiencies and strategies to reduce costs. These recommendations are summarized here to facilitate discussion and are presented in no particular priority.

NCCHC Recommendations of Systemic Changes

1. Convert some of its vacant RN positions to LPNs or CNAs. One RN position in each complex should be converted to a lab tech.
2. Develop a simplified physical for healthy individuals.
3. Specify, when the new managed care contract is written, that requests for off-site specialty care must be responded to within one week.
4. Aggressively recruit a physician for the vacant RMO position in Region III.
5. Explore ways to expand its use of telemedicine.
6. Add the first level review of off-formulary requests to the utilization management responsibilities in the new contract.
7. Determine whether the Parole Board will not release someone on chronic medications, and if false, educate the inmate population.
8. Research the issue of incinerating pharmaceutical waste with the appropriate environmental authorities to see if these regulations apply in Michigan, and change their practice if necessary.
9. Review the entire formulary to be certain that it contains all of the therapeutic categories and pharmacologic classes specified in the Model Guidelines for Medicare Prescription Drug Benefit, submitted by the United States Pharmacopeial Convention, Inc. on December 31, 2004.
10. Survey physicians practicing in the Michigan Department of Corrections to elicit further recommendations about other drugs they believe, on the basis of their experience, should be included in the formulary.
11. Promptly fill the initial order for the non-formulary medications, for up to a ten day period,

unless the ordering practitioner specifies "non-urgent."

12. Clarify the formulary.
13. Reinstitute its Pharmacy and Therapeutics Committee to provide an on-going mechanism for adding and deleting items from the formulary.
14. Issue medications directly from blister cards and document directly on the MAR as they administer the medications.
15. Build query tools locally using MS Access and ODBC.
16. Write a concise EHR implementation policy and follow it.
17. Obtain the data schema for the EHR.
18. Appoint committees for both custody and health care to examine paperwork requirements with an eye toward simplifying and streamlining the processes.
19. Build in approval of hiring and firing decisions of MSPs into its new provider contract, if it decides to continue to contract these positions out.
20. Train all nurses managing patients under protocols in the use of the nursing protocols, including assessment, documentation, intervention and follow-up, and be required to demonstrate competency in the use of each protocol.
21. Train all MSPs in NCCHC's clinical guidelines, and develop a clinical quality management program where charts of chronic care patients can be reviewed for compliance with these guidelines.
22. Train staff, particularly some providers, in the use of Serapis. Health staff would benefit from the additional training.
23. Seriously reconsider the advantages and disadvantages of continuing to contract out provider services.
24. Review its custody procedures regarding closing clinics during count and lunch, as well as ensure consistency throughout the system regarding which custody levels can be mixed in clinic waiting areas.
25. Create an effective CQI program that specifies how to conduct a formal CQI program, but does not specify what each facility should study.
26. Revisit its policy regarding transfers.

27. Develop a clear and reliable on-call system.
28. Develop an effective contract monitoring system and hold its health services vendor accountable for meeting the contract terms.
29. Print a copy of the receiving screening when it is completed, and forward it to the dental staff.
30. Explore the cost and feasibility of linking the computerized dental, medical, and pharmacy systems.
31. Develop productivity guidelines for the dentists, and hold them accountable for meeting them.
32. Consider developing a state-wide dental waiting list to provide routine care on a more equitable basis.
33. Periodically test water that comes out of dental irrigators at all its dental operatories.
34. Give serious consideration to consolidating all mental health services under a single entity to avoid the inefficiencies inherent in the current organizational structures as well as the potential for compromising the quality of mental health care.
35. Review its contract with the DCH to ensure that it continues to reflect the MDOC's needs regarding mental health services.
36. Appoint a contract monitor to oversee the mental health contract.
37. Evaluate the AOP/SOP's impact on recidivism.
38. Change its criteria for admission into the AOP/SOP.
39. Create a state-wide waiting list for the AOP/SOP groups to make the admission process more equitable.
40. Separate the forensic and treatment functions of its psychologist staff.
41. Improve timing and occurrence of post-discharge MSP appointments.
42. Ensure continuity of care in the transition from the inpatient to the ambulatory setting.
43. Consider exploring the possibility of transferring some hospitalists and emergency department staff to ambulatory care positions at those institutions where provider staff is urgently needed.
44. Explore reducing the emergency department capabilities to urgent care level equipment and staffing. Resuscitations are rarely run in the ER.
45. Consider having the hospitalist staff cover the urgent care-level facility if the emergency department is converted to that.

46. Implement a regularly scheduled CQI/peer review process, during which MSPs discuss challenging cases, critique each others' performance, and work together to identify and seize opportunities for improvement.
47. Develop site-specific procedures incorporating Serapis throughout the entire sick call process.
48. Determine which set of nursing protocols should be used to ensure consistency throughout the system.
49. Consider a CQI process study of the sick call system once all the patient history is entered into Serapis to determine the effectiveness of the overall process.
50. Provide periodic in-service training for nurses that addresses the use of protocols, medications, documentation, and physical assessment as related to the sick call process.
51. Develop a process to track trends in grievances and identify whether grievances were resolved or denied. Also, regional staff should hold facility staff accountable for timely responses to Step I health care grievances.
52. Maintain a log of corrective action plans that tracks the plans to completion. This will complete the documentation cycle for all mortality reviews.
53. Use of Serapis to document chronic care clinic visits should cease, and CCC visit documentation should revert to paper.
54. Develop an effective peer review process.
55. Develop a utilization management program to track appropriate ordering of laboratory and diagnostic tests, and train providers who exhibit a pattern of over- or under-ordering.
56. Clarify the guidelines for issuing non-medical items and appoint a single ombudsman to address these requests.

Conclusions

With rare exceptions, our reviewers were impressed with the dedication and professionalism of all of the staff we encountered: administration, custody, dental, nursing, medical, and mental health. We were also impressed with the extent to which such individuals worked together in spite of a fractured organizational structure. Most of the problems we identified were attributable to system

failures, rather than to individuals not doing their jobs. We believe the most pressing problem for the MDOC is to address the lack of MSP coverage and their generally low productivity. Until this occurs, access to care, quality of care, and health staff morale will continue to suffer. We also identified a number of inefficiencies in the current health care delivery system that should be addressed. The MDOC could realize considerable cost savings if some or all of our recommendations are implemented.

ADDENDUM

Review of the MDOC's Strategic Plan

The MDOC formed a Health Care Improvement Team that began working March of 2007. It includes representatives of the MDOC's Bureau of Health Care Services and Bureau of Fiscal Management, representatives from the Department of Management and Budget, Department of Community Health, Department of Information Technology, and consultants from the Michigan Public Health Institute. The Health Care Improvement Team has met as a full committee at least twice weekly since April. In addition there have been several work group committees meeting weekly to implement specific tasks in the strategic plan, in accordance with the timeline of the Strategic Plan. Through most of 2007, the MDOC has continued to work aggressively in redesigning the health services contracts it manages, and restructuring the organization to improve the management capability of the MDOC. These efforts are reflected in its Strategic Plan.

Following the submission of our draft report, we had the opportunity to review the Strategic Plan developed by the Michigan Prisoner Health Care Improvement Project. It is a comprehensive, thoughtful document that will go a long way toward addressing the major concerns raised in our report. A comparison of NCCHC's recommendations with the MDOC's Strategic Plan activities follows.

NCCHC Recommendation # 1: Recommends the conversion of some MDOC RN vacancies to LPN or CNA positions. One RN position in each complex should be converted to a lab tech position.

Strategic Plan Activity—Page 30 of the Strategic Plan is aligned with this recommendation. It requires that the MDOC conduct an assessment of the current nurse staffing plan; develop models to effectively accomplish patient care services; and identify Civil Service barrier issues to implement the needed changes.

NCCHC Recommendation #2: Recommends developing a simplified physical for healthy individuals.

Strategic Plan Activity—Page 25 of the Strategic Plan is partially aligned with this recommendation. It requires that the intake process be reviewed with the goal of improving the workflow and outputs for medical and mental health to improve the quality of health services.

NCCHC Recommendation #3: Recommends specifying that the new managed care contract require that off-site specialty care responses be scheduled within one week.

Strategic Plan Activity—Page 10 of the Strategic Plan is aligned with this recommendation. It requires the use of telemedicine to expand the pool of specialists and reduce the cost of consults; improve the timeliness and quality of specialty care; and reduce transportation costs. In addition, the MDOC has included this requirement in the terms of its contract extension with the current provider.

NCCHC Recommendation #5: Recommends exploring ways to use telemedicine.

Strategic Plan Activity—Pages 10 and 15 of the Strategic Plan are aligned with this recommendation. In addition, the contract extension with the current provider has financial incentives to increase the use of telemedicine. The MDOC may want to contact the Texas Department of Criminal Justice regarding their very effective use of telemedicine.

NCCHC Recommendation #6: Recommends adding a level of first review of off-formulary requests to the utilization management responsibilities in the new contract.

Strategic Plan Activity—Page 31 of the Strategic Plan is partially aligned with this recommendation. MDOC states that current staffing levels and expertise in this area are deficient

and will need to be increased. NCCHC recommends that the Strategic Plan include its specific recommendation to help reach the stated objective.

NCCHC Recommendation #7: Recommends that it be determined if it is true that the Parole Board will not release someone on chronic medications, and if false, educate the inmate population.

Strategic Plan Activity—Page 18 of the Strategic Plan is aligned with this recommendation. Appropriate community placement of the medically fragile is also the stated goal of the Governor. Recent articles in October 2007 in the Detroit Free Press provide extensive coverage of the pilot program for the medically fragile and its successes. The media coverage is also part of the communication strategy on page 32 of the strategic plan.

NCCHC Recommendations 9-14: Recommends a series of improvements to the business processes of the pharmacy contract and MDOC management delivery system for pharmacy.

Strategic Plan Activity—Page 14 of the Strategic Plan is partially aligned with the recommendation to address the need to improve the existing pharmacy contract. MDOC, through the current Request For Information (RFI) process for the health care services contract, has invited vendors to make recommendations in their proposals to improve the delivery system and utilization review for pharmacy. The RFI was posted on the MDOC web page.

NCCHC Recommendations 15-17: Recommends building query tools locally using MS Access and ODBC. Also, the MDOC needs to write EMR implementation policies, and obtain a data schema for the EMR.

Strategic Plan Activity—Page 13 of the Strategic Plan is fully aligned with this recommendation, though the proposed solution takes a different approach. MDOC has completed a RFI process to upgrade the existing electronic medical record system that includes more robust reporting tools. A RFP was posted on December 17, 2007 with the scheduled award date for an improved EMR

contract to be awarded in late January 2008. MDOC reports that the RFP significantly incorporates the recommendations of NCCHC.

NCCHC Recommendation 18: Recommends the appointment of committees for both custody and health care to examine paperwork requirements with an eye towards simplifying and streamlining the processes.

Strategic Plan Activities—Page 27 of the Strategic Plan is aligned with this recommendation. The Strategic Plan requires that an integrated reporting system be developed that will map all health care reports to identify those that are necessary and those that are not. The Strategic Plan further requires that the MDOC develop the capacity to analyze and interpret the reports. The MDOC also provided documentation on the recent reorganization of the Central Office management team for health services, which now includes an office of Quality Assurance (QA), whose duties include the development and monitoring of an integrated reporting system. The Quality Assurance office duties also support the development and training for Continuous Quality Improvement targeting both clinical and process procedures in health care.

NCCHC Recommendation 19: Recommends contract changes in the health services provider contract to include approvals of hiring and firing decisions of MSPs.

Strategic Plan Activities—Pages 10 and 11 of the Strategic Plan and the contracting objectives of MDOC appear to be aligned with the goals of this recommendation. The initial RFP for provider services includes the broad outlines for risk sharing, performance accountability, and compliance through a HMO model. Contract requirements along these lines appear to address the underlying concerns related to the need to approve MSP hiring and firing. While the initial RFP has been replaced with a new RFI to take into consideration non-HMO provider plans, the principals stated in the new RFI are consistent with the core objectives of the earlier RFP.

NCCHC Recommendations 20 and 21: Recommend the training of all nurses managing patients under protocols in the use of nursing protocols, including assessment, documentation, intervention, and follow-up, and that they be required to demonstrate competency in the use of each protocol.

Strategic Plan Activity—Page 23 of the Strategic Plan is significantly aligned with this recommendation. Through instituting a CQI program, the MDOC will be able to address the procedural and competency issues of the nursing staff. As a result of the Strategic Plan requirements, the MDOC has developed the Quality Assurance office to ensure accountability for this and related concerns.

NCCHC Recommendation # 22: Recommends training staff and providers in the use of the current EMR.

Strategic Plan Activity—Page 10 of the Strategic Plan addresses this recommendation through a plan to replace the existing EMR with a new EMR. The RFP for this effort has been posted on the Department of Management and Budget website and includes the requirement to provide training on the new system to all users through a phased roll-out period with a defined timeline.

NCCHC Recommendation #23: Recommends the MDOC seriously consider the advantages and disadvantages of continuing to contract out provider services.

Strategic Plan Activities—Page 10 of the Strategic Plan indicates that the MDOC is in alignment with this recommendation. The strategic plan objective to redesign the managed care contract is a serious consideration of changing the current system. The current RFI for health care services is posted on the MDOC website and invites providers to submit proposals for a wide variety of delivery services. While this does not include the option of the MDOC returning to Civil Service providers, it does invite discussion on all other options as distinct from the current system.

NCCHC Recommendation #24: Recommends a review of custody procedures that result in closing clinics during "count" and lunch, as well as to ensure system-wide consistency regarding mixing custody levels in the clinic waiting areas.

Strategic Plan Activities—Page 23 of the Strategic Plan appears to align with this recommendation. The development and implementation of a CQI program provides the opportunity to address the inefficiencies in the current system that result in closing clinics and mixing custody levels in waiting areas.

NCCHC Recommendation #25: Recommends creating an effective CQI program without micro-management at the facility level.

Strategic Plan Activities—Page 23 of the Strategic Plan aligns with this recommendation. The Strategic Plan states that the CQI initiative is designed to extend from senior management to front-line staff. In addition, the new Quality Administrator's duties will include the development of CQI programs, in consultation with the Chief Medical Officer, the Health Services Administrator, and Regional Health Administrators. The restructured organization for the Bureau of Health Care Services includes a Health Care Quality Improvement Team that will collaboratively develop CQI programs utilizing teams that train and work with front-line staff to develop solutions to problems identified through the activities of the Quality Assurance program.

NCCHC Recommendation #26: Recommends revisiting the policy regarding transfers.

Strategic Plan Activities—This is not specifically covered in the Strategic Plan, and, therefore, not in alignment with the NCCHC recommendations. The MDOC may wish to contact the New Jersey or the Washington DOC regarding their transfer policies.

NCCHC Recommendation #27: Recommends the development of a clear and reliable on-call provider system.

Strategic Plan Activities—Page 10 of the Strategic Plan appears to address this in the redesign of the health services RFP and the ensuing RFI. Based on the RFP and the RFI, it appears that the MDOC intends to incorporate improved provider oversight through the terms of the new contract. In addition, the MDOC reports that the contract extension with the current provider requires the development of a reliable on-call system.

NCCHC Recommendation # 28: Recommends the development of a contract monitoring system to hold vendors more accountable.

Strategic Plan Activities—Page 31 of the Strategic Plan is aligned with this recommendation. The Strategic Plan clearly shows the priority for contract management and vendor accountability. The MDOC reports that while budget requests are still in the early stages, additional positions for contract compliance are under consideration. In addition, the terms of the current provider contract extension have been improved to enhance compliance and accountability. The RFI under consideration is another example of the development of business processes that will require enhanced accountability and oversight of the health services vendor.

NCCHC Recommendation #29: Recommends printing a copy of the receiving screening when it is completed and sharing it with the dental staff.

Strategic Plan Activities—Page #27 of the Strategic Plan appears to be aligned with this recommendation, if the development of an integrated reporting system includes the specific task of sharing the receiving screening information with the dental providers.

NCCHC Recommendation #30: Recommends linking the computerized systems for medical, dental, and pharmacy.

Strategic Plan Activity—Page 13 of the Strategic Plan is aligned with this recommendation. The Strategic Plan requires updating the current EMR and the RFP now posted for bids addresses the concerns underlying this recommendation.

NCCHC Recommendations #31-33: Recommends the development of productivity guidelines for dentists and holding them accountable; the development of a statewide dental waiting list; and testing water from the dental irrigators.

Strategic Plan Activity—Page 23 of the Strategic Plan is in alignment with this recommendation. The Strategic Plan requires the development of a CQI process for all clinical and procedural services, including dental.

NCCHC Recommendations #34-40: Recommends giving serious consideration to consolidating mental health services under a single entity.

Strategic Plan Activities—Page 16 of the Strategic Plan is in alignment with this recommendation. The process outlined in the Strategic Plan will review the current system and the statutory barriers to changing the mental health care delivery system. Through its Health Care Improvement Team, the MDOC has convened a multidisciplinary group of 25 members from government agencies and community groups to conduct the review. Their recommendations are expected by April 2008. MDOC officials state that recommendations from NCCHC will be included in the review process.

NCCHC Recommendation #41: Recommends improving the timing and occurrence of post-discharge MSP appointments.

Strategic Plan Activities—Page 23 of the Strategic Plan is aligned with this recommendation. The CQI for provider processes to improve quality should include this recommendation.

NCCHC Recommendations #42-43: Recommends ensuring continuity of care in the transition from an inpatient to an ambulatory care setting.

Strategic Plan Activities—Page 23 of the Strategic Plan provides for quality of care management through CQI in all regions. Page 28 addresses the more specific quality improvement issues at the Duane Waters Health Center. The management restructuring by MDOC to institute a Quality Assurance Administrator will insure that CQI and DWHC improvement efforts are monitored and reported on. In all these aspects, the Strategic Plan is in alignment with this recommendation.

NCCHC Recommendation #44-45: Recommends reducing the ER capabilities at DWHC to urgent care. The MDOC should also consider utilizing hospital staff for the ER coverage, if it can be converted to urgent care.

Strategic Plan Activity—Page 28 of the Strategic Plan is aligned with this recommendation, though more specificity would be beneficial. The Strategic Plan requires an evaluation of the role of the DWHC, which could include converting the ER to an urgent care operation.

NCCHC Recommendation #46: Recommends implementing a regular peer review process for MSPs.

Strategic Plan Activities—Page 23 of the Strategic Plan is aligned with this recommendation. The development of a system-wide CQI program, with leadership from the Chief Medical Officer, the Health Services Administrator, and the Quality Administrator could certainly result in the implementation of peer review processes.

NCCHC Recommendation #47: Recommends developing site-specific procedures incorporating the EMR throughout the entire sick call process.

Strategic Plan Activities—Page 13 of the Strategic Plan is aligned with this recommendation. The Strategic Plan calls for the development of a new EMR to be a system-wide information tool that successfully integrates all aspects of the delivery system.

NCCHC Recommendation #48: Recommends the development of a consistent set of nursing protocols that can be used throughout the system.

Strategic Plan Activities—Page 23 of the Strategic Plan is aligned with this recommendation. The Strategic Plan to develop CQI through the Quality Assurance office will likely result in the development of uniform nursing protocols that can be monitored and compared with best practice models.

NCCHC Recommendation #49: Recommends a CQI process to study the sick call system.

Strategic Plan Activities—Page 23 of the Strategic Plan is aligned with this recommendation. The development of system-wide CQI processes for health care through the Quality Assurance office would likely focus on the sick call process to improve health outcomes overall and reduce costs.

NCCHC Recommendation #50: Recommends periodic in-service training for nurses that addresses the use of protocols, medications, documentation, and physical assessments as related to the sick call process.

Strategic Plan Activities—Page 29 of the Strategic Plan, though not specific to this recommendation, appears to align with it. The Strategic Plan requires team-building processes that can facilitate the cultural change from a silo-oriented system to a more collaborative structure. In-

service training can serve to reinforce that change. The Strategic Plan would benefit from more specificity in this regard.

NCCHC Recommendation #51: Recommends a grievance process that tracks the final disposition of the complaint and holds staff more accountable for timely responses.

Strategic Plan Activities—Page 27 of the Strategic Plan is in alignment with this recommendation, though the Strategic Plan would benefit from more specificity with respect to the grievance reporting system.

NCCHC Recommendation #52: Recommends the development of a log of corrective action plans that tracks the plans through to completion. This will complete the documentation cycle for all mortality reviews.

Strategic Plan Activities—This is not currently addressed in the Strategic Plan. The plan to develop an integrated reporting system would benefit from the addition of this recommendation.

NCCHC Recommendation #53: Recommends that the use of the EMR to document chronic care clinic visits should cease, and the CCC visit documentation should revert to paper.

Strategic Plan Activities—The EMR upgrade will include a more user-friendly system that will enhance the CCC documentation.

NCCHC Recommendation #54: Recommends a peer review process be developed.

Strategic Plan Activities—Page 23 of the Strategic Plan is aligned with this recommendation through the implementation of a CQI process and a Quality Assurance program. Though not specifically mentioned in the strategic plan, a peer review process is a useful tool to enhance quality improvement.

NCCHC Recommendation #55: Recommends the development of a utilization management program.

Strategic Plan Activities—Page 31 of the Strategic Plan is aligned with this recommendation through the development of a stronger contract compliance operation. In addition, the proposed contract terms for a new RFP for health services require improved utilization management. Finally, the development of a contract for an independent third party review will focus on utilization management. In the process of developing the RFP for health care services, the MDOC reports that it has engaged the services of a national actuary firm to further support its ability to monitor utilization through claims data.

NCCHC Recommendation #56: Recommends clarifying guidelines for issuing non-medical items and the appointment of a single ombudsman to address these requests.

Strategic Plan Activities—This recommendation is not addressed in the Strategic Plan.

Conclusions

We commend the MDOC and BHCS administrations for the positive way they have embraced our recommendations and those of other consultants. If this strategic plan and the recommendation of our report are implemented, the MDOC's health delivery system can, once again, become a leader in the correctional health care field.

APPENDIX A

The National Commission on Correctional Health Care

The National Commission on Correctional Health Care (NCCHC) is a not-for-profit, 501(c)(3) organization committed to improving the quality of care in our nation's prisons, jails, and juvenile detention and confinement facilities. NCCHC is supported by the major national organizations representing the fields of health, law, and corrections.

In the early 1970s, the American Medical Association studied the conditions in jails. Finding inadequate, disorganized health services and a lack of national standards to guide correctional institutions, the AMA, in collaboration with other organizations, established a program that in the early 1980s became the National Commission on Correctional Health Care. The National Commission's early mission was to evaluate, formulate policy, and develop programs for an area clearly in need of assistance.

Today, NCCHC's leadership in setting standards for health services and improving health care in correctional facilities is widely recognized. Its *Standards for Health Services* are written in separate volumes for prisons, jails, and juvenile confinement facilities. The *Standards* represent NCCHC's recommended requirements for the management of a correctional health services system, covering the general areas of care and treatment, health records, administration, personnel, and medical-legal issues. The *Standards* have helped the nation's correctional and detention facilities improve the health of their inmates and the communities to which they return; increase the efficiency of their health services delivery; strengthen their organizational effectiveness; and reduce their risk of adverse legal judgments.

As well as establishing standards, each year NCCHC sponsors correctional health care's premier educational and scientific conferences. Each fall, the annual National Conference on Correctional Health Care attracts physicians, nurses, psychologists, scientists, and other health care providers and researchers to learn of contemporary practices and issues in the field of correctional health care.

Each spring, the Clinical Updates conference provides the latest information on infectious and chronic disease research and treatments, as well as other timely clinical issues in correctional health care.

NCCHC also provides technical assistance and quality improvement reviews on correctional health care management and policy issues, and develops and publishes research on the correctional health care field. In addition, NCCHC operates the national certification program for correctional health professionals, sponsors other educational and training programs, and publishes numerous support texts.

NCCHC SUPPORTING ORGANIZATIONS

Academy of Correctional Health Professionals
American Academy of Child & Adolescent Psychiatry
American Academy of Pediatrics
American Academy of Physician Assistants
American Academy of Psychiatry & the Law
American Association for Correctional & Forensic Psychology
American Association of Public Health Physicians
American Bar Association
American College of Emergency Physicians
American College of Healthcare Executives
American College of Neuropsychiatrists
American College of Physicians
American College of Preventive Medicine
American Correctional Health Services Association
American Counseling Association
American Dental Association
American Diabetes Association

American Dietetic Association

American Health Information Management Association

American Jail Association

American Medical Association

American Nurses Association

American Osteopathic Association

American Pharmacists Association

American Psychiatric Association

American Psychological Association

American Public Health Association

American Society of Addiction Medicine

John Howard Association

National Association of Counties

National Association of County and City Health Officials

National Association of Social Workers

National District Attorneys Association

National Juvenile Detention Association

National Medical Association

National Sheriffs' Association

Society for Adolescent Medicine

Society of Correctional Physicians

APPENDIX B

NCCHC's Consultants' Biographies

B. Jaye Anno, PhD, CCHP-A is a criminologist specializing in correctional health administration and compliance with national correctional health care standards. She operates a correctional health care consulting firm, Consultants in Correctional Care. Dr. Anno is an experienced researcher, lecturer, and author in correctional health care. She is the editor and principal author of the major reference book for the field, *Correctional Health Care: Guidelines for the Management of an Adequate Delivery System*, 2001 edition, and has written numerous other articles and reports on correctional health care topics. She is a past editor of the *Journal on Correctional Health Care* and former author of the "Q & A on NCCHC Standards" column for the quarterly newspaper, *CORRECTCARE*. Dr. Anno was recognized by the Institute of Medicine of the National Academies of Sciences for her role in developing correctional health care, receiving the Gustav O. Lienhard Award for the Advancement of Personal Health Services. Dr. Anno received the Distinguished Service Award of the American Correctional Health Services Association and the NCCHC's Award of Merit. In 1999, she received the "Award of Excellence in Correctional Health Care Communications" from the National Commission on Correctional Health Care. Dr. Anno received her PhD from the University of Maryland.

R. Scott Chavez, PhD, MPA, CCHP-A, PA is vice-president for the NCCHC and served as project manager for the NCCHC-NIC's *A Comprehensive Assessment of Medical Care in the Wisconsin State Prison System*. Dr. Chavez was the coordinator for the NCCHC Congressional study on *The Health Status of Soon-To-Be-Released Inmates* project. His responsibilities with the NCCHC include technical assistance on health care standards, quality improvement, risk management, and organizational development in correctional health care systems. He currently co-authors the "Q & A on NCCHC Standards" column for the quarterly newspaper, *CORRECTCARE*. Dr. Chavez was the principal investigator for a NCCHC-CDC cooperative agreement on "Hepatitis Curricula for Correctional Officers and Inmates" and the principal author for the "Tobacco Cessation Curriculum for Correctional Populations." He has given numerous presentations and has authored chapters on

evidence based medicine, public health, and physician assistant utilization in corrections. Dr. Chavez received his PhD from Walden University, with a dissertation on organizational factors correlated to quality public and private correctional health care systems. He has a master's degree in public administration from the University of Nebraska, Omaha and a PA credential from Dartmouth Medical School.

Rochelle Daneluk, RN, MPA, CCHP is a certified correctional health care professional and lead surveyor for the NCCHC. As a registered nurse, Mrs. Daneluk held several health care administrative positions in the Michigan Department of Corrections, Bureau of Health Care Services. Prior to retirement, she was the Infectious Disease Coordinator for five years. Her responsibilities included the statewide coordination of Infectious Disease Control and Prevention for prisoners and employees, focusing on HIV/AIDS, hepatitis, tuberculosis and other communicable diseases. Mrs. Daneluk, in collaboration with the Michigan Department of Community Health, was one of the principle coordinators for the statewide Hepatitis B Vaccination Project for MDOC prisoners. She received the "ASTHO 2000 Vision Award" in recognition of a commitment to excellence from the Michigan Department of Community Health. She designed and implemented a statewide nursing preceptorship program, with the assistance of MDOC nursing directors, for newly hired nurses entering the Michigan correctional health system. Since 1988, she has presented several workshops on topics related to correctional health care for the NCCHC national conferences. Mrs. Daneluk earned a Masters Degree in Public Administration and a Bachelors of Science in Health Studies from Western Michigan University.

David Hellerstein, MD, PhD retired in July 2006, as Chief Medical Officer for Medical and Public Health Programs, Division of Correctional Health Care Services, California Department of Corrections and Rehabilitation (CDCR). His responsibilities at CDCR included clinical guideline development, clinical quality monitoring programs, court mandated statewide healthcare policy and procedure development, physician training, pharmaceutical formulary management, and HIPAA compliance. Dr. Hellerstein led the health care services team that developed, piloted, and implemented the computer-based Inmate Patient Scheduling, Tracking, and Quality Monitoring

System used throughout the California prison system. He continues to serve as a consultant to CDCR. Dr. Hellerstein has published on correctional health care in *CORRECTCARE*. and the *Journal of Correctional Health Care*. He sits on the Clinical Guidelines Committee of the National Commission on Correctional Health Care. Dr. Hellerstein earned his bachelor's and master's degrees from Harvard University, his PhD from Stanford University, his MD from the University of California, San Diego, and completed his residency at the University of California, San Francisco. He is board certified in internal medicine and emergency medicine.

Marcia Jenkinson, RN formerly served as an auditor for the Michigan Department of Corrections Bureau of Health Care providing quality review audit services for consent decree cases and Michigan Department of Corrections facilities to promote the delivery of health care services to prisoners. As Litigation Coordinator for Regional Management Team members, she was recipient and responder to prisoner litigation to concurrent work with the Office of the Attorney General, State of Michigan. Along with specialization in audit performance and review, she acted as Grievance Coordinator for advanced level prisoner grievances within her region. Marcia was the Continuous Quality Improvement Coordinator for two regions within the state and served as resource liaison between staff and management as facilitator. Her responsibilities also included course development and training staff in Quality Assurance. She has been a member of Women in Corrections lecturing on the Unique Health Care Needs of the Female Offender, was a committee member for the youthful offender study, and has hosted various "Wellness" booths promoting employee health care. Marcia graduated from Oakland Community College in Nursing, and attended the University of Michigan for Total Quality Management graduating as a certified trainer. Marcia was presented with the "2001 Quality Excellence Award" by the Bureau of Health Care, and is currently employed with Oakland County, State of Michigan.

Lambert King, MD, PhD is Director of Medicine at Queens Hospital Center. He attended the University of Chicago where he received his MD degree and a PhD degree in Experimental Pathology. He is a recipient of the HIV Clinical Excellence Award from the New York State AIDS Institute. Dr. King has published studies on the epidemiology of diseases, including tuberculosis and

epilepsy, in jails and prisons and the organization and improvement of health services within correctional institutions. He is principal investigator for an NCCHC-sponsored national project to identify best practice models for continuity of care between prisons and local communities.

Joseph Paris, MD, PhD, CCHP-A. Joe Paris obtained an MD from Boston University in 1975. After four years of residency in internal medicine in Boston and in Worcester, Massachusetts, he became a Diplomate of the American Board of Internal Medicine in 1979. After a few years in private practice, Joe entered correctional medicine in the Florida DOC in 1985 and treated thousands of correctional patients in various Florida State prisons. He was the first Florida correctional physician to prescribe AZT to an inmate. In 1991 he became Medical Director of the Florida Prison Hospital in Lake Butler where he treated inpatients and outpatients from all of Florida prisons. In 1995, he came to the Georgia Department of Corrections in Atlanta and became Statewide Medical Director, a title he retained in 1997 when the Medical College of Georgia entered a partnership with the Georgia Department of Corrections for the delivery of correctional health care throughout the Georgia prisons. He retired from the DOC at the end of 2005 and began part-time public health work with HIV patients. Joe is a founding member and Past President of the Society of Correctional Physicians (SCP). He is also Past President of the Florida Chapter of the American Correctional Health Services Association and a Board Member of the Certified Correctional Health Professionals and of the Correctional Medical Institute. In 2002, he received the Armond Start Award, the highest commendation of the SCP. He is the author of dozens of specialized correctional publications and has presented his work in over a hundred national meetings. He is the author of several chapters in the textbook *Clinical Care in Corrections,* first published in 1998 and reedited in 2005. Joe is in demand as a correctional health care consultant, a lecturer, a surveyor of the National Commission on Correctional Health Care, and as an expert witness in correctional health care litigation.

William Reinbold, MD served seven years as the Director of Mental Health at the then 7,200 inmate Orleans Parish Prison (New Orleans' municipal population area). This preceded his now six-year tenure as the Director of Psychiatry at Angola (Louisiana's maximum security facility). He has

served in over seventy NCCHC accreditation and technical assistance audits. He has been involved as well in many other audits in various states based on his full time correctional experience and extensive work as a correctional systems evaluator. He is American Board of Psychiatry and Neurology certified in General, Forensic, and Child and Adolescent Psychiatry. He is an Assistant Professor of Clinical Psychiatry in the LSU Psychiatry Department.

Andrew Savicky, PhD is a forensic psychologist specializing in correctional mental health care and treatment. He is presently the Chief Psychologist and Director of Mental Health for the New Jersey Department of Corrections. Dr. Savicky has over thirty years of experience in psychology, and is a sought after lecturer and presenter at numerous professional conferences and meetings. He is the coauthor of the book *A World Without Tears* which examined the mind of the infamous Charles Rothenberg case for the National Burn Victim Foundation. Dr. Savicky has provided consultation to other states on correctional policies and procedures, with a focus on compliance with NCCHC standards. His expertise on suicide prevention; behavior support plans for hard to manage inmates; sex offender treatment; psychological testing; and women's issues in corrections; has yielded numerous consultations to colleagues in the corrections field. Recently he returned from a tour of duty in the combat zone of Kirkuk, Iraq as a Lt Col., and Chief of Life Skills. Dr. Savicky received his PhD from the Graduate Faculty of the University of Pennsylvania and holds an MA in National Security and Strategic Studies from the US Naval War College.

Ralph Woodward, MD is a physician specializing in correctional medicine and has been Director of Health Services for the New Jersey State Department of Corrections since 2004. He was the software developer for NCCHC's Analysis of Chronic Care Disease – a Robert Wood Johnson funded project. Dr. Woodward has authored two chapters on electronic health records in correctional medicine in *Clinical Practice in Correctional Medicine 2nd edition* and *Public Health Behind Bars: From Prisons to Communities*. Dr. Woodward earned his BS degree from Rutgers University, a Master's in Biology from Stroudsburg University, a medical degree from UMAN, and a fellowship in infectious diseases from Seton Hall University.

APPENDIX C

NCCHC's Chronic Care Guideline Worksheets

DIABETES CLINICAL CARE ASSESSMENT Facility:

Record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Patient's Chart ID Number:																	
Baseline laboratory tests on the initial assessment:	***"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated***																
Glycolated hemoglobin performed?																	
Is HgbA1c correctly used to assess degree of control?																	
Fasting lipid profile ordered?																	
Is fasting lipid profile accurately evaluated and treated?																	
If Microalbuminuria is indicated, was it accurately assessed?																	
If serum creatinine is indicated was it accurately assessed?																	
If Patient is >40 yo is EKG peformed?																	
Is electrocardiogram accurately evaluated?																	
Is thyroid function indicated?																	
If yes, is thyroid function accurately assessed?																	
Routine	***"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated***																
Is degree of control consistent with clinical findings?																	
Is clinical status consistent with clinical findings?																	
Are F/U visits appropriately scheduled? (e.g. good control q 4 mo)																	
If ASA therapy is clinically indicated, is it started?																	
Is insulin appropriately monitored?																	
If ACE inhibitor is indicated, is it started?																	
Is tobacco use recorded?																	
Pt counseled to stop smoking?																	
Is exercise/activity recorded?																	
Counseled to increase?																	
Is hyperlipidemia recorded?																	
Is hyperlipidemia aggressively treated?																	
Is hypertension recorded?																	
B/P aggressively controlled to less than 130/80 mm/Hg?																	
Are foot exams recorded at most recent visit?																	
Annual	***"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated***																
IF patient been in system for more than a year, are:																	
Annual tests of microalbuminuria completed?																	
Dilated funduscopic eye examination performed annually?																	
BUN/creatinine performed annually?																	
Has pneumococcal vaccine been offered?																	
In your opinion is this patient's clinical management appropriate?																	

HYPERTENSION CLINICAL CARE ASSESSMENT Facility:

Record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Patient's Chart ID Number:																	
Initial	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
History is accurately assessed?																	
Are two or more blood pressure measurements separated by																	
2 minutes (either supine or seated) obtained?																	
Were two or more blood pressure measurements after																	
standing for at least 2 minutes evaluated?																	
Was verification of BP readings done in contralateral arm?																	
Is the patient's Ht and Wt accurately assessed?																	
Is funduscopic examination for hypertensive retinopathy recorded?																	
Are carotid bruits, distended veins, or thyroid gland assessed?																	
Was a urinalysis (UA) evaluated?																	
Was a complete blood count (CBC) appropriately evaluated?																	
Were K+ NA, creatinine, fasting glucose, total cholesterol																	
and HDL obtained and appropriately assessed?																	
Was a fasting lipid profile appropriately assessed?																	
Was a 12-lead electrocardiogram accurately evaluated?																	
Was a creatinine clearance indicated and evaluated																	
Was a microalbuminuria, 24-hour urinary protein assessed?																	
Was a blood calcium evaluated?																	
Was a uric acid evaluated?																	
Was a low-density lipoprotein (LDL) cholesterol indicated?																	
If a glycosolated hemoglobin indicated, was it assessed?																	
If a thyroid-stimulating hormone indicated, was it assessed?																	
If a limited echocardiography is indicated, was it assessed?																	
Routine	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Appropriate action is taken for incidental blood pressure readings																	
Is degree of control recorded on routine visits?																	
Is status recorded on routine visits?																	
Is the frequency of patient visits based on physical or lab findings?																	
The clinical record indicates behavioral modification to:																	
Reduce weight through caloric restriction																	
Increase aerobic physical activity																	
Moderate use of dietary sodium																	
Increase dietary intake of potassium																	
Maintain adequate dietary calcium and magnesium																	
Decrease dietary fats																	
Reduce tobacco use for overall cardiovascular risk reduction																	
In your opinion is this patient's clinical management appropriate?																	

ASTHMA CLINICAL CARE ASSESSMENT Facility:

Record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Patient's Chart ID Number:																	
Initial	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Is initial history complete? (i.e.: inhaled steroids, steroids,																	
beta-agonist inhalers, sinus infections, allergies, seasonal																	
attacks, smoking history, and gastrointestinal reflux)																	
Is personal best peak flow measure recorded?																	
Lungs appropriately assessed?																	
Peak expiratory flow measurement appropriately evaluated?																	
A baseline CXR evaluated?																	
Based on the initial data is pt's disease accurately categorized?																	
(mild, moderate or severe)																	
Does MPL contain the diagnosis AND categorization of severity?																	
Routine	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Is the frequency for F/U visits appropriate for degree of control?																	
Are vital signs assessed?																	
Is a peak flow meter obtained and evaluated at each visit?																	
Is a lung exam documented?																	
Is the degree of control appropriate to the clinical findings?																	
Is the status in relationship to the previous visit being evaluated?																	
When indicated, is smoking cessation discussed with the patient?																	
When indicated, is a smoke-free housing environment offered?																	
Annual	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Is the influenza vaccine offered annually during flu season?																	
In your opinion is this patient's clinical management appropriate?																	
COMMENTS																	

HIV CLINICAL CARE ASSESSMENT Facility:

Record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Patient's Chart ID Number:																	
Initial	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Is the initial history adequate?																	
Is the initial PE adequate?																	
Are inital diagnostic studies obtained? (i.e., CD4 count, viral load																	
CBC, liver enzymes, hepatitis B and C antibodies,																	
a tuberculin skin test, and RPR)																	
Are inital diagnostic studies appropriately evaluated?																	
Are negative TSTs retested if the pt's CD4 count rises?																	
Are the CD4 counts routinely obtained?																	
Are the CD4 counts are assessed with the clinical picture and																	
appropriately managed?																	
Was the CMV and toxoplasma antibodies accurately evaluated?																	
Was a baseline CXR assessed?																	
Was categorization of severity of disease based on clinical picture?																	
For new conversions, was treatment started within 6 months																	
of HIV seroconversion?																	
Follow Up	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Is F/U frequency based on severity of disease and drug toxicities?																	
Is pt appropiately evaluated and managed for toxicity to therapy?																	
Is pt evaluated for new opportunistic infections or cancers?																	
Is HIV viral load and CD4 count based on pt's clinical picture?																	
Is an annual influenza vaccination provided?																	
Is a pneumococcal vaccination given at least one time?																	
Is a second pneumococcal vaccination given after 5 years?																	
If hepatitis B vaccination is warranted, is it provided?																	
If hepatitis A vaccination is warranted, is it provided?																	
Are women screened every 6 months for cervical cancer (PAP)?																	
Is a yearly rectal exam in men obtained?																	
Are patients assessed for ophthalmologic exam every 6 months?																	
Is referral to mental health specialists done when it is appropriate?																	
Are mental health evaluations clinically appropriate?																	
Are antiretroviral regimens appropriately managed?																	
Is pt ed and involvement in therapeutic decisions documented?																	
Is HIV specialist managing HIV care?																	
Is the degree of control being assessed?																	
Is the the status in relationship to the previous visit being evaluated?																	
Is the frequency for F/U visits appropriate for category of HIV?																	
In your opinion is this patient's clinical management appropriate?																	

EPILEPSY CARE ASSESSMENT Facility:

Record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Patient's Chart ID Number:																	
Initial Assessment	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Prior history of Epileptic Seizures?																	
Have seizures been distinguished as a result from toxic,																	
metabolic, or substance abuse or drug withdrawal?																	
Was last documented seizures 2 to 5 years ago?																	
If so, has the practitioner considered stopping medications?																	
Is classification of epilepsy based on International Classification																	
of Epileptic Seizures?																	
An electroencephalogram (EEG) obtained?																	
New onset of seizure?	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
If yes, was a MRI or CT study of the brain ordered?																	
Was the MRI or CT appropriately evaluated?																	
If an MRI is unavailable, was an EEG and blood tests?																	
(glucose, electrolytes, blood urea nitrogen, creatinine,																	
magnesium, phosphorus, calcium, etc.) to exclude 2nd causes																	
Other studies considered? (e.g., lumbar puncture or cardiac studies)																	
If diagnosis is uncertain due to drug abuse or other causes is																	
a neurology consultation obtained?																	
Management Overview	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Neurologist consult appropriate for refractory or uncontrolled sz.																	
Neurologist consult obtained?																	
Does practitioner consider monotherapy?																	
Exact seizure type identified in problem list?																	
Substance abuse history documented?																	
A thorough neurological examination documented?																	
Is the epilepsy differentiated from ETOH or other drug withdrawal sz?																	
Is the degree of control appropriate to the clinical findings?																	
Is frequency of follow-up visits appropriate to clinical findings?																	
DOT considered for fair or poor degree of control?																	
Are serum drug levels, CBC, LFT monitored?																	
Is pt assessed for drug interactions?																	
Is pt with documented SZ assigned to lower bunk?																	
If pt SZ free for 2 or more years, are alternatives discussed?																	
In your opinion is this patient's clinical management appropriate?																	

HIGH BLOOD CHOLESTEROL ASSESSMENT Facility:

Record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Patient's Chart ID Number:																	
	"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated																
Is pt male 35 yo or older? -OR- Pt is women 45 years and older?																	
Does pt have diabetes or HTN and is 20 years of age or older?																	
Baseline screening performed?																	
Screen performed every five years thereafter?																	
Recommended screening test																	
fasting blood lipid panel that includes total cholesterol,																	
HDL cholesterol, triglycerides, and LDL cholesterol.																	
If fasting lipid levels are not practical, is a total cholesterol test done?																	
Is the total cholesterol above 200?																	
Is yes, F/U fasting blood lipid panel after a 9- to 12-hour fast?																	
Is 2nd dyslipidemia R/O before initiation of lipid lowering therapy?																	
Is overall therapy guided by baseline LDL cholesterol level?																	
Is overall therapy guided by pt risk factor assessment?																	
Is patient's risk group appropriate to clinical findings?																	
Regardless of risk, is low-saturated-fat diet started?																	
Is drug therapy appropriate to clinical findings?																	
Moderate exercise program of 30 minutes 3x week encouraged?																	
If indicated, counseling to avoid tobacco products is documented.																	
Is the degree of control appropriate to the clinical findings?																	
Is frequency of follow-up visits appropriate to clinical findings?																	
Follow-up Visits	*"Y" if accurately evaluated / "N" if not accurately assessed / "NO" if not obtained / "NA" if not indicated*																
Does health record have documentation to reinforce reducing:																	
weight loss																	
smoking cessation																	
regular exercise																	
heart-healthy diet																	
If indicated, are the following assessed?																	
diabetes																	
hypertension																	
coronary heart disease																	
nephrotic syndrome																	
liver disease																	
hypothyroidism																	
Is blood testing performed when clinically indicated?																	
Medication is reviewed on each F/U visit?																	
In your opinion is this patient's clinical management appropriate?																	

APPENDIX D

MORTALITY REVIEW DETAILS

Duane Waters Health Center

Case 1	Date of Death:	38895	Age:	80	Gender:	Female

Pre-morbid care:	Severe advanced dementia case at DWHC for 10 years due to normal pressure hydrocephalus (NPH) evolving for many years. He also may have had a stroke in 1995. Incidental history of coronary artery disease and post myocardial infarction. There was no linear record or historical evidence of when he developed the normal pressure hydrocephalus. He was never considered for a shunt. Infirmary-style care was given for his dense organic brain syndrome.
Morbid care:	All at DWHC
Events during death process:	Developed pneumonia at DWHC, did not respond to antibiotics and expired quietly despite supportive care.
Mortality Review:	Conducted by Central Office medical staff. Performed on December 20, 2006, nearly 6 months after the death. No findings were made. No actions were taken. Case closed the same day.
COMMENT:	The MDOC Committee should have considered the matter of why the dementia was not worked up at onset. In some cases, dementia progression may be halted by the performance of a ventricular shunt, which may be effective in normal pressure hydrocephalus. The MDOC Committee should have considered additional education and training at the institution where the dementia work-up was omitted. NCCHC's standards require mortality reviews to occur within 30 days of death.

Southern Michigan Correctional Facility

Case 2	Date of Death: 38997	Age: 61	Gender: Male

Pre-morbid care:	This male inmate died of Methicillin-resistant *Staphylococcus Aureus* (MRSA) pneumonia and end-stage Chronic Obstructive Pulmonary Disease. The massive records on hand showed multiple admissions to hospitals for exacerbation of chronic obstructive pulmonary disease. Although he had been in prison since 2001, most of the time he was at "C" Unit (an infirmary-like facility). He was on multiple medications for chronic obstructive pulmonary disease, plus oxygen. No evidence of chronic care visits was found in the extensive C-Unit record. However, it is policy to have all C-Unit patients seen by a physician monthly.
Morbid care:	All at C-Unit plus a number of frequent hospitalizations.
Events during death process:	He was at Foote Hospital in Jackson, MI, in a secure unit. He had an exacerbation of chronic obstructive pulmonary disease again and the hospital staff tried to turn him around. However, the combination of MRSA pneumonia and chronic obstructive pulmonary disease could not be overcome.
Mortality Review:	Conducted by regional office. No concerns found; however, it was noted that the patient did not receive his Synthroid (thyroid medication) for 5 days. This would not have contributed to his death.
COMMENT:	The mortality review findings were discussed with health care nurses at a regional meeting in January 2007.

G. Robert Cotton Correctional Facility

Case 3	Date of Death: 38785	Age: 49	Gender: Male
Pre-morbid care:	Cause of death was metastatic lung cancer. Prior to diagnosis, he was at the Canton Facility. Evidence of chronic care was found. As part of his routine follow-up, a chest X ray was done on January 17, 2006. It showed a hilar mass.		
Morbid care:	By the time he was seen by oncology, metastases were in evidence. He received chemotherapy, but eventually he stopped responding.		
Events during death process:	The patient received terminal care at DWHC, failed to respond, and expired.		
Mortality Review:	Central office conducted the review. Only nursing issues were found.		
COMMENT:	Nursing issues charted as "communicated to region." No details were described.		

G. Robert Cotton Correctional Facility

Case 4	Date of Death: 38773	Age: 52	Gender: Male
Pre-morbid care:	This 52 year old male died of metastatic colon cancer. While at Cotton he was treated for emphysema, Hepatitis C, and hypertension. On February 1, 2006 he developed abdominal pain and increased girth. He was sent to the emergency department and was admitted. Metastatic colon carcinoma was found by exploratory laparotomy. No evidence of colonoscopy at age 50 or yearly stool guaiacs.		
Morbid care:	Transferred to DWHC for terminal care.		
Events during death process:	Died at DWHC after hospice-type care delivered.		
Mortality Review:	Performed by central office medical staff. No observations were made on the lack of screening colonoscopy or stool guaiacs. One observation was made on nursing issues. No copy of a regional mortality review was found.		

COMMENT:	Nursing issues "will be addressed by Region II Nursing Director." However, central office medical staff should have noted the lack of screening colonoscopy at age 50 and the lack of yearly stool guaiacs.

Parnall Correctional Facility

Case 5	Date of Death: 38812	Age: 92	Gender: Male
Pre-morbid care:	He had a positive PPD since 1995. He refused chest X ray and medical exam on August 10, 2002. A suspicious chest X ray and blood in sputum were found on September 3, 2002. A lung mass was found on chest CT on October 10, 2002. He refused bronchoscopy on November 6, 2002.		
Morbid care:	Transferred to DWHC for care of terminal lung cancer. At C-Unit until March 21, 2005, he received palliative care. He declined chemotherapy or surgical interventions.		
Events during death process:	After March 21, 2005, palliative care was continued at DWHC. He gradually lost weight and strength, and passed away.		
Mortality Review:	Central Office conducted the review and no issues were found.		
COMMENT:	Central Office medical staff should have found that, following the finding of a suspicious chest X ray and blood in sputum for a positive tuberculin skin test the patient should have been placed in isolation pending the harvesting of negative sputum for acid-fast bacillus.		

G. Robert Cotton Correctional Facility

Case 6	Date of Death: 38821	Age: 77	Gender: Male
Pre-morbid care:	JCF and JCS: He had his chronic care visits at the Cardiac /Hypertension clinic, where his blood pressure was controlled.		
Morbid care:	After an intracranial bleed, he was transferred to Foote Hospital for care, but his condition was not survivable and he passed away. Death due to intracranial hemorrhage and hypertension.		
Events during death process:	He slowly slipped away at Foote Hospital.		
Mortality Review:	Review performed by Central Office. No findings.		
COMMENT:	None.		

Southern Michigan Correctional Facility

Case 7	Date of Death: 39035	Age: 45	Gender: Male
Pre-morbid care:	Since April 2004, he was being treated at DWHC by a consulting surgeon who felt he had a long term problem with ischio rectal abscess. Over time, he received antibiotics, debridement, and appeared to have been healing. Cancer was suspected on August 10, 2004, and a colonoscopy recommended. It was performed around October, 2004.		
Morbid care:	He was diagnosed on November 4, 2004 by biopsy as having a 12 cm mass of the anus, proven to be carcinomatous. He was staged and given chemotherapy by oncologists, and also given radiotherapy. He received a diverting colostomy for relief. Death due to metastatic anal cancer		
Events during death process:	At DWHC, he dwindled, developed local metastases to bone and lymph nodes, could not be nourished, and passed away.		
Mortality Review:	Done by regional staff, who found that the diagnosis was not timely. Specifically, they felt that a CMS MD whose signature was unreadable, did anal visual inspections, but no digital exam.		

COMMENT:	With respect to the regional office finding, no action could be taken "because the MD in question remains unknown." This was an inadequate response. The Committee should at least have addressed the question of why it took the treating surgeon four months to suspect malignancy when treating this inmate for ischio-rectal infection since April 2004.

Originally from JCS, he was later sent to C-Unit and DWHC.

Case 8	Date of Death: 38735	Age: 79	Gender: Male
Pre-morbid care:	Chronic obstructive pulmonary disease was present at least since 1990 and he received appropriate care.		
Morbid care:	While at C-Unit, he was reviewed monthly by MD. Death caused by chronic obstructive pulmonary disease, plus diabetes mellitus and chronic renal failure.		
Events during death process:	In his old age, he became cyanotic with minimal effort, required maximal oxygen therapy and required narcotics for pain. He expired with respiratory failure and multiple medical problems.		
Mortality Review:	Done by Central Office. No findings.		
COMMENT:	None		

G. Robert Cotton Correctional Facility

Case 9	Date of Death: 38740	Age: 49	Gender: Male

Pre-morbid care:	Initially, he had chronic care visits for hypertension, which was controlled by the last visit on November 2005. There was an unscheduled visit to an RN on October 12, 2005 for 4 weeks of episodes of chest pains lasting 30 minutes; blood pressure uncontrolled at 172/104. The RN reassured him, did not write referrals to MD, did not obtain chest X ray or EKG. He received Tylenol. He was seen on October 13, 2005 by another RN for uncontrolled blood pressure (144/82) and headache over the eyes. The patient had been holding off certain medications because of lack of faith in his newly prescribed medications. On October 14, 2005 he transferred to JCF, where he had chronic care visits and controlled blood pressure. However, apparently a physician discontinued Tenormin, Verapamil, and other drugs except Clonidine, which was given regularly but "abruptly decreased." By January 23, 2006 he went into a hypertensive crisis with blood pressure of 220/110 and was transferred to the Foote Hospital.
Morbid care:	At Foote Hospital, maximal efforts were made, but he was brain dead. Death due to acute cerebral hemorrhage and long standing hypertension.
Events during death process:	He was disconnected from life support and expired.
Mortality Review:	Done by Central Office, who found that the discontinuation of many hypertensive drugs by a JCF physician was not adequately performed or monitored. Central Office referred the matter to the CMS medical director for follow-up.
COMMENT:	The physician in question was referred to the Michigan Health Professional Recovery Program for evaluation of cognitive impairment and thereafter resigned from the Michigan DOC.

Duane Waters Health Center

Case 10	Date of Death: 38878	Age: 53	Gender: Male

Pre-morbid care:	He was at DWHC when, in early January 2005, he had a hospital admission for chest pain and a hemoglobin of 5. The hospital diagnosed gastric ulcer, rule out gastric carcinoma. Cancer was diagnosed a few weeks later by biopsy and he had a gastrectomy on January 31, 2005.
Morbid care:	The last 2 months were spent at DWHC receiving palliative care interspersed with chemotherapy rounds and admissions to Foote Hospital.
Events during death process:	He slowly deteriorated, became malnourished despite all efforts, needed a morphine drip, and went downhill. He passed away with peritoneal carcinomatosis. Death due to metastatic stomach cancer.
Mortality Review:	Done by Central Office. There was only one finding: issues with the dialysis services at Foote Hospital. Dialysis issues were discussed with Foote Hospital authorities.
COMMENT:	None

Huron Valley Men's Facility

Case 11	Date of Death: 39078	Age: 63	Gender: Male

Pre-morbid care:	Known to be hepatitis C virus (HCV) positive since early 2005. He was enrolled in the HCV Chronic Care Clinic and had visits. At times, ALT (liver study) was elevated. It is not known why he was not considered a candidate for interferon at any of these visits in 2005. The 2005 outpatient records could not be found. In 2006, he had adequate chronic care visits, but by then he was not a candidate for interferon, because his INR (test to study blood coagulation) was up and platelets were down.
Morbid care:	At HVM, he became confused, had a short visit to an emergency room, returned to HVM, and was placed at the infirmary on December 27, 2006.

Events during death process:	He was found unresponsive at the HVM infirmary on December 28, 2006, given cardiopulmonary resuscitation, and transported via rescue to the emergency room, where he was pronounced dead. Cause of death: chronic active hepatitis C, cirrhosis of the liver, pneumonia, and dehydration. Other diagnoses: hypothyroidism on Synthroid and Bipolar Disorder on Prolixin, Depakene, and Cogentin.
Mortality Review:	Done by regional staff: There were multiple findings, including inaccurate diagnosis, diagnosis not timely, inappropriate treatment, also not timely and preventable death. They also found multiple episodes of not getting his Synthroid, and not notifying psychiatrist of same. Another finding: Synthroid was not increased in response to multiple elevated TSH (test to evaluate thyroid level in the blood). A transfer from HVM to Riverside should not have happened. Dehydration should not have happened. The multiple Regional Office concerns were communicated to Central Office and a corrective action plan devised. The case was not closed by Central Office until implementation was verified.
COMMENT:	The 2005 records should be found and the lack of documentation of whether he was a candidate for interferon therapy should be addressed.

G. Robert Cotton Correctional Facility

Case 12	Date of Death: 39069	Age: 49	Gender: Male

Pre-morbid care:	All chest X rays during his chronic care were benign, without masses. His HIV was being treated regularly at DWHC with visits to consultants who regulated his HAART. These HIV specialists became concerned, because by July 2006, the patient had developed clubbing and weight loss. The specialists wrote about these concerns in their chart notes, but apparently the primary care providers at JCF did not act upon these recommendations. A chest X ray at Foote Hospital was normal on November 20, 2006. During a visit to Foote Hospital on December 1, 2006 for servicing of a Port-A-Cath, a chest X ray revealed a right lower lobe density and elevation of the hemidiaphragm, raising the suspicion of effusion or atelectasis. He stayed at Foote Hospital, was diagnosed with lung carcinoma via chest CT, and was too advanced for any therapy to succeed, with brain and other metastases.
Morbid care:	Despite efforts, he died at Foote Hospital in a few days. Only brain radiotherapy was recommended. The chest tumor was too advanced to benefit. Death caused by metastatic lung cancer plus AIDS.
Events during death process:	He could not be turned around at Foote Hospital.
Mortality Review:	Done by regional staff: The review described the failure of JCF primary care MDs to review HIV specialist' notes and to act upon them. The JCF doctor in question no longer works for the MI DOC.
COMMENT:	None

Robert Scott Correctional Facility

Case 13	Date of Death: 38956	Age: 56	Gender: Female

Pre-morbid care:	She came to the system on October 13, 2000. She had a routine screening mammogram on January 10, 2001, which was completely negative. On July 18, 2001 a breast biopsy was requested, because of an enlarged lymph node near her left clavicle. A surgeon performed a biopsy on August 10, 2001; it was positive for breast carcinoma. By late 2001, she had Stage IV metastatic breast carcinoma, for which she was being treated appropriately.
Morbid care:	Following the metastatic breast cancer diagnosis, the patient had visits to specialists, chemotherapy, etc. She slowly went downhill of metastatic disease.
Events during death process:	Cared for at Harper Hospital from August 25, 2006 through her death on August 28, 2006.
Mortality Review:	Done by regional staff. Findings: There were several issues with timeliness of certain medical services after she was diagnosed. Also there was an issue with timeliness of the biopsy after the initial request (there was a 3-4 week delay).
COMMENT:	These issues were addressed by regional staff and one provider was replaced. Staff education recommended for these issues.

Karmanos Cancer Center, from Charles E. Egeler Reception and Guidance Center

Case 14	Date of Death: 38765	Age: 48	Gender: Male
Pre-morbid care:	This 48 year old male from Midland County Jail came to RGC on January 30, 2006. At the jail, he was said to have been on a 30-day "hunger strike" when, in fact, he could not eat. He was also incontinent of bowel and urine, uncommunicative, and uncooperative. He had a history of hepatitis A, B and D, plus dyslipidemia and mental health problems. Since arrival at RGC, he took only Ensure. On January 31, 2006, RGC sent the inmate directly to the Foote Hospital, where a brain CT proved the diagnosis to be a glioblastoma. He also had a brain hemorrhage with hydrocephalus, which necessitated a ventriculostomy. Foote staff stabilized him and sent him to the Harper Hospital, then to the Karmanos Cancer Center for terminal care on February 8, 2006.		
Morbid care:	Terminal, palliative care was given at Karmanos Cancer Center.		
Events during death process:	He passed away quietly.		
Mortality Review:	Done by Central Office. No findings made.		
COMMENT:	None		

Duane Waters Health Center

Case 15	Date of Death: 38808	Age: 37	Gender: Male
Pre-morbid care:	This patient was known to be HIV+ since 1986. He developed colon cancer by September 2005, when he had a surgical resection as a free person. No chemotherapy was given, because of his low CD4 count. Intake for his last incarceration began in December 2005. He was sent to DWHC, where he was followed by a HIV specialist with consultation reports and frequent progress notes.		

Morbid care:	Death caused by HIV and metastatic colon cancer. While at DWHC, he developed metastases at the incision site and other areas. Palliative care was instituted.
Events during death process:	The patient died of overwhelming metastatic disease.
Mortality Review:	Done by Central Office. No findings.
COMMENT:	None

G. Robert Cotton Correctional Facility

Case 16	Date of Death: 39039	Age: 46	Gender: Male

Pre-morbid care:	He returned to prison November 2004. At intake, he was noted to have chronic obstructive pulmonary disease and congestive heart failure with edema, a history of cardiac disease, and he was taking Imdur, Lanoxyl, other cardiac meds.
Morbid care:	While there were progress notes which evidenced a number of clinic visits, hospital admissions, and medication administration, no evidence of chronic care visits was found in this review. These visits presumably took place monthly at the C-Unit, but the C-Unit record had not been forwarded to Central Office yet so it could not be reviewed.
Events during death process:	He was found unresponsive in his cell at DWHC. He was rushed to Foote Hospital, but he could not be resuscitated. Cause of death was congestive heart failure and coronary artery disease.

Mortality Review:	Done by Regional Office. There were some concerns regarding the quality of pain management therapies and the quality of documentation. Dr. Savage, Regional Medical Director, discussed his concerns with Dr. Pramstaller of Central Office. The main concern was regarding Institutional Pain Management Committee decisions, which need to be entered in Serapis (electronic medical record system). This case was not closed. However, per Dr. Pramstaller, it appears that for the last 32 months, Institutional Pain Management Committee decisions were entered in Serapis. Note: the Institutional Pain Management Committee is composed of all physicians.
COMMENT:	None

Duane Waters Health Center

Case 17	Date of Death: 38817	Age: 83	Gender: Male

Pre-morbid care:	He came to prison in 2000, age 76, with surprisingly little chronic disease. His intake physical did not include a rectal exam. The practitioner charted "refused. However, no signed refusal could be found. In a few days, it was found that his PSA (Prostate Specific Antigen) was at the upper limits of normal for his age, and "Benign prostatic hypertrophy, rule/out prostate carcinoma" was suspected, with the recommendation that it be followed. By January 2001, PSA was repeated and it was higher. A urology consult was requested on January 15, 2001, and performed on April 23, 2001. No refusal was found to explain the 3-month delay. The urologist did not find cancer, only benign prostatic hypertrophy. He was referred to urology again on October 3, 2003. The urologist found a large enlarged prostate, but no nodules. Rectal ultrasound and biopsy were recommended. Apparently, the patient refused these to the urologist. Evidence of yearly complete physicals including rectal exams and PSA was found in the chart for 2002 and 2003. An exam was mentioned as performed on August 3, 2004, but could not be found in the chart or Serapis electronic records. By October of 2004, he started losing weight with poor appetite and intake. By March 2, 2005, he was referred to an urologist with a PSA of 700, metastases by bone scan, anemia, and full blown prostate carcinoma. He refused surgery to the consultant.
Morbid care:	He went to Detroit Medical Center for a bilateral orchiectomy on February 23, 2005.
Events during death process:	At DWHC, he had palliative care until he expired of prostate carcinoma with metastases.

Mortality Review:	Done by Central Office. No problems found. Our review found that follow-up of a rising PSA and BPH in elderly male was performed adequately until 2004, when documentation of such follow-ups could not be found. By 2005, his disease was not operable. The Central Office Mortality Review should have mentioned these facts.
COMMENT:	None

Duane Waters Health Center

Case 18	Date of Death: 38952	Age: 51	Gender: Male

Pre-morbid care:	He came to prison for the last time in 1991. Hepatitis C virus (HCV) was diagnosed in 1998 on top of his previously known hepatitis B positive status.
Morbid care:	The patient's liver enzymes had been elevated at least since 1999 and he was aware of his condition. He wrote an emergency request for hepatitis C virus care on April 17, 2003, but it was denied. An initial HCV database was completed on December 8, 2003. He had already a slight elevation of bilirubin, low platelets, and persistently elevated ALT. He was not offered interferon therapy. On May 13, 2004, there was a hepatitis C follow-up visit. The doctor found him to have tense ascites, palmar erythema and pedal edema. Pro-time was elevated. Lasix was increased. Thereafter, he was followed closely. Ascites was controlled for a while. However, by May 2005, his ammonia level was climbing. He was placed on lactulose. On August 22, 2005 he vomited blood and went to the emergency room. Cause of death was end-stage cirrhosis of the liver due to hepatitis C virus.
Events during death process:	He was at DWHC where terminal care of the cirrhotic patient took place until he expired.

Mortality Review:	Done by Regional Office. No findings were made. Our review found that in 2003, there should have been at least a notation of why this patient was or was not a candidate for interferon therapy. Therapy with plain interferon has been available in correctional systems since 1999. Interferon plus ribavirin became the standard of care in corrections in 2003, and should have been considered.
COMMENT:	None

Duane Waters Health Center

Case 19	Date of Death: 38777	Age: 69	Gender: Male

Pre-morbid care:	He came to the system in July of 2004. Diabetes mellitus was found and cared for. He had quit smoking 30 years previously. By February 9, 2005, he presented to an RN and then to a MD with productive cough, positional, chest pain with cough, wheezing and shortness of breath, night sweats, headache, fatigue, and nausea. The MD prescribed antibiotics, Tessalon, an inhaler, and charted to return to clinic as needed in 4 days. The patient requested a visit for cough again on February 25, 2005, and was seen on March 1, 2005. A nurse gave over-the-counter medications. He was also seen in chronic clinic, but no chest X ray was taken. By January 31, 2006, he had lost 20 pounds in the last 3 months, had developed weakness, anorexia and new lumps in the neck and abdomen. He was sent to the Chippewa Hospital Emergency Room. A chest X ray showed a lung mass and a CT showed multiple liver metastases. An oncologist recommended palliative treatment, but no chemotherapy or radiotherapy.
Morbid care:	Was performed at DWHC, consisting of palliation. Death caused by metastatic lung cancer, plus diabetes mellitus.

Events during death process:	Orders to not resuscitate. He was found unresponsive in his bed.
Mortality Review:	Done by Central Office. Findings: None. NCCHC does not concur. He should have been diagnosed almost a year earlier, when he presented to the nurse on February 9, 2005 with classic symptoms suggestive of cancer. The nurse properly referred him to a MD, but the MD did not perform a chest X ray. The Central Office Committee Review did not mention this oversight.
COMMENT:	None

Duane Waters Health Center

Case 20	Date of Death: 38911	Age: 82	Gender: Male

Pre-morbid care:	His last incarceration began in 1992, at age 72. There were no findings on intake exam. He refused his annual exam in 1993. He had nurse annual screenings in 1994 and 1995. He refused chronic care in 1996 and refused annual screening in 1997. The status of the 1998 annual exam is unknown. He had another annual health screening by a nurse in 1999. He refused annual screenings in 2000 and 2001, but had them in 2002 and 2003. He refused annual screening again in 2004. He had a nurse annual screening in 2005, but refused the blood tests. He refused blood tests again in early 2006. He developed a non-healing axillary abscess in February of 2006. He was referred to the Foote Hospital, because of the abscess. At Foote, anemia was found, and Chronic Myelogenous Leukemia (CML) was diagnosed by bone marrow biopsy.
Morbid care:	At Foote Hospital, a hematologist diagnosed CML plus axillary lymphoma via bone marrow biopsy. He was transfused. Chemotherapy was not acceptable to the patient and he did not receive it.
Events during death process:	At DWHC, he had epistaxis and lasted only two days, being found dead in bed.

Mortality Review:	Done by Central Office. No findings were made. NCCHC concurs, but with the comment that the several annual screenings performed (1994, 1995, 1999, 2002, 2003, and 2005) were charted as performed by nurses with no indication that a physician examined the patient. According to Dr. Pramstaller, annual exams in the elderly are performed by nurses, with referral to a physician only if there are findings. Apparently, this policy is in the process of changing. Annual physicals for elderly inmates are to be performed by physicians.
COMMENT:	None

Duane Waters Health Center, C-Unit

Case 21	Date of Death: 38731	Age: 58	Gender: Male
Pre-morbid care:	This inmate had been in prison since 2003. He developed gastrointestional bleeding and was sent to the Foote Hospital. He had signs and symptoms of gastric carcinoma, was promptly diagnosed, and given chemotherapy by an oncologist.		
Morbid care:	He received chemotherapy and was placed at DWHC for long term care. Cause of death was metastatic gastric carcinoma, with diabetes mellitus and hepatitis C virus.		
Events during death process:	He received palliative care until he was found dead in bed at DWHC.		
Mortality Review:	Done by Central Office. No findings. NCCHC concurs.		

Marquette Branch Prison

Case 22	Date of Death: 38755	Age: 45	Gender: Male

Pre-morbid care:	He was in prison since June of 2001. He was known to have high cholesterol since September 27, 2001, when his level was 261.
Morbid care:	By March 10, 2005, his cholesterol had increased to 311. Despite the early finding of hypercholesterolemia, the record did not evidence therapy for hyperlipidemia or visits to chronic care for it until August 3, 2005, when he was started on Mevacor. His medication administration record (MAR) showed a gap (a period without Mevacor) between August 31, 2005 and October 3, 2005. By June 6, 2005, his cholesterol had dropped to 216. By September 27, 2005, it had dropped further to 196, then to182 on January 12, 2006. Cause of death was acute myocardial infarction, with contributory factors being hyperlipidemia and history of smoking.
Events during death process:	The inmate was playing hackysack in the prison yard when he became light-headed, sat down, and stopped breathing. Cardiopulmonary resuscitation was given, and the automatic external defibrillator was used. Although it is very likely that correctional officers started CPR and nurses continued it, the health record did not describe the sequence of CPR events. Emergency Medical Services was called. On arrival, EMS staff continued CPR, but he could not be resuscitated.
Mortality Review:	Done by Central Office. No findings were made. NCCHC finds that the Committee should have picked up the 4-year gap between diagnosing hypercholesterolemia and treating it (2001 to 2005). While later treatment succeeded in lowering cholesterol, the patient most likely had a cholesterol level of over 300 for several years, thus contributing to the development of plaques that may have led to his myocardial infarction and death.

COMMENT: None

G. Robert Cotton Correctional Facility

Case 23	Date of Death: 38982	Age: 21	Gender: Male

Pre-morbid care: The inmate was in the system since April 3, 2006. At intake, staff learned that before incarceration, he had a near amputation of the left hand, which needed reattachment. By May 3, 2006, while at JCF, he came to the clinic with a leg boil. He stated that he had repeated staph infections in the past. His skin infections recurred by August 13, 2006, when he presented to an RN with open, draining lesions of the fingers of the left hand.

Morbid care: The next day, August 14, 2006, a doctor detected a grossly infected left middle finger He was given Augmentin and booked for a recheck in two days. He did not improve, osteomyelitis was suspected, and he went to the Foote Hospital emergency department on August 16, 2006. Emergency department staff charted the presence of foul odor, discharge, and cellulitis of the hand. Osteomyelitis of the hand was also suspected, and he was admitted to Foote Hospital. Blood cultures were obtained. On August 24, 2006, at the Foote Hospital operating room, broad incision and drainage were performed. He received IV Vancomycin for 6 weeks, as required for osteomyelitis. Organisms grown were Serratia, Enterobacter, and MRSA sensitive to Vancomycin. On August 28, 2006, he was discharged to DWHC on IV Vancomycin, a full course of which was to be finished by the DWHC staff.

Events during death process:	On September 22, 2006, he slumped, was cyanotic, had chest pain, shortness of breath and an oxygen saturation of 70%. He was fluid resuscitated, oxygenated, and transported to the Foote emergency department again. IV access was difficult, His heart rate shot up to 164 and he was intubated. He went into Acute Respiratory Distress Syndrome and became harder and harder to ventilate. Consideration of transfer to a major ICU center was made, but he was unstable, went into flat line, and died. The autopsy report read: dilated cardiomyopathy and congestive heart failure without obvious cardiac infection.
Mortality Review:	Done by Regional Office. No findings made. NCCHC concurs.
COMMENT:	None

G. Robert Cotton Correctional Facility

Case 24	Date of Death: 38831	Age: 56	Gender: Male

Pre-morbid care:	This inmate came to prison in 1989, when he was already HIV+. He was initially followed frequently by internal medicine. In March of 1995, he was enrolled in the HIV Clinic and started on AZT. Epivir was added in March of 1996.
Morbid care:	During ID visits in September 2005, abdominal pain prompted an abdominal work-up. Paraproteins were present, so a hematology work-up was requested. A CT showed a pancreatic mass on 1-26-06. The next day, he was admitted to Foote Hospital for a work-up. Pancreatic biopsy showed adenocarcinoma. Metastases were present. IV Gemzar was tried by an oncologist. Cause of death was pancreatic carcinoma, HIV+, hepatitis C virus, and hypertension.
Events during death process:	He returned to DWHC for palliative care and signed a DNR (do not resuscitate). He was found dead in bed in a few weeks.
Mortality Review:	Done by Central Office. There were no findings related to the death with pancreatic carcinoma. They made an incidental finding: an institutional primary care MD lacked the ability to recognize and treat patients co-infected with HIV-HCV. This matter was referred to the CMS Regional Medical Director, Dr. Hutchinson, who responded to these concerns appropriately and put them to rest. The case was closed by Central Office. NCCHC concurs.
COMMENT:	None

Duane Waters Health Center

Case 25	Date of Death: 38814	Age: 62	Gender: Male

Pre-morbid care:	The inmate came into the system on April 27, 2004, already sick. At intake, he described his diagnosis of laryngeal carcinoma in 2002, due to chewing tobacco. Chemotherapy and radiotherapy were completed before incarceration. In prison, he had checkups every other month. He was still smoking cigarettes, but no longer chewing tobacco. He also had some chronic obstructive pulmonary disease.
Morbid care:	On April 28, 2004, he had a suspicious mole on the neck and he saw a general surgeon on May 14, 2004. The mole was excised on July 14, 2004. It was benign. On August 31, 2004, he had some laryngeal findings and a biopsy was scheduled. On October 28, 2004, the biopsy was described at Foote Hospital as suspicious, but not diagnostic for recurrence of malignancy. He was referred to the University of Michigan Hospital for further diagnosis. He continued to see ENT frequently through 2005. New biopsies were obtained on October 10, 2005 and were still negative despite strong clinical suspicions. There were gaps in primary care follow-up at the institution. He began coughing and choking on December 10, 2005 and went to the Foote emergency room. Recurrence of laryngeal carcinoma was blamed. He had a large laryngeal mass, could not receive more radiotherapy, and declined chemotherapy.
Events during death process:	At DWHC, he received comfort measures only and expired of his large tumor.
Mortality Review:	Done by Central Office. The Committee had concerns about primary care follow-up gaps, lack of review of pathology reports, and certain subsequent actions. The CMS Regional Medical Director, Dr. Hutchinson, responded to all the concerns. NCCHC concurs.
COMMENT:	Actions taken: Referred to Dr. Hutchinson to respond to concerns. Case is still open.

Duane Waters Health Center, C-Unit

Case 26	Date of Death: 38888	Age: 74	Gender: Male

Pre-morbid care:	This inmate came to corrections on October 26, 1999. He had non-insulin dependent diabetes mellitus, emphysema, and hypertension. All appropriate medications were continued. Chronic care visits were sporadic at first. Later on, he had these visits more regularly. By June 2002, he went to C-Unit.
Morbid care:	On June 12, 2006, he was admitted to Foote Hospital with MRSA pneumonia, acute respiratory failure, congestive heart failure, and his other chronic conditions. He had complications and stayed at Foote Hospital until June 21, 2006. He was discharged when no additional benefit from the hospitalization could be obtained.
Events during death process:	He returned to DWHC on June 12, 2006 and died later on that day. Cause of death was MRSA pneumonia. He also had diabetes mellitus, coronary artery disease, and atrial fibrillation.
Mortality Review:	Done by Central Office. No findings. NCCHC concurs.
COMMENT:	None

Duane Waters Health Center

Case 27	Date of Death: 38741	Age: 53	Gender: Male

Pre-morbid care:	He came to the system on September 24, 2004. At intake, he was noted to have status post myocardial infarction, pacemaker, congestive heart failure, chronic obstructive pulmonary disease, and diabetes mellitus. He stated that his last pacemaker check had been a year previously. He had a pacemaker check on December 29, 2005. The battery was at the end of its life, so the consultant recommended a battery change. Although he was seen by cardiologists numerous times thereafter, the need for his pacemaker battery replacement was not commented upon anymore. The record bore no evidence of further pacemaker testing or battery change.
Morbid care:	While at DWHC, he was referred to the Foote Hospital for exacerbation of congestive heart failure. A chest X ray showed a bilateral lung mass. He was diagnosed with carcinoma, which was confirmed with a positive biopsy lung. Chemotherapy was not possible, so he was recommended for palliation.
Events during death process:	He returned to DWHC on January 20, 2006 and died quietly on January 25, 2006.
Mortality Review:	Done by Central Office. No issues found. NCCHC found that the diagnosis and care of his terminal disease, lung cancer, met the standard of care. However, the Mortality Committee did not take issue with the lack of pacemaker testing. The pacemaker was tested only once in two years, when it should have been tested monthly or at least every 3 months. The Committee did not take issue with the lack of follow-up of directives to change the pacemaker battery, which was at the end of its life.
COMMENT:	None

DWHC, from Chippewa Correctional Facility

Case 28	Date of Death: 39041	Age: 51	Gender: Male

Pre-morbid care:	This long-time heavy smoker came into the system in 1989. Chronic care visits were regular until 2005, when they became sparse. By 2006, they were regular again.
Morbid care:	By June 23, 2006, at Chippewa, he had weight loss, fatigue, dry cough, and shortness of breath. On July 12, 2006, he was admitted for one day first to Marquette Hospital then to Duane Waters Health Center (DWHC) for one month for similar symptoms. Chest X ray and CT scan of the chest showed a large mediastinal mass infiltrating the carina, trachea. A lung biopsy showed squamous cell carcinoma. Chemotherapy and radiotherapy were recommended. Chemotherapy was given July 17, 2006 at Foote Hospital via Port-a-cath. Taxol, Carboplatin and biphosphonates were given. By then, bone metastases were present. Radiotherapy was given as well.
Events during death process:	On September 28, 2006 he was at DWHC for end-of-life care. He was found dead in bed on November 21, 2006. Cause of death was lung cancer. He also had hypertension.
Mortality Review:	Done by Regional Office. Some nursing performance issues were raised. NCCHC concurs that no major issues of care were found.
COMMENT:	Nursing performance review per Regional Office.

Deerfield Correctional Facility, with a few days at DWHC

Case 29	Date of Death: 38794	Age: 60	Gender: Male

Pre-morbid care:	This inmate came to prison in 1984. He had paroxysmal ventricular contractions as early as in 1988 and was on Norpace for a while. He was enrolled in the cardiac chronic care clinic since 1996, and he had regular clinic visits. His blood pressure was always low, perhaps reflecting a low cardiac output.
Morbid care:	In early January of 2002, he had a stay at the Ionia Hospital, and then was transferred to the Foote Hospital. From Foote, he went to the Sparrow Hospital. These transfers were needed, because he had a myocardial infarction which necessitated ICU care, a coronary artery bypass graft, and an implantable cardiac defibrillator. These cardiac events were complicated by gastrointestinal bleed and erosive gastritis. He was transferred to DWHC on February 13, 2006 due to weakness, inability to walk to the bathroom, and the onset of incontinence.
Events during death process:	At DWHC, he was bedridden and essentially received pain management, as all therapeutic options were exhausted. He developed shortness of breath on March 10, 2006, and he had another Foote Hospital emergency department evaluation. He expired on the 19th. The death was deemed cardiac at autopsy, with renal carcinoma being only a contributory factor.
Mortality Review:	Done by Central Office. No findings. NCCHC concurs.
COMMENT:	None

Duane Waters Health Center, C-Unit

Case 30	Date of Death: 38915	Age: 63	Gender: Male

Pre-morbid care:	He was diagnosed with small cell lung carcinoma in September of 2003.
Morbid care:	After a wedge resection of the lung, he received radiotherapy and chemotherapy, consisting of Carboplatin and Taxol, then Gemcytabine. Due to poor response to these, palliative therapy with IRESSA (treatment of advanced non-small cell lung cancer) was necessary. All along, he needed oral morphine for pain.
Events during death process:	He was at the DWHC C-Unit since January, coping with terminal, metastatic lung carcinoma, and suffering much pain, which was treated with morphine tablets. A morphine level at time of death and autopsy was 2.33 (0.1 to 0.8 is the therapeutic level). At the Foote Hospital where he was taken initially, he was observed to have a deep, self-inflicted neck laceration. He declared that he had taken 600 mg of morphine tablets. Foote Hospital stabilized the patient and referred him to the University of Michigan Hospital, where he died of "suicide, due to morphine intoxication, plus metastatic lung cancer."
Mortality Review:	Done by Central Office. They concluded that the diagnosis was not appropriate, not timely, and the treatment was not appropriate and not timely. While not stated in the Central Office report, it appeared that these qualifiers were meant to describe the evaluation of suicidality of the patient, not the quality of treatment of his lung cancer.

COMMENT: The matter was referred to the regional medical officer (RMO) and to a psychiatrist. The psychiatrist prepared a lengthy description of this inmate's mental health history. He criticized the DWHC evaluation of the inmate's suicidality, pointing to the various weaknesses in his management and their remedies. The RMO felt that the terminal management would not have changed the outcome, but had comments on the use of morphine tablets for a patient who had been suicidal previously when he overdosed with tricyclics, suggesting that liquid methadone would have been a better choice. These comments were accepted by Central Office. NCCHC generally concurs with the process followed, but believes that a review of this type needs to ask how the C-Unit staff handled the directly observed administration of morphine tablets to a previously suicidal patient. Perhaps closer monitoring of the tablet and liquid chaser swallowing process would prevent similar occurrences in the future.

Baraga Maximum Correctional Facility

Case 31	Date of Death: 38768	Age: 40	Gender: Male

Pre-morbid care: While at Baraga, and beginning on January 1, 2006, this patient developed vague, fleeting symptoms including stomach discomfort. He had some nursing and physician exams and a couple of runs to the emergency department which were non-diagnostic. He developed night sweats, hematuria, abdominal pain, and swelling. By February 8, 2006, Baraga health staff had requested an abdominal ultrasound.

Morbid care: He went to Marquette General Hospital on February 13, 2006, where a CT of the abdomen and a CT-guided liver biopsy showed carcinomatosis replacing 80% of his hepatic tissue. His condition was deemed terminal. An oncologist did not feel that chemotherapy would work. A morphine drip was started and he was kept comfortable.

Events during death process:	He died at Marquette General Hospital on February 21, 2006 of liver carcinomatosis.
Mortality Review:	Done by Central Office. No issues were found. NCCHC concurs.
COMMENT:	None

Charles E. Egeler Reception and Guidance Center

Case 32	Date of Death: 38982	Age: 39	Gender: Male

Pre-morbid care:	He had intake on September 22, 2006. The exam included a 17-question suicide screening.
Morbid care:	He had only two positive responses to the intake suicide screening: He checked that he was very worried about major problems (family) and that he had a history of a previous suicide attempt with drug overdose in May of 2006. At the time of the events in question, intake inmates were referred to mental health only if they responded positively to 6 or more of the 17 questions, or if they responded positively to a "red flag" question. The "red flag" questions were not so marked, so inmates could not know which questions were "red flags." In any case, he was not referred immediately to mental health. He would have been seen by mental health for a formal intake evaluation in a few days, but he did not make it, committing suicide before that date. He did not request a mental health evaluation either.
Events during death process:	He wrote a suicide note, jumped from a 4th floor galley, crashed into a hard floor, and was brought by Rescue to Foote Hospital, where he was pronounced dead of multiple injuries.
Mortality Review:	Done by Central Office and Regional Office. Regional staff opined that there may have been problems with the standards used for referral to mental health after screening and referred the matter to Central Office. Central Office agreed that there may be a need to revise the standards for mental health referral.

COMMENT:	Central Office said that it would create a committee to formulate screening and mental health referral standards for suicidality at intake. NCCHC concurs with the actions taken.

Marquette Branch Prison

Case 33	Date of Death: 39005	Age: 40	Gender: Male

Pre-morbid care:	He was at MBP where he received cared for his uncontrolled insulin dependent diabetes, diabetic uropathy with indwelling bladder catheter, recurrent urinary tract infections and attention deficit disorder. He was on Baclofen, Tenormin, Vasotec, Bactrim, Advair, Albuterol, Neurontin, Norvasc, and Lantus. His Accuchecks were performed frequently, showing primarily values between 300 and 600, with rare normal values. HbA1c levels were on the very high side, with values in excess of 12%. While there were hundreds of visits and care charted in Serapis for this patient, very few chronic care visits could be identified from the Serapis listings.
Morbid care:	While at MBP, he developed nausea, vomiting, chest and abdominal pains, and was admitted to Marquette General Hospital. Blood cultures were positive for gamma hemolytic strep, a gram negative rod (Serratia), and Enterococcus. He received antibiotics. An abdominal ultrasound showed acalculous cholecystitis and a laparoscopic cholecystectomy was performed. He developed hypotension and required continued endotrachial intubation and dopamine. He remained on the ventilator in septic shock with metabolic acidosis.
Events during death process:	Despite all efforts, he could not be ventilated and expired at Marquette General Hospital of multi-organ failure, insulin dependent diabetes, status post cholecystectomy, and sepsis.

Mortality Review:	Done by Regional Office. No concerns were raised. A minor issue was mentioned. When this inmate was found medically unsuitable to go to a mental health residential treatment program, the information was communicated verbally, without a health record entry on paper or electronically.
COMMENT:	The above recommendation will be given to the MBP staff. NCCHC concurs with findings and action taken.

Huron Valley Men's Facility

Case 34	Date of Death: 38971	Age: 62	Gender: Male

Pre-morbid care:	This heavy smoker was in the system since 2001, when he came free of tumor. However, he disclosed a history of Hodgkin's lymphoma in 1970, which had required radiotherapy and chemotherapy. A melanoma of the face had been removed in 1999. Chest X ray showed incipient emphysema. He spent most of his time at Saginaw Correctional Institution. In 2005, he developed a suspicious neck lesion. A biopsy performed on July 29, 2005 showed squamous cell carcinoma of the neck.
Morbid care:	After surgery and dissection of the tumor, radiotherapy was tried for 6 weeks. At first he appeared to respond to radiotherapy. However, by May 8, 2006 he had a recurrence, and, on July 27, 2006, an oncologist felt that no additional therapies were feasible. He was transferred to the HVM infirmary on August 4, 2006 due to the need for terminal care.
Events during death process:	He was kept comfortable, given pain relief, and was found dead in bed on September 12, 2006. Cause of death was disseminated carcinoma of the neck, unresponsive to radiation therapy, coronary artery disease, and emphysema.
Mortality Review:	Done by Central Office. No findings were made. NCCHC concurs.
COMMENT:	None

G. Robert Cotton Correctional Facility (From JCS)

Case 35	Date of Death: 38988	Age: 54	Gender: Male

Pre-morbid care:	He came to the system in 1999 with no major medical conditions at intake. By January 2003, however, he was at JCS and was started in the pulmonary and diabetic chronic care clinics. He was noted to be positive for hepatitis C. Chronic care visits were sporadic, however, and he was not seen in chronic care until July of 2002, when he was seen for his chronic conditions. Again, in 2003, there were only sporadic chronic care visits. Regular chronic care visits began in 2004. Apparently, he was never considered for interferon therapy. Evidence of a pneumonia shot could not be found.
Morbid care:	He was at JCF when, on August 30, 2006, he presented with a history of being sick for 5-6 days with cough, chills, and fatigue. He visited the DWHC emergency department on August 31, 2006 and September 1, 2006, when he received antibiotics. Wet film reading of his chest X ray showed infiltrates. However, he was sent back from the emergency department to prison each time after intravenous Levaquin was given. Suggestions were given for the institution, JCF, to monitor the patient and to send him back for re-evaluation. The next day, September 2, 2006, JCF staff found him very short of breath and sent him to the Foote Hospital for definitive care. He left Foote Hospital on September 13, 2006 and went to DWHC. The DWHC documentation was not part of the Central Office file given to the NCCHC reviewer. At DWHC, he did not do well and returned to Foote Hospital September 25, 2006.
Events during death process:	At Foote Hospital since September 25, 2006, he did not do well, could not be ventilated, and expired in four days, on September 29, 2006, of pneumonia, with non-insulin dependent diabetes mellitus, chronic obstructive pulmonary disease, and hepatitis A, B, and C.
Mortality Review:	Done by Regional Office: No care issues were found, but the DWHC documentation was not available.

COMMENT:	The Committee agreed that the Regional DON would get together with the DWHC nursing staff to address the documentation issue. NCCHC concurs. In addition, it was noted that this diabetic inmate, in the system for 6 years, has no documented pneumonia shot despite serious diabetic and pulmonary disease. The Committee should have addressed this issue, but it did not.

G. Robert Cotton Correctional Facility

Case 36	Date of Death: 38960	Age: 77	Gender: Male

Pre-morbid care:	He came into the system in 1995, without major problems. He was enrolled in the chronic clinic for ischemic heart disease in 1997. A pneumonia shot was given in June of 2002. He had chronic clinic visits. His blood pressures were on the low side, with an average of 100 systolic and 60 diastolic, perhaps denoting low cardiac output. In 2002, he had a myocardial infarction, which required pacemaker insertion. The pacemaker was checked every 3 months. A cardiologist saw him on May 25, 2005, He commented on the chronic atrial fibrillation and the use of Betapace. Recurrent weakness and shortness of breath required clinic and emergency department visits.
Morbid care:	He was sent to the DWHC emergency department on August 22, 2006 for generalized weakness. DWHC staff felt that he was too sick for DWHC and relayed the case to the Foote Hospital.
Events during death process:	At Foote Hospital, he was felt to be very elderly, with low perfusion, which did not respond to the usual therapies, He expired on September 1, 2006 of pneumonia and sepsis, with chronic obstructive pulmonary disease, chronic renal failure, coronary artery disease, and atrial fibrillation.
Mortality Review:	Done by Central Office and Regional Office. There were no findings. NCCHC concurs.
COMMENT:	None

Lakeland Correctional Facility

Case 37	Date of Death: 38792	Age: 74	Gender: Male

Pre-morbid care:	He was at the Lakeland Facility. He came to the system for his last incarceration in 1965. Documentation from that period was available, but it consisted of 4x5 cards with very little medical information. However, it was known from the start that he had a "rough mitral valve sound." The inmate said that he had had rheumatic fever at age 7. He smoked all the way to the end. Over decades of institutionalization, he had numerous visits to the clinic and to the chronic illness clinics. His last chronic illness clinic visit was on February 5, 2006. He was doing reasonably well, had a good peak expiratory flow, and was taking 13 medications (some were over- the-counter).
Morbid care:	On February 13, 2006 he developed acute shortness of breath, orthopnea, and was using accessory muscles of respiration. He was sent to the Lakeland Community Health Center emergency room. A chest X ray was unchanged from baseline. He was still smoking. Electrocardiogram was unchanged. He returned to DWHC on March 2, 2006, convalescing from chronic obstructive pulmonary disease with exacerbation. He was believed to have end-stage chronic obstructive pulmonary disease. Massive doses of Solu-Medrol had to be given IV.

Events during death process:	By March 6, 2006, he was admitted to the Foote Hospital because of his inability to wean from IV Solu-Medrol and increasing shortness of breath. He had developed a myocardial infarction with elevated troponins. He remained intubated and on steroids. It was noted that his platelet counts were in the vicinity of 20,000, with low red blood cells and white blood cells. A bone marrow biopsy confirmed the presence of aplastic anemia. He received G-CSF (granulocyte-colony stimulating factor— a growth factor that stimulates the bone marrow to make more white blood cells), Neupogen factors, and Fortaz antibiotics, plus platelet transfusions. He did not respond to these maneuvers, became depressed, lethargic, and expired on March 17, 2006 of myocardial infarction, with coronary artery disease, chronic obstructive pulmonary disease, and aplastic anemia.
Mortality Review:	Done by Central Office. No findings. NCCHC concurs.
COMMENT:	None

G. Robert Cotton Correctional Facility

Case 38	Date of Death: 38777	Age: 64	Gender: Male

Pre-morbid care:	He came to the system in October of 2001, with no major medical findings, except for smoking 1 1/2 pack per day for 45 years. He also had chronic obstructive pulmonary disease, some shortness of breath, and non-insulin dependent diabetes mellitus since 1975. On admission, he refused a pneumonia shot. He refused the same shot again in 2003. Chronic care clinics took place regularly. His HbA1c fluctuated between 10% to 12.0%, because of compliance issues. He refused some chronic care visits and ministrations.
Morbid care:	He developed shortness of breath, a productive cough and weight loss, and needed admission to the Foote Hospital on September 30, 2005. A CT scan of the chest showed lung masses and mediastinal adenopathy. A trans-bronchial biopsy proved the presence of lung carcinoma. Chemotherapy was started. He was not operable and was sent to DWHC for palliative care on October 14, 2005.
Events during death process:	At DWHC, he stayed until November 16, 2005, receiving palliative care. He stabilized and was returned to JCF. He lasted at JCF until January 13, 2006, when he developed left-sided weakness and uncontrolled diabetes mellitus. He went to Foote Hospital, where his lungs were opaque by chest X ray, but he still was breathing on his own. He was discharged to DWHC on January 23, 2006. Taxol and Taxotere were tried for tumor palliation. He refused his insulin shots and was restless and weak. He expired on March 2, 2006 of respiratory failure, metastatic lung carcinoma, plus diabetes.
Mortality Review:	Done by Central Office. Only one problem was found. The Committee pointed out that, following an emergency department visit on September 9, 2005, a repeat chest X ray that was supposed to take place at the institution in one week had not been done. Apparently, the inmate had refused to go to the emergency room for the chest X ray, but the correctional officer did not generate a signed refusal.

COMMENT: The RMO took appropriate action. NCCHC concurs.

Appendix E

External and Internal Stakeholders' Concerns

Groups and individuals have expressed their concerns to the MDOC administration, the Governor, and the Michigan Legislature about MDOC health services and the quality of care being provided to inmates. As part of this comprehensive assessment, NCCHC contacted external and internal stakeholders to solicit their opinions regarding health services. External stakeholders were identified by the MDOC, and NCCHC contacted them by telephone in August 2007. Several themes emerged as a result of their responses.

External Stakeholder Concerns

Theme 1. Health care is not timely nor appropriate. Many external stakeholders indicated to us that prisoners are not getting the care that they are supposed to be receiving. They cite as examples: medications are not being delivered on a timely basis, specialist care is not being delivered, health complaints are being ignored, and recommendations from health care professionals are not followed through.

Theme 2. Inconsistent Policies and Procedures. Several external stakeholders indicated to us that health services policies are inconsistent from institution to institution. For example, lack of special accommodation (e.g., special shoes, canes, walkers, or low bunk assignments) may be allowed in one facility, but then medical staff cannot order it at a different facility with the same security rating.

Theme 3. Failure to Follow Thorough. Many external stakeholders indicated to us that health staff do not sufficiently explain issues to the inmates and fail to follow through on promised services. Often, inmates are treated rudely by health staff.

Theme 4. Failure of Accountability. A number of external stakeholders indicated there is no single individual who can effectively take responsibility for change. Owing to the tripartite system, there is much "finger-pointing" and it is difficult to assign responsibility and accountability. For example, a severe chronic pain regime has been issued by a "pain committee." However, it has not been followed by CMS physicians and there is no enforcement or accountability. Without impunity, health appointments are cancelled without notification, medications are not delivered, and inmates are not taken seriously for their complaints or diseases. They indicated there is insufficient oversight over CMS.

Theme 5. Dysfunctional Operational Capacities. Many of the external stakeholders indicated that unit physicians are reluctant to put in requests for care, because they know it will be denied anyway through CMS's utilization review. CMS has little risk exposure and does not share in the costs, yet failure to monitor expenses such as over-prescribing leads to over-utilization of services without accountability. The DOC's Bureau of Health Care Services, CMS, and the Department of Community Health do not coordinate their efforts. There is much overlap and failure to ensure that operational capacities are functioning efficiently and effectively.

Internal Stakeholder Concerns

NCCHC contracted with MGT of America, a national public sector consulting firm specializing in corrections, to conduct a survey of all employees of the MDOC regarding their impressions and opinions of inmate health care in the department.

NCCHC and MGT of America designed the Likert survey questions. The survey asked fifteen questions. The web-based survey was made available online for a one-week period. Table 1 presents the survey questions and response options as they appeared to the survey respondents.

An invitation to participate in the survey was sent by the MDOC Director to all employees.

In an effort to maximize the level of participation, the survey was designed to be taken anonymously. No mechanisms to identify individuals responding to the survey were included. A total of 1,114 employees responded to the survey.

Table I
Michigan Department of Corrections Staff Survey on Correctional Health Care

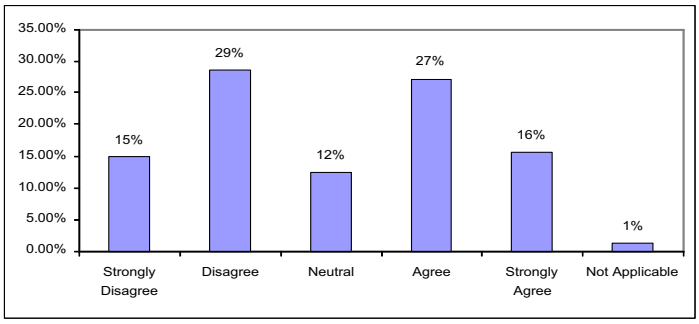
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1. Correctional officers, mental health, and health care staff are held equally accountable for their performance.						
2. Correctional officers follow MDOC practices, procedures, and regulations.						
3. Health care and mental health staff follow MDOC practices, procedures, and regulations.						
4. Providing good health care and mental health services to inmates is central to the mission of the MDOC.						
5. Inmates take unfair advantage of health care and mental health services.						
6. Correctional officers treat inmates fairly.						
7. Correctional officers, health care, and mental health staff share common values and work together effectively.						
8. Management does a good job in balancing security considerations with the delivery of health care and mental health services to inmates.						
9. I feel safe when working among the inmates.						
10. Inmates should receive no more than a minimal level of health care services.						
11. Inmates currently receive a high level of health care services.						
12. Health care and mental health staff understand institutional security rules.						
13. Health care, mental health staff, and correctional officers back each other up if things get tough.						
14. It is important to keep an inmate's health status confidential.						
15. Inmates usually lie about being ill.						

Survey Results

Question 1. Correctional officers, mental health, and health care staff are held equally accountable for their performance. There were 1,107 survey respondents who answered this question. The results were divided almost evenly, with 44 per cent of respondents strongly disagreeing (15%) or disagreeing (29%) and 43 per cent strongly agreeing (16%) or agreeing (27%). Twelve percent of respondents were neutral on the issue, and one per cent responded "not applicable." Chart 1 below illustrates a summary of the results of question one.

Chart 1

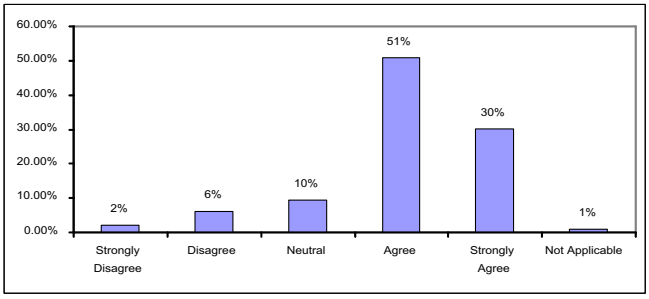
Correctional officers, mental health, and health care staff are held equally accountable for their performance.



Question 2. Correctional officers follow MDOC practices, procedures, and regulations. There were 1,109 respondents who answered this question. The overwhelming majority (81%) of respondents agreed (51%) or strongly agreed (30%) that correctional officers follow MDOC practices, procedures, and regulations. Only eight per cent disagreed (6%) or strongly disagreed (2%) with this statement. Ten per cent of respondents were neutral on the issue, and one per cent responded "not applicable." Exhibit 2 below illustrates a summary of the results of question two.

Chart 2

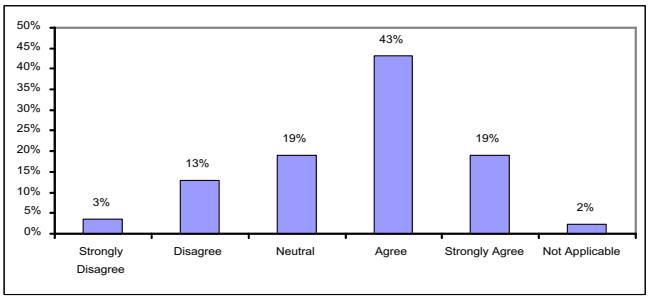
Correctional officers follow MDOC practices, procedures, and regulations.



Question 3. Health care and mental health staff follow MDOC practices, procedures, and regulations. There were 1,105 survey respondents who answered question three. The majority of respondents (62%) agreed that health care and mental health staff follow MDOC practices, procedures, and regulations. Of the 62% agreeing with this statement, 19% strongly agreed, and 43% agreed. Sixteen percent did not agree with the statement, with 13% of these disagreeing and 3% strongly disagreeing. Nineteen percent were neutral on the issue and 2% responded "not applicable." Responses do not add up to exactly 100% due to rounding. Chart 3 below illustrates a summary of the results of question three.

Chart 3

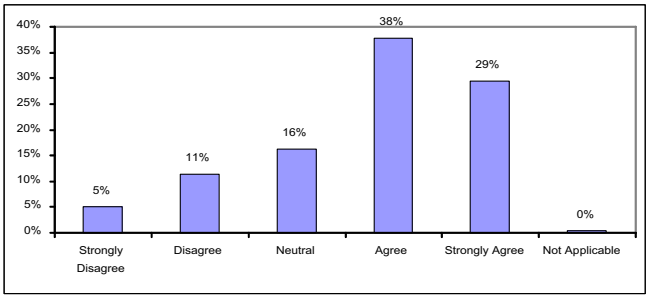
Health care and mental health staff follow MDOC practices, procedures, and regulations.



Question 4. Providing good health care and mental health services to inmates is central to the mission of the MDOC. There were 1,104 survey respondents who answered this question. The majority (67%) of respondents agreed (38%) or strongly agreed (29%) that providing good health care and mental health services to inmates is central to the mission of the MDOC. There were 16% of the respondents who did not support the statement [disagreed (11%) or strongly disagreed (5%)]. Another 16% of respondents were neutral on the issue and less than one per cent responded "not applicable." Chart 4 below illustrates a summary of the results of question four.

Chart 4

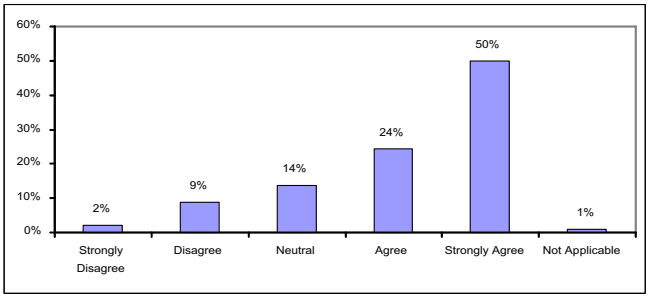
Providing good health care and mental health services to inmates is central to the mission of the MDOC.



Question 5. Inmates take unfair advantage of health care and mental health services. There were 1,107 survey respondents who answered this question. A large majority (74%) strongly agreed (50%) or agreed (24%) that inmates take unfair advantage of health care and mental health services. Fourteen percent were neutral on this issue. Only 11% disagreed (9%) or strongly disagreed (2%) with the statement. One per cent responded "not applicable." Chart 5 below illustrates a summary of the results of question five.

Chart 5

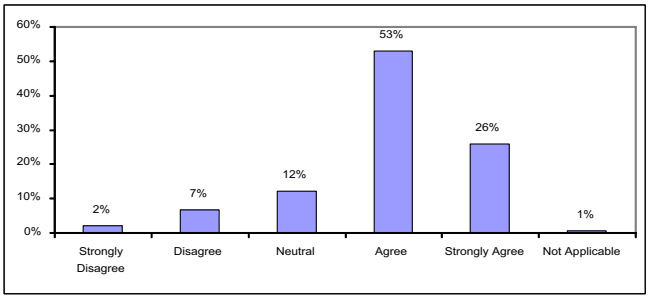
Inmates take unfair advantage of health care and mental health services.



Question 6. Correctional officers treat inmates fairly. There were 1,106 survey respondents who answered this question, with 79% of them agreeing (53%) or strongly agreeing (26%) that correctional officers treat inmates fairly. Only 9% did not agree with this statement; 7% disagreed and 2% strongly disagreed. Twelve percent of respondents were neutral on this issue and one percent responded "not applicable." Responses do not add up to exactly 100% due to rounding. Chart 6 below illustrates a summary of the results of question six.

Chart 6

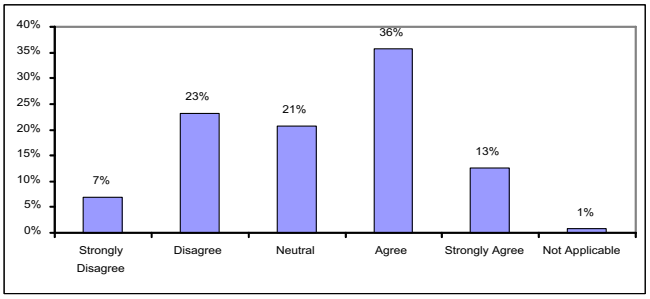
Correctional officers treat inmates fairly.



Question 7. Correctional officers, health care, and mental health staff share common values and work together effectively. There were 1,105 survey respondents who answered this question, with almost half (49%) agreeing (36%) or strongly agreeing (!3%) that correctional officers, health care, and mental health staff share common values and work together effectively. However, 30% either disagreed (23%) or strongly disagreed (7%) with this statement. Also, 21% of respondents were neutral on the issue and one percent responded "not applicable." Responses do not add up to exactly 100% due to rounding. Chart 7 below illustrates a summary of the results of question seven.

Chart 7

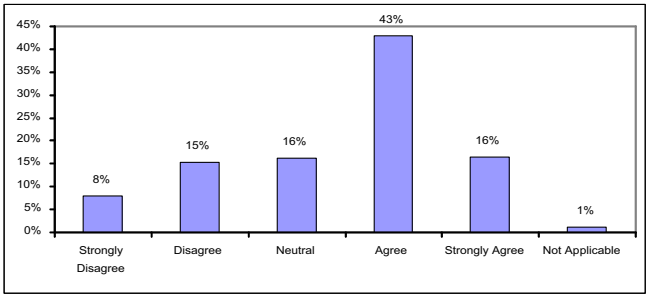
Correctional officers, health care, and mental health staff share common values and work together effectively.



Question 8. Management does a good job in balancing security considerations with the delivery of health care and mental health services to inmates. There were 1,104 survey respondents who answered this question. Over half (59%) either agreed (43%) or strongly agreed (16%) that management does a good job balancing security considerations with the delivery of health care and mental health services to inmates. Almost one quarter of respondents (23%) disagreed (15%) or strongly disagreed (8%) with this statement. Sixteen percent of respondents were neutral on this issue and one percent responded "not applicable." Responses do not add up to exactly 100% due to rounding. Chart 8 below illustrates a summary of the results of question eight.

Chart 8

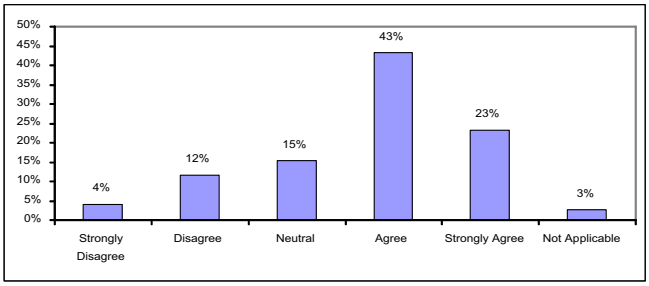
Management does a good job in balancing security considerations with the delivery of health care and mental health services to inmates.



Question 9. I feel safe when working among the inmates. There were 1,106 survey respondents who answered this question. Two thirds (66%) either agreed (43%) or strongly agreed (23%) that they felt safe when working among inmates. There was 16% disagreement with this statement [either disagreed (12%) or strongly disagreed (4%)], 15% of respondents were neutral on the issue and three per cent responded "not applicable." Chart 9 below illustrates a summary of the results of question nine.

Chart 9

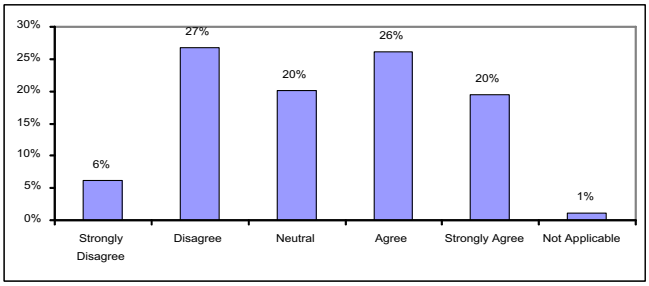
I feel safe when working among the inmates.



Question 10. Inmates should receive no more than a minimal level of health care services. There were 1,096 respondents who answered this question. There were 46% who either agreed (26%) or strongly agreed (20%) that inmates should receive no more than a minimal level of health care services. Another 33% either disagreed (27%) or strongly disagreed (6%) with this statement. Twenty percent of respondents were neutral on this issue and one per cent responded "not applicable." Chart 10 below illustrates a summary of the results of question ten.

Chart 10

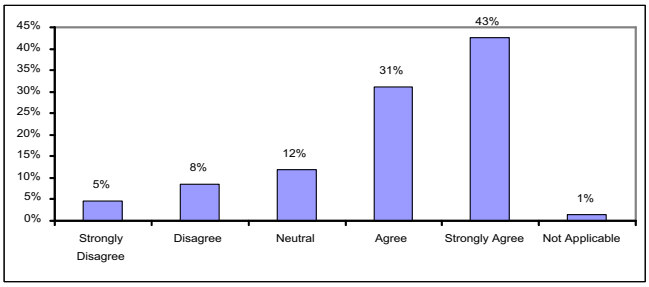
Inmates should receive no more than a minimal level of health care services.



Question 11. Inmates currently receive a high level of health care services. There were 1,102 survey respondents who answered this question. A large majority (74%) either agreed (31%) or strongly agreed (43%) that inmates currently receive a high level of health care services. Only 13% either disagreed (8%) or strongly disagreed (5%) with this statement. Twelve percent of respondents were neutral on this issue and one per cent responded "not applicable." Chart 11 below illustrates a summary of the results of question eleven.

Chart 11

Inmates currently receive a high level of health care services.

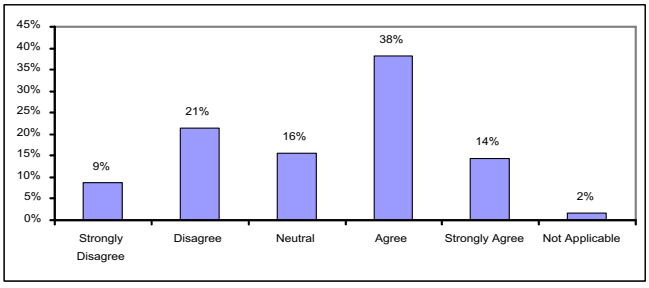


Question 12. Health care and mental health staff understand institutional security rules.

There were 1,102 survey respondents who answered this question. Slightly more than half (52%) either agreed (38%) or strongly agreed (14%) that health care and mental health staff understand institutional security rules. Thirty percent either disagreed (21%) or strongly disagreed (9%) with this statement, 16% of respondents were neutral on this issue, and two per cent responded "not applicable." Chart 12 below illustrates a summary of the results of question twelve.

Chart 12

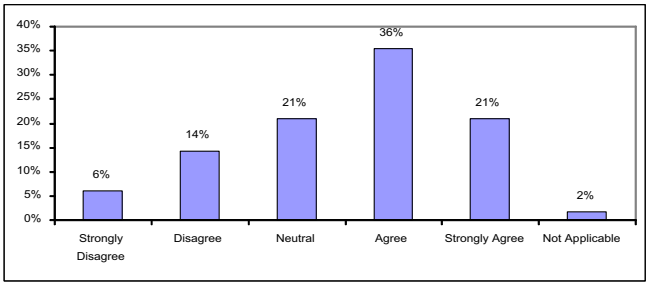
Health care and mental health staff understand institutional security rules.



Question 13. Health care, mental health staff, and correctional officers back each other up if things get tough. There were 1,106 survey respondents who answered this question. Over half (57%) either agreed (36%) or strongly agreed (21%) that health care, mental health staff, and correctional officers back each other up if things get tough. Twenty percent either disagreed (14%) or strongly disagreed (6%) with this statement. Another 21% of respondents were neutral on the issue and two percent responded "not applicable." Chart 13 below illustrates a summary of the results of question thirteen.

Chart 13

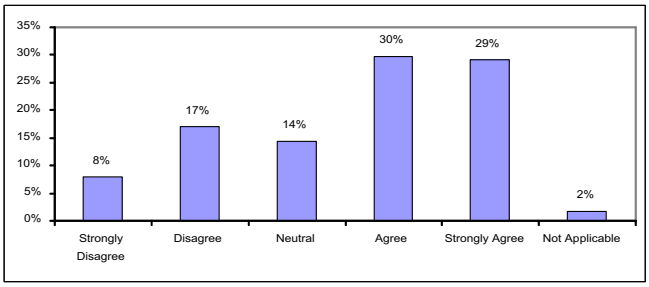
Health care, mental health staff, and correctional officers back each other up if things get tough.



Question 14. It is important to keep an inmate's health status confidential. There were 1,108 respondents who answered this question. A total of 59% of respondents supported this statement 30% agreeing and 29% strongly agreeing that it is important to keep an inmate's health status confidential. One quarter (25%) of respondents either disagreed (17%) or strongly disagreed (8%) with this statement. Another 14% of respondents were neutral on the issue and two per cent responded "not applicable." Chart 14 below illustrates a summary of the results of question fourteen.

Chart 14

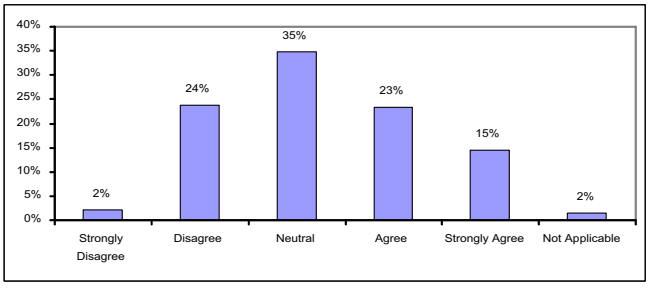
It is important to keep an inmate's health status confidential.



Question 15. Inmates usually lie about being ill. There were 1,108 survey respondents who answered this question. Respondents appeared divided as to whether inmates usually lie about being ill, with 38% either agreeing (23%) or strongly agreeing (15%) with this statement. Another 35% were neutral on this issue, and 26% either disagreed (24%) or strongly disagreed (2%) with the statement. Two per cent responded "not applicable." Responses do not add up to exactly 100% due to rounding. Chart 15 below illustrates a summary of the results of question fifteen.

Chart 15

Inmates usually lie about being ill.



Conclusions

The survey results showed a strong consensus among MDOC staff that both correctional officers and health care staff comply with agency policies and rules in the performance of their duties. Most staff agreed that health care is an important part of the MDOC's mission. A very high percent of respondents agreed that inmates currently receive a very high level of health care service, and that officers treat inmates fairly. However, the statement that inmates take unfair advantage of the services available to them received one of the highest positive responses in the survey, with 74% in agreement (50% strongly agree), and only 11% disagreeing. Staff also generally feel safe working around inmates and feel that management does a good job of balancing security and health care service delivery.

There appeared to be a major divide among staff as to whether health care and custody staff are held equally accountable, whether custody and health care staff share similar values and work together well, and whether inmates should receive minimal levels of health care. It would have been useful to know the positions of the respondents in regard to the answers they gave. Unfortunately, in an effort to promote a higher number of responses to the survey and provide the respondents with anonymity, data were not collected on the job or facility of the respondents. Therefore, additional analysis of the data was not possible.