HMA

HEALTH MANAGEMENT ASSOCIATES

Inmate Medical Services Assessment

PREPARED FOR
CONNECTICUT DEPARTMENT OF CORRECTION

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EXECUTIVE SUMMARY

Connecticut Department of Correction (CT DOC) contracted with Health Management Associates (HMA) to assess the current inmate medical services delivery systems and make recommendations for the system and for a medical management model. Although the assessment methodology was initially designed to incorporate in-person visits and on-site observation, this was impossible due the nation's pandemic. As a result, HMA worked diligently with CT DOC and its Health Services' Unit (HSU) to utilize all other means including extensive interviewing (phone and video calls), extensive document review to perform an operational assessment and staffing analysis, and an evaluation of medical care through comprehensive review of 632 medical charts.

A correctional health care system is by definition a specialty health care system. The system serves thousands of individuals with acute medical and behavioral health needs and individuals with many chronic conditions. The safety of inmates and staff must be ensured, and access to care is constrained by a wide variety of safety, communication, and transportation considerations. Many service delivery mechanisms in correctional health systems across the county are outdated and reactive and do not incorporate efficient and effective practices that are now ubiquitous in community health care. This analysis considered national accreditation standards for correctional health, nationally recognized clinical guidelines for managing chronic illness and preventive care, common practices in managed care, and models of care for addressing defined populations.

The assessment identified many core strengths within CT DOC's health care system as well as challenges and opportunities to improve its operations and outcomes. Findings from the chart audits aligned completely with the operational and staffing analyses.

Strengths

CT DOC health care system strengths are underpinned by the positive relationship between health care and security. There is a high level of medical autonomy; health care staff feel safe carrying out their work; and security is largely viewed as a partner in assuring that inmates have access to timely care.

HSU's response to COVID-19 has been excellent and demonstrated proactive efforts and management of a fluid, dangerous, and complex set of circumstances. Several initiatives, such as its surveillance and management of Hepatitis C Virus (HCV), have also been proactive and demonstrate best practices. Recent plans such as hiring a podiatrist, should assist with improving chronic care management and outcomes.

Across the system, intake screenings are generally on time, and necessary and critical actions are addressed quickly and efficiently.

HSU has made great strides with new laboratory and pharmacy providers. Significant service improvement and cost savings ($800 K-$1.1M per month) have been realized. HSU has begun to revamp

the Utilization Management process for specialty care to ensure those who need specialty care are able to receive it in expeditious manner. Discussions have also started to improve efficiency and timeliness of HSU third party administrative functions like off-site claims administration.

Implementation of an electronic health record (EHR) system will allow HSU to closely monitor patient care, outcomes, and provider and system performance. As reporting functions become more robust, dashboards and patient registries will enhance operations and patient care. The electronic medication administration record (eMAR) also affords considerable opportunities to reduce medication administration errors, med line times, missed medications, and more.

CT DOC should be lauded for a partnership with its sister agency, Department of Mental Health and Addiction Services, and a private contractor for offenders needing nursing home level of care and end of life care (60 West).

Areas for Improvement: Operations and Administrative Functions

CT DOC does not conduct initial health assessments within two weeks of incarceration by policy or practice. This is a clear departure from accreditation standards and creates risk for many conditions that are not identified in the chaotic intake screening environment. CT DOC also does not have a policy to conduct annual/periodic health assessments for high-risk inmates. Periodic health assessments present the opportunity to conduct age and gender-appropriate health screenings and immunizations which are vital to managing the health status of the CT DOC population.

CT DOC's sick call process is under-developed and insufficiently monitored. The piloted sick call model, "Prompt Care," does not address the fundamental components of sick call. HSU needs to redesign the full sick call system to standardize access, provider allocation, nursing protocols, documentation, and monitoring.

CT DOC does not have an effective chronic care program by policy or practice. Providers often address chronic conditions during visits for other complaints, but the subsequent documentation is not recorded in a chronic care template and therefore cannot be monitored.

Infirmary bed management across the system can improve to ensure infirmary beds are used only for those with clinical acuity and who need around-the clock levels of clinical care level of care as opposed to infirmaries functioning as "locations."

The use of off-site specialty care is not subject to acceptable utilization management review or to requirements for the components of a "good" referral to specialists. There are opportunities to enhance primary care management, the effectiveness of the specialty intervention, and tracking of patients awaiting specialty referrals to reduce poor outcomes and incomplete referrals.

Offenders who need emergency department and inpatient care are receiving that level of care. The system lacks assurance of compliance with discharge instructions upon the offender's return to the

correctional facility. It also lacks analysis of the appropriateness of emergency and inpatient care and variance across facilities and providers in the use of these levels of care.

HSU administrative functions should follow the results and recommendations from this assessment. This includes strategic planning, development of policies and procedures, and development of clinical nursing protocols for sick call and emergencies. These should be consistent with relevant industry accreditation standards and Medicaid practices. CT DOC will need to develop a broad, measurement driven quality assurance (QA) program that is informed by real time and actionable metrics.

CT DOC's EHR implementation is incomplete in terms of provider use of templates, refinements to improve provider productivity, and reporting capabilities. The population health management capabilities of an EHR are not being realized.

Areas for Improvement: Staffing

The CT DOC staffing assessment was significantly limited by our inability to conduct site visits due to COVID-19. We were not able to assess the degree to which HSU staff across the system are occupied, working at the top of their licenses, or interacting effectively. Nevertheless, interviews and document and medical chart reviews allowed for several staffing findings:

- CT DOC does not have a single source document that illustrates budgeted staffing by discipline, shift, and facility. Such a document would show vacancies, their duration, and positions filled by locum or staffing agencies, which would provide a useful snapshot to leadership.
- One comparison of CT DOC health care staffing to other prison systems shows fewer providers and more nurses per inmate than other systems. The data is from 2015 and therefore precedes the departure of UConn's management of medical services.
- Elimination of the facility-specific Health Services Administrator has created a vacuum in local operation intel and hands-on management. Managing daily priorities has fallen on nursing leaders to the detriment of their other duties.
- Staff supervision and professional development, alignment of compensation with community standards, as well as competitive and attractive retirement benefits are several strategies worthy of consideration to positively impact staff morale and retention.

HMA's report lays out recommendations for CT DOC to develop a well-informed staffing plan that is customized to the unique needs at each facility and considers the many inputs and influences shown in the figure. HMA also recommends that CT DOC explore additional categories of staffing such as health care scribes and Emergency Medical Techs who can "stretch" the capacities of providers and nurses.

The Department would benefit from a comprehensive, universally adopted, vision and approach (plan) to guide and inform all staffing decisions, policies, processes, and reports.

Recommended Medical Model

HMA recommends CT DOC implement a "medical model of care" that is rooted in evidence-based practice and would enhance the quality and efficiency of inmate health care. The proposed model produces measurable improvements in patient outcomes and satisfaction as well as health care team member job satisfaction. The model aligns with and incorporates the CT DOC stated vision for the future of health care services, building on the strengths and addressing inherent risks in the current state of health care operations.

The recommended medical management model is built on three key components and embeds elements that have become the foundations of successful health care delivery in community health. The components are:

Population health management, whereby each facility's health care staff "own" the population therein and are responsible for proactively managing the risk of every person, population sub-group, and disease state using risk-based metrics and practices.

Team-based care, whereby every member of the facility health care team and representatives of custody operate as an integrated team whose duty is to ensure that all patient needs are met every day through team huddles and other features of the Patient-Centered Medical Home.

Continuous learning and quality improvement, whereby the facility-specific team, supported by the region and the state, continuously evaluate their individual and collective performance of duties and in the provision of health care to continuously improve patient outcomes and efficiency.

The proposed model would provide CT DOC leadership with actionable, real-time information to support improved care, better outcomes, facility and provider-specific performance metrics, higher productivity, and enhanced recruitment and retention.

HMA CHARGE AND METHODOLOGY

CT DOC contracted with Health Management Associates (HMA) to assess the current inmate medical services delivery system and make recommendations for how to improve its structure, operations, and outcomes. It is the Department's goal to provide health care services that align with national standards, best practices, and high medical quality. In this report, HMA provides CT DOC with 1) an operational assessment, staffing analysis, and medical chart review that characterize the current state and 2) recommendations for an improved overall model for delivering inmate medical care and improvements to the current state.

HMA has partnered with NCCHC Resources, Inc. (NRI) for this important work. The full team includes correctional health experts – clinicians and administrators – with deep knowledge of all aspects of correctional health care design, delivery, evaluation, and accreditation. The team also has extensive expertise in models of care, clinical tools, and innovations used in community settings that can be translated to correctional settings. Team bios are included as Appendix 1.

The project work plan included reviews of 632 inmate medical records, interviews with leadership and line staff, and extensive document and data review. The team developed interview templates by discipline and captured interview data by facility, discipline, and topic. The team created a uniform methodology for chart reviews that included 15 areas of review and a database for collecting the findings. The staffing analysis involved review of historic and current staffing, current vacancies, staff structure, scopes of practice, and comparisons with other correctional systems.

Throughout the project, team members reviewed emerging themes and cross-referenced these findings with the interviews, document and data review, and chart reviews. We returned many times to CT DOC for additional data and clarifications. This enabled the team to analyze a large volume of many types of information under a rubric that produced clear, comprehensive, integrated, and defensible findings.

The original project plan also included site visits to all CT DOC facilities by multi-disciplinary project team members. Due to COVID-19 and the resulting restrictions, we could not conduct site visits. The team was also unable to conduct virtual tours of several facilities due to a second wave of COVID-19, which impacted the facilities and required DOC staff to focus on essential operations. Nonetheless, the team was able to evaluate the system and is confident of our findings and recommendations. However, the absence of on-site observation and interactions has left some gaps in our understanding of operations and relationships.

Although this assessment did not include a review of behavioral health or dental services, the HMA team notes that integration of behavioral health and medical care is considered the gold standard across the health care system, including in correctional settings. This is even more important in the context of the current opioid epidemic. In addition, the oral health needs of incarcerated populations are unique and are an essential part of overall health care. Ideally, future CT DOC analyses and service design efforts would include these important services.

Interview templates are included as Appendix 2. In addition, a high-level narrative overview of the CT DOC health care system is included as Appendix 3.

The timing of this Health Care Assessment is important. Governor Ned Lamont, based on legislative directive, has hired a consulting firm to make recommendations for a sweeping overhaul of state government operations designed to reduce costs by as much as $500 million a year. Recommendations will be made in February 2021[1]. It will be critical that CT DOC be able to reference its areas of strength and demonstrate its own ability to critically look at its own operation and self-correct in order to ensure it is providing good health care for its inmates while providing a safe workplace for its staff.

OPERATIONAL ASSESSMENT

When applicable, HMA's approach to communicating our operational assessment findings will focus on seven domains: Operations; Patient Access; Orders and Execution; Follow-up, Tracking, and Reporting; Compliance with Standards; and Leadership and Oversight. This assessment includes high level summary information from the chart review to highlight certain issues, but the full chart review findings are addressed later in this report.

Domains	Operations	Patient access	Orders/ execution	Follow up	Tracking/ reporting	Compliance with Standards	Leadership and Oversight
Interviews	✓	✓	✓	✓	✓	✓	✓
Document Review	✓	✓	✓	✓	✓	✓	✓
Chart Review	✓	✓	✓	✓	✓	✓	

[1] Harford Courant. Lamont taps Boston Consulting Group to prepare overhaul of state government, eliminating jobs and cutting $500M. Keith Phaneuf, Sept 28, 2020.

Introductory Observations and System Strengths

Correctional health care, by its definition, is a specialty health care system. A correctional health care system must have infrastructure, standardized processes and procedures, commitment to performance improvement, and skill in responding to crises and threats. It encompasses preventive care, primary care, specialty care, and emergency care every day. Its population often includes individuals with chronic illnesses who have not had routine health care while in the community. Correctional health care must take place in a jail or prison environment where the security and safety of the incarcerated and its staff are primary. A correctional environment is very different than community-based health care settings. Security threats, institutional procedures (e.g., counts), and many other factors can impact the smooth provision of health care.

As such, an assessment of a correctional health care system should highlight those existing processes, initiatives and examples of good "care," proactive initiatives and process improvements, along with the challenges and areas ripe for improvement. In the following report, HMA will address these areas and provide a series of short-term, mid-term, and long-term recommendations.

Overall System Strengths and Observations

Overall, we found that most inmates of the CT DOC receive timely health care services in response to acute and chronic needs.

1. Medical autonomy, defined by the National Commission on Correctional Healthcare (NCCHC) as "*clinical decisions and actions regarding health care provided to inmates to meet their serious medical needs are solely the responsibility of qualified health care professionals,*" is generally intact across the health care system.[2]

2. The relationship between health care and custody functions professionally across the system. In most facilities and most shifts, custody staff are supportive of inmate needs for health care and collaborate closely with health care staff to ensure inmates get to on-site and off-site appointments. Custody staff provide secure environments in which health care staff deliver services, and health care staff report feeling safe in their work settings. Collaboration between custody and health care worked well in response to COVID-19 and that experience can be built on moving forward.

3. CT DOC's HSU leadership and health care staff across the facilities deserve much credit on their management of the first wave of COVID-19 impacting the Department of Correction. Jurisdictions across the nation are reeling from the effects of the pandemic. CT DOC's proactive

[2] Custody officers determine infirmary bed occupancy in certain circumstances, which may be in conflict with medical autonomy.

approach and its efforts to date with mass testing and isolating patients have clearly made a difference. CT DOC's medical care for patients with symptomatic COVID-19 is based on available hospital standards and has allowed patients to remain in CT DOC facilities while accessing medical care rather than be sent to hospitals. For those patients that need hospitalization and a greater level of care, HSU has been able to use their labs and testing results to expedite care in the hospital.

The Commissioner, Deputy Commissioners, Dr. Richeson (HSU Chief Operating Officer), his direct reports, and the staff on the ground managed these complex efforts well. CT DOC's broad scale testing efforts and management of COVID-19 should be a model for other correctional jurisdictions in the country.

It should be added that HSU's COVID-19 mitigation efforts were recently noted in a New England Journal of Medicine article, "Risk Factors for SARS-CoV-2 in a Statewide Correctional System."[3] As an organization that is committed to performance improvement, HSU is using this data to enhance the safety and care of their inmates during the current pandemic. At the time of this writing, the CT DOC is addressing the second wave of COVID-19 to affect the Department of Correction and, based on its earlier response, they are in a good position to continue to be proactive and respond quickly to new unexpected challenges.

4. Another laudable infectious disease intervention that must be highlighted has been HSU's approach to Hepatitis C Virus (HCV). Unlike many other correctional jurisdictions, CT DOC moved to an "opt-out" approach of HCV testing. New admissions (except for a small percentage of those who declined) are automatically screened for HCV, which allows for early identification of the disease/disease state and to initiate necessary treatment protocols. In 2019 alone, over 9,000 offenders were tested and over 500 inmates were receiving antiviral protocols. HSU's protocol to identify early stages of HCV should be considered an excellent public health approach and intervention.

5. CT DOC's move to Diamond pharmacy from its previous pharmacy provider is another example of process improvement and good fiscal intervention. Diamond's clinical pharmacist and staff have been instrumental in spearheading process improvements, on-site training, production of high-cost medication reports and suggestions for equally efficient and lower cost substitutes, competitive pricing (near 340b pricing) for high cost medicines and clinical problem-solving for complex medical conditions. In addition, Diamond and the HSU have utilized blister packs and barcode scanning to confirm patient identification with medication orders with accuracy. These efforts have resulted in a savings of $500-700K per month, or $6M-8.4M per year.

[3] https://www.nejm.org/doi/full/10.1056/NEJMc2029354

6. CT DOC also made a positive decision to change laboratory vendors to a new contractual relationship with Quest. Reports from staff have noted that Quest has proven to be an excellent partner in the care team as demonstrated by its instant responsiveness, flexibility in adapting procedures to CT DOC needs, bundled (and lowered) rates for expensive labs, and have played a critical role in HSU's COVID-19 response. They have added "stat" pick up for urgent lab tests, on-site lab tech training and have provided a portal for reporting of test results and data mining. Collectively, CT DOC has seen a savings of $300-400K per month or $3.6M-4.8M per year.

7. Although we will discuss the nuances and challenges with chronic care later in the report, HSU has already begun to make some positive changes to strengthen their ability to prevent and/or slow down some degenerative medical conditions (e.g., untreated diabetes). For example, they have asked and received permission to hire a podiatrist. This specialist will be able to flag early foot and vascular conditions in patients with diabetes and other conditions, allowing earlier interventions. The podiatrist will be able to work closely with the provider to order tests, adjust medication, and alter treatment plans proactively.

8. The HSU has recognized the need to make changes to its Utilization Management (UM) procedures to make better use of specialty referrals and resources. At the time of this report, they had initiated discussions with a sister agency, DSS/Medicaid, to potentially assume a UM role, and at a minimum, review their UM processes and procedures for possible CT DOC adaptation. HSU understands the role of pre-authorization for maximizing resources for specialty care.

9. Similarly, HSU has begun discussions about the possibility of DSS/Medicaid assisting CT DOC with "third-party" administrative/billing functions. This would allow an independent party to manage claims/billing **and** collections for hospital and specialty services. This would significantly assist CT DOC in its budget projections.

10. HSU's adoption of an EHR is an extremely important and positive move that will ultimately improve their ability to monitor patient care and system performance. Similarly, the Electronic Medication Administration Record (eMAR) is linked to the EHR which facilitates providing integrated and holistic care.

11. Although HMA will discuss the challenging impact of the transition of health care from University of Connecticut (UConn) to the DOC later in the report, one notable and positive legacy of UConn's departure is that staff across the system have taken interest in problem-solving and system change. As a result, the HMA team saw numerous examples of quality improvement (QI) projects and practice changes that produced meaningful information and/or change.

12. CT DOC, along with its sister agency, Department of Mental Health and Addiction Services, should be recognized for its contribution to the development of the 60 West model, whereby offenders with nursing home care (and often terminal) needs are moved out of DOC custody into an appropriate level of care outside of the correctional system. CT DOC is a pioneer among correctional jurisdictions in the creation of this model.

On-Site Medical Care

Intake – Jail

CT DOC policy requires jail intake screening upon admission (Directive 8.1.7). In general, all intake screenings are completed in a timely manner with critical actions taken to address substance use withdrawal, refer for essential medications, and appropriately manage any mental health issues requiring immediate intervention.

Referrals for treatment and ongoing care seem as though they are completed in a timely manner, and chart review showed follow-up care was met 89% of the time. This is particularly important at the intake facilities. CT DOC should prioritize focusing on ensuring that the delivery of necessary medical care occurs. All patients identified with medical or psychiatric needs should have a plan of care that includes timely follow-up, medication management, additional testing or diagnostics, as well as orders for interval of care follow-up as it relates to best practice around their chronic condition levels of control (i.e., patients with poorly controlled disease will have a shorter interval to follow up then a person with well-controlled illness). CT DOC might consider a dedicated LEAN project focused on this patient flow issue and institute routine audits at each intake facility.

Other areas of future attention at the intake stage are infectious disease screening and follow-up (e.g. TB/STI) as well as Hepatitis A/B/C assessment and immunizations. CT DOC should work to align its policy and practice with the Connecticut Public Health Guidelines. Our inability to conduct in-person or virtual site visits prevented a thorough assessment of privacy protections during the intake screening and assessment process. Privacy is of critical importance to the inmate/patient and lends credibility to the CT DOC health care services; In addition, health care practitioners are bound by patient privacy practice standards.

Intake – Prison

Despite the limited information available on this topic, it is our understanding the CT DOC practice is not to duplicate intake screening and/or assessment protocols following transfer from another system facility regardless of the time elapsed between system intake and the transfer. The only policy reviewed regarding intra-facility transfers (Directive 8.1.7) states, "*In the event of a referral from the admitting and processing staff member for an immediate screening and assessment, a qualified health services staff member shall promptly conduct an intake or transfer health screening and assessment*." This policy

contemplates provider follow-up on referrals. We were unable to secure any other policy related to CT DOC prison intake/transfer policy. The National Commission on Correctional Healthcare (NCCHC) Prison transfer standard (Prison: P-E-03) can inform the CT DOC transfer policy and ensure that health assessments are performed upon transfer. Regardless of the decision to implement a more detailed policy, CT DOC should consider policies and practices that will ensure inmates with risks are provided continuity of care coordination across settings.

The EHR (discussed in detail later in the report) is a critical tool to identify patient movement and allow for continuity of care across the CT DOC system. The EHR ensures that a patient's information and plan of care follows them and is available to their care team wherever they transfer within the facilities. It provides continuity of care documentation for all service lines, medical, behavioral health, and dental. The CT DOC EHR utilizes a "transfer encounter," but it is not clear who is responsible for activating the patient in the new site and ensuring that all elements of care/diet/orders/referral are addressed in a timely way. We do know that pending orders could and occasionally are dropped in the transfer process.

Initial Health Assessment

CT DOC Policy (Directive 8.1.8.B) regarding Initial Health Assessment comports with NCCHC standards and most state penal codes that require a comprehensive health assessment be conducted within 14 days of incarceration. Yet, the chart review did not demonstrate a process for and documentation of Initial Health Assessments. We were advised by a Centricity training team member that Initial Health Assessments are not routinely done and only occur upon the recommendation of the nurse to a provider. It was difficult to assess the frequency and outcome of nurse-to-provider referrals due to provider tendency to incorrectly document such referrals in the EHR (i.e. they often do not correctly document these events as provider encounters).

Health assessment is the central driver of the care model and ensures that all health care needs are assessed and documented and that a plan of care and follow-up planning are clearly established. Assessments are conducted by a provider or a nurse if the provider has trained the nurse (NCCHC standard: When assessment is conducted by nurse, positive findings should be reviewed by provider). A behavioral health and/or physical health provider should perform the intake assessments to manage emergent and urgent medical, mental health, substance use, and dental needs.

The lack of standardization of timely delivery of the health assessment is a considerable deficiency.

Sick Call

The sick call process is the backbone of a correctional health system. NCCHC standards and most state penal codes require a formal sick call process with daily inmate access. While we commend CT DOC for undertaking a sick call change process in the piloting of Prompt Care (PC) and acknowledge strengths in

the existing system such as timely follow-up to sick call orders, the current state of the CT DOC sick call practice has significant limitations.

The PC process was designed to overcome process shortcomings and increase access. The goals were laudable, but overall PC has not been successful because of the following:

- Sick call access remains an issue due to provider shortages
- The system is confusing to inmates
- PC is not accountable
- PC was not conceived under a larger set of policy goals that could be met with resources, codified, and scaled.

More specifically, the current state of CT DOC sick call:

- Lacks uniformity and standardization across the system
- Is driven by "provider busyness" and staffing levels
- Lacks a dedicated request form; the current request form is not sufficiently specific to sick call as it conflates with inmate grievances
- Lacks a uniform data set reflecting inmate access to sick call
- Is not audited for quality/compliance/performance
- Does not seem to be driven on nursing protocols
- Lacks safeguards to ensure requests do not get "lost" due to bumping or multiple requests
- Tends to allow providers to address chronic conditions in the context of sick call; this contributes to poor chronic care service documentation in the EHR, so chronic care management cannot be appropriately evaluated.

In our assessment, the CT DOC sick call process needs an overhaul across the entire system. A key starting point would be updating the Sick Call Policy (8.1.6.A) to provide detail for the methods to access the sick call process, the triage process, or timeframes for response to requests and for sick call encounters.

Our proposed model of care includes key sick call elements that provide a basis for beginning this work. As an additional resource, an HMA issue brief, "Best Practices in Managing Sick Call", is included as Appendix 4. Below are brief highlights of the elements of a well-performing correctional setting sick call program:

- All inmates, regardless of housing assignment, are given the opportunity to submit oral or written health care requests at least daily.
- Inmates must be able to submit confidential sick call requests.
- Sick call requests are picked up at least once daily.
- Sick call requests are triaged by a qualified health professional within 24 hours of receipt.

    - Often this is completed on night shift along with the population of sick call roster for nursing and the provider.
    - All requests with clinical elements must be evaluated by a qualified health professional face-to-face within 24 hours.
- Providers adhere to specific timeframes in following up with all nurse referrals:
    - Emergent needs are seen the same day.
    - Urgent needs are seen within 1-2 days.
- Patients are evaluated in a clinical setting.
- The program utilizes strong nursing protocols for management of many of the common sick call complaints.
- The program demonstrates fidelity to nursing protocols, which must be monitored through audit and follow-up training.
- Scheduling of sick call nurse and provider visits, which was not reviewed, are central to any efficient and effectively run sick call process. Critical issues include, but are not limited to:
    - The number of visits a given provider will "allow" during a day
    - Tracking and managing rescheduled sick calls or "bumping"
    - Ensuring required provider visits are scheduled (e.g. when an inmate makes multiple sick call requests about the same complaint.)
- All aspects of the health care request process, from review and prioritization to subsequent encounter, are documented, dated, and timed.
- The frequency and duration of response to health services requests are sufficient to meet the health needs of the patient population.
- Continuous Quality Improvement (CQI) efforts will include, but are not limited to, compliance with policies and procedures. Tracking and reporting on key sick call performance metrics help identify opportunities for improvement and further training; for example, an assessment of nurse encounters that results in a provider referral can detect any significant variance across the nursing staff and may indicate the need for additional training and supervisory intervention.

Periodic Health Assessment

CT DOC policy on periodic health assessments (Directive 8.1.8.G) states that *"each inmate shall receive a periodic health assessment as determined by the responsible physician."*

Periodic health assessments are another fundamental component of correctional health care. This affords the opportunity to conduct age and gender-appropriate preventive care and capture any new conditions in a comprehensive treatment plan that were not identified/addressed in the intake assessment.

While the CT DOC Directive clearly contemplates periodic health assessments, it is limited in its ability to drive patient wellness because the policy and practice lacks timeframes, prompts, and guidelines. Guidelines might include requiring assessment whenever there is a change in condition, as a scheduled

part of clinical follow-up or a plan of care, or as clinically warranted. Additionally, periodic health assessment might be performed as a part of health care maintenance on or near the one-year anniversary of incarceration, where applicable.

All aspects of clinical services related to periodic health assessments should be addressed by written policy and defined procedures. CQI efforts should include, but not be limited to, compliance with policies and procedures and identifying opportunities for improvement of health assessments, including any training needs.

Chronic Care

A codified approach to managing chronic conditions is an essential component of correctional and community health care. CT DOC providers treat chronic conditions and do comply with some clinical guidelines, but not within a structure that allows for measurement of process or outcomes. Key shortcomings in chronic care noted include the following:

- Chronic care is delivered to patients as they present; this is a reactive approach to care, which fails to use scheduled interventions to deliver the necessary level of control.
- While there is some diabetes care data collected statewide, the data is under-developed and not formatted to be actionable and drive improvement.
- Chart reviews noted many diabetic patients did not receive (no documentation) foot assessments or eye exams according to broadly accepted clinical guidelines.

Each identified chronic illness should have an associated clinical protocol and process for patient management. All identified patient diagnoses should be documented in the master problem list of the EHR when identified or diagnosed. There should also be a documentation tool in the form of a template within the EHR that provides embedded clinical decision support with adaptable order sets to allow the clinician to create an individualized care and treatment plan grounded in best practice around the management of chronic diseases. A physician or other qualified provider will develop, and update when warranted, individualized care and treatment plans at the time the condition is identified. The template may include the following:

- Plan of care that includes patient goals
- Mechanism to identify and place patients in chronic disease-specific registries
- Frequency of follow-up for medical evaluation based on disease control and in accordance with national clinical guidelines
- Monitoring the patient's condition (e.g., poor, fair, good), status, and trends and taking appropriate action to improve patient outcomes
- Type and frequency of diagnostic testing and therapeutic regimens (e.g., diet, labs, exercise, medication)
- Documentation of patient education (e.g., diet, exercise, medication)
- Compliance with clinical guidelines for disease management
    - Clinically justifying any deviation from the protocol

- Tracking of compliance with clinical guidelines by facility and provider, with appropriate remediation of variance

Patient education, health literacy, and self-management skills are critically important to improving health outcomes for people with chronic diseases. It is estimated that approximately 95% of the treatment of chronic illness occurs outside of the patient-provider interaction, underscoring the need for good self-management skills. A program for health education for patients with chronic disease can be developed adapting best practice models to the jail settings. Topics may include basic knowledge of disease and medications, diet and exercise, recognizing change in condition, goal setting, myths and barriers to adherence, addressing health care, and connecting to community providers.

The EHR documentation tools can create discrete data points that allow CT DOC to run reports that will assist in a robust quality program around the identification and management of chronic diseases for patients within the detention/prison facility.

Lastly, CT DOC would benefit from having one policy that addresses the structure of the chronic care program at the facility level, inclusive of treatment protocols and guidelines.

Infirmary Care

NCCHC defines infirmary care as care *"provided to patients with an illness or diagnosis that requires daily monitoring, medication, and/or therapy, or assistance with activities of daily living at a level needing skilled nursing interventions."* Further, NCCHC requires that *"infirmary patients always be within sight and sound of a qualified health care professional."*

We reviewed the related policy *8.1.9 Infirmary Care Services* prior to our chart review and found all aspects of infirmary care, from admission to discharge, are not clearly defined. There is also variability in the approach to infirmary care and services at the facilities providing this level of care.

In CT DOC, statewide infirmary bed management, a critical component of UM in a prison system, appears to be absent. We find CT DOC infirmaries function more as locations and as inmate overflow space, rather than a level of care to address clinical need. This is contrary to the best practice of prisons and jails, which use infirmaries to monitor patients whose clinical acuity is increasing and may, if not managed, require the need for inpatient hospital services. The infirmary is also used to serve patients who are returning from the hospital and no longer need inpatient care but are not yet stable or appropriate for general population. We point to two examples of CT DOC deviating from the recommended practice below:

- CT DOC Custody can assign people to infirmary beds. This is an inappropriate allocation of limited clinical resources and interferes with medical autonomy.

- The infirmary is used for inmates needing CPAP machines, those with mobility or other ADA constraints, and those with dementia. None of these populations/conditions are appropriate for infirmary care, absent other qualifying clinical issues.

One significant consequence is that CT DOC infirmary beds do not reduce the use of inpatient hospital services. To ensure infirmary is operated according to the best practices, CT DOC infirmary care policy should require the following:

- An admission diagnosis and provider order
- Daily rounding by provider and nursing staff
- Discharge orders
- Discharge orders implemented

Our chart review showed the following performance outcomes rates:

Key Infirmary Performance Indictor	Cases (%) Indicator Met N = 186
Provider Admission Order	54%
Daily Provider Rounds	19%
Shift Nursing Rounds	55%
Discharge Order	55%
Discharge Orders Implemented (documented)	57%

Lastly, CT DOC might consider having a clearly defined policy and procedure manual for infirmary care.

Special Populations

Today's prison systems deal with many special populations, each with unique health care needs and many with special legal protections. Because the HMA team was not able to conduct site visits, we are insufficiently informed to evaluate how CT DOC serves the health care needs of the following populations:

- Women, especially pregnant women
- Youth (in the adult correctional system)
- Inmates with HIV/AIDS
- LGBTQ populations, especially inmates with gender dysmorphias
- Inmates with physical disabilities
- Inmates with Traumatic Brain Injury

- Inmates needing support with activities of daily living
- Inmates with developmental disabilities

CT DOC should, in its strategic planning, develop a process for evaluating how facilities serve each of these populations, mitigating any deficiencies, updating policies, and building regular review into performance assessment. Compliance with requirements of the Americans With Disabilities Act (ADA) is extremely important in this arena.

With respect to CT DOC's aging population and those needing skilled nursing, HMA notes that Connecticut is the first and **only state** in which Medicaid has approved a nursing home (60 West) for parolees. We strongly encourage CT DOC to revisit this arrangement (consistent with all appropriate legal, regulatory, and other matters) and determine whether current (and additional) CT DOC inmates are eligible for parole to this facility or others that may be developed like it. Given the aging of the incarcerated population, this opportunity is of extraordinary importance.

Complex Care Management

Complex care management is an important component of any health care system managing a large population of adults. As an example, the Connecticut Medicaid program explicitly identifies program requirements for complex care management. Features include risk assessment to identify high-risk/high-utilization cases; a multi-disciplinary care team; a single, comprehensive, integrated care plan for each person by the care team and within specified timeframes; review of the care plan at least every 90 days; re-assessment every six months; and specific caseload requirements for case managers. A sample of Husky Care program requirements for complex case management is included as Appendix 5.

Every correctional facility has inmates with complex clinical needs. Examples include cancer diagnoses, transplant candidates, and inmates with multiple acute and chronic illnesses. CT DOC manages complex cases through its Patient Prioritization & Transportation (PPT) program with communication between the facility-level Primary Care Provider, PPT/case manager, the Regional Chief Operating Officers (RCOO), and external clinical providers. Systemwide, there are approximately 11 facility PPT case managers and one PPT unit supervisor in the central office who manages direct liaison with UConn specialty groups and serves as the primary scheduler arranging all transfers and transportation to outside medical services. Facility-based case managers are sometimes tasked with liaising with local community consultants for outside scheduling when UConn consultants are not available. The process appears to be ad hoc, and it is unclear if there are appropriate systems in place to track complex cases that are regularly reviewed by a care management team and central office leadership.

As CT DOC refines its model for medical management, it should include a plan for centrally tracking complex cases, managing resources, access to services, and transfers, and providing support to the facility's medical and custody teams housing the inmates. The process should tie to UM authorization processes and systemwide bed

management. It should also include reporting that integrates on-site, pharmacy, and off-site service utilization. Finally, roles for statewide and facility-specific case management functions should be provided.

Prevention and Wellness

Prevention underlies effective population health management and is especially important in a DOC where the system is responsible for the long term (and sometimes lifetime) health care needs of many of the inmates. Age and gender-appropriate health screenings, immunizations, and health education targeted at prevention and wellness must all be addressed.

In most DOCs, preventive screenings and immunizations are addressed in the initial and annual health assessments. As CT DOC does not routinely conduct either of these encounters, prevention and wellness are insufficiently addressed. This creates some risk to the CT DOC and its inmates for preventable disease and preventable spread of disease.

Capturing facility-specific and statewide preventive care and immunization data is a critical component of prevention/wellness and also of a DOC infection control program. Data on screenings and immunizations should be a component of an annual systemwide QI review.

Addressing prevention and wellness will be addressed in more detail in the proposed medical model.

Pharmacy and Laboratory Services

Pharmacy Vendor Operations

CT DOC's recent change in pharmacy vendors to Diamond Pharmacy Services has produced improved efficiency, service and significant cost savings to CT DOC. Regarding the latter, CT DOC reports savings of $500-700K per month or $6M-8.4M per year. Medication procurement is timely and chart reviews confirm that new medications arrive in time for first dosing as ordered in most cases. Although most staff report significant improvements over the process utilized with UConn, there were problems reported about duplicate prescriptions, time involved with medication returns, and blister cards.

CT DOC fiscal leadership reports being very pleased at the performance of the pharmacy contractor, noting lower costs (high cost medications at near 340b pricing) and better customer service than the previous provider. Diamond clinical pharmacist and staff have been instrumental in spearheading process improvements and on-site training for staff.

Pharmacy reports are generated every month to CT DOC medical leadership, but the report package HMA saw contained only a few of Diamond's large standard reports and focused on high-priced medicines. CT DOC should review a much larger complement of pharmacy data. Also, fiscal analyses should track pharmacy costs as a total and percentage of all health care costs.

Medication Administration

The HMA team was not able to observe medication administration, which is a key component of a DOC evaluation. We cannot comment on the degree of efficiency or whether proper procedures are followed to ensure that a patient receives the right medication, the right way, and at the right time. We also could not evaluate practices to safeguard controlled substances, dispose of unused medications appropriately, return unused medications for refund, or check stock medication inventory to remove expiring medications. We were not able to assess practices to reduce diversion of psychotropic and other medications with high diversion potential through crushing, limiting formularies, and other means. These are all important elements to a well-run pharmacy operation.

Through interviews, we deduced the following:

- CT DOC has a Keep on Person (KOP) program, which is key in reducing medication administration resources, but it does not include practices necessary to ensure that patients take their medication as prescribed or renew them when they should.
- Medication renewal notifications from Diamond to providers seem to work efficiently.
- Practices to observe patient ingesting medications to ensure they are not "cheeked" or diverted ("Direct Observation Therapy" or DOT) are not uniform. Custody does not seem to be involved in this process.
- Instances of missed medications, due to patient refusals or otherwise, are not optimally incorporated into care management, which creates risk for patients and for CT DOC.

Managing Pharmacy Operations

Medication ordering, procurement, safeguarding, administration, and documentation require a significant amount of CT DOC staff hours each month. Accordingly, all DOCs are wise to ensure that all components of pharmacy operations work smoothly and efficiently. In addition to issues noted above, a well-run pharmacy operation includes all of the following:

- An active Pharmacy and Therapeutics Committee that:
    - Reviews a comprehensive panel of pharmacy reports and discusses changes in cost by drug class, pharmaceutical equivalents, etc.
    - Manages the formulary
    - Reviews adverse drug reactions
- Computerized physician order entry for medications
- eMAR produced monthly
- Electronic documentation of medication administration using scanners
- Use of Pharmacy Technicians and/or LPNs under supervision of RNs
- Facility-level electronic reconciliation of orders received against orders placed
- Simple and efficient return-for credit policies, practices, and reporting

- Clinical Pharmacy services provided by the vendor to address drug interactions, polypharmacy, therapeutic substitutions, etc., with prescribers
- Participation of the vendor in recommending cost-saving measures
- Efficient and timely processes for non-formulary requests
- Reporting on non-formulary prescriptions by provider
- Regular reviews of monthly, quarterly, and annual pharmacy costs as well as opportunities for cost savings
- Engaging in performance improvement cycles that can lead to practice and system change

Laboratory Services

CT DOC's movement to Quest Diagnostics for laboratory services was an excellent decision which is having a very positive impact on cost and quality. Many staff commented on Quest's eagerness to partner with CT DOC, and has been demonstrated by its instant responsiveness, flexibility in adapting procedures to CT DOC needs and willingness to bundle (and lower) rates for expensive labs. Quest is playing an instrumental role in CT DOC's COVID-19 response. They have added "stat" pick up for urgent lab tests and provided a portal for reporting of test results and data mining. In addition, they have provided on-site lab tech training. CT DOC is reporting savings of $300-400K per month or $3.6M-4.8M per year since subcontracting lab services to Quest Diagnostics.

Health Care Functions Off-Site Care

Off-site services, whether to a specialist office, hospital emergency department, or inpatient hospitalization, creates significant expense for CT DOC because each instance incurs not only the cost of the care itself, but also the cost of transport and security throughout the encounter. The HMA team did not find any specific data on custody costs for transport and security, but they should be part of CT DOC's analytics. Clearly, more specialty services provided on-site will reduce those transportation and security costs, as well as clinical costs for care. HMA reviews an e-consultation model in the below recommendations.

Specialty Care

NCCHC standards call for timely inmate access to specialty care and that a written summary of assessment, treatment, and follow-up recommendations accompany the inmate upon return to the facility. Standards call for the jail/prison provider to consider and act on recommendations made by a specialist in a timely manner. Where the facility provider opts not to implement the specialist recommendations, the medical record is expected to show consultation with the specialist on an alternative treatment plan.

The process for specialty care has changed considerably from when UConn operated health care to the process now under DOC HSU. UConn had a very restrictive process for specialty referrals, and staff interviewed almost uniformly reported that this significantly limited necessary and timely access to specialty care.

- Overall, in 2019, over 90% of specialty requests were approved and appointments completed, averaging nearly 800 per month. In 2020, the pandemic has significantly reduced the number of specialty requests and approvals to only 376 per month. The complete data set for 2020 is not yet available for further analysis.
- Under UConn, prison and jail providers had relationships with specialists that afforded collegiality, "curbside" informal consultation, and a single medical record.
- Under DOC HSU, restrictions for specialty referral were virtually eliminated, and nearly all referrals are now executed with no review. There is no clear UM process that evaluates, triages, and prioritizes those in need.
- Analysis of referrals by specialty for January – December 2019 noted that of the 11,094 specialty requests submitted, 9954 were approved (90%). Commensurate 2020 numbers were not available at the time of this report.
- This "open access" to specialty care has created several problematic and unanticipated consequences.
    - Specialists experienced a large volume of referrals, many of which are clinically unnecessary.
    - Specialty visits often occur without necessary documentation of patient history, treatment, and work-up. This lack of documentation may create duplication of diagnostic testing and a delay in providing treatment. Future access for specialty care may also be impacted if post-visit instructions and directions are not provided.
- Nurses review orders and documents that accompany patients returning from off-site referral and then forward them to PCPs. But there is no policy or practice that ensures the PCP reviews the recommended treatment plan in a timely manner, nor is there a requirement that PCPs document alternatives to the treatment plan recommended by a specialist, inclusive of clinical rationale. This creates inordinate risk of poor outcomes and reduces the actual value of the consultation.
    - Nevertheless, it appears that CT DOC may be well served by on-site audiology and dermatology clinics.

    - Several specialties also warrant consideration for e-consultation, which would address inmate needs quickly, reduce off-site specialty visits, and build clinical capacity within primary care for managing common conditions. These include endocrinology, otolaryngology ("ENT"), gastroenterology, dermatology, nephrology, orthopedics, pulmonary medicine, urology, and vascular surgery. This issue is discussed in more detail in the proposed medical model of care and recommendations.

- Demand for consultations for speech and occupational therapy seem high as well and may indicate the need for on-site clinics or arrangements for telehealth.
- The system may be well served by some mobile diagnostic services. High volume indicates a high cost for transport and security. These include radiology and diagnostic imaging, computerized tomography (CT) scans, magnetic resonance imaging (MRIs), and ultrasonography.
- There is a high rate of referral for internal medicine (IM), which CT DOC should have the capacity to provide internally using its own staff. CT DOC needs to consider internal centralized IM consultation across CT DOC providers.

- Referrals by facility are not evaluated nor are individual PCPs monitored for their referral practices.
- There is no policy or practice by which the PCP tracks patients referred for specialty care but not yet seen. This creates very high risk for clinical deterioration where referrals are incomplete.
- Incomplete referrals are not appropriately tracked.
- Better data on all features of specialty care would enable leadership to make informed decisions about PCP training, e-consultation, UM practices, on-site clinics, and more.

- The system needs both a high-functioning UM process and e-consultation capacity that are integrated to ensure timely access to care for complex conditions.

- The IT component to this process cannot be overlooked.

With respect to contracting for specialty care, despite DOC having issued two RFPs for outpatient care, only UConn was responsive. As they engage most of the health care specialists in the community, this has significantly limited DOC's ability to negotiate and manage the contractual relationship, and UConn continues to provide much of the off-site care for DOC patients.

For many specialty services including orthopedics, dialysis, and podiatry, CT DOC pays UConn a flat monthly rate that covers a set number of patients or encounters. Funds are not credited to CT DOC if the number of patients served in a month is less than the cap. If volume exceeds the cap, scheduling is delayed. CT DOC reported that new negotiation is underway to address that circumstance. In the meantime, this contractual arrangement does not serve CT DOC well and jeopardizes timely access to specialty care for CT DOC inmates.

Other services are billed at a negotiated fee-for-service rate. Some services, such as radiology, are paid at the Medicaid rate, but others are based on the negotiated rate between the specialist and DOC.

Off-Site Visits to Emergency Departments

Managing referral of patients to local hospital emergency departments (EDs) is challenging for correctional settings. Most ED visits do not become inpatient admissions, which implies that care could have been managed in primary care. But some suspected conditions, such as possible heart attacks, progress too quickly to safely manage "in house." In addition, prisons and jails have choices to make about what point-of-care diagnostics and emergency trained providers to provide in the correctional setting. Large urban jails are developing "Emergency Room Observation" (ERO) capacity in partnership with local EDs. In these arrangements, an ED physician staffs the jail/prison ERO unit, which is equipped with advanced point-of-care diagnostics. Transports to the ED are minimized and patients needing admission are admitted directly from the ERO setting at the jail/prison. The HMA team was not able to ascertain whether this option would be feasible for CT DOC. In interviewing physicians and conducting chart audits, we learned the following:

- Providers believe their ED referrals were appropriate, and chart audits found ED referrals to be prompt.
- Lack of 24/7 provider coverage leads to "risk aversion" and subsequent ED referrals when no provider is present.
- Facilities sent proper documentation with patients to the ED in 92% of cases reviewed.
- EDs sent documentation back to the facility with the patient in 88% of cases reviewed.
- Patients returning from the ED were seen by a qualified health professional in a reasonable timeframe in 92% of cases reviewed.
    - Patients were usually evaluated by nursing, not a provider.
    - Nurses enter orders in the discharge summary where available, but it is not clear whether the provider reviews, approves, and executes them.
- Facility health care staff do not keep logs of ED visits that note the reason for referral; logs are kept by custody and reflect custody officers' perception of the reason for referral, but these are not reliable for use in determining appropriateness of referral.

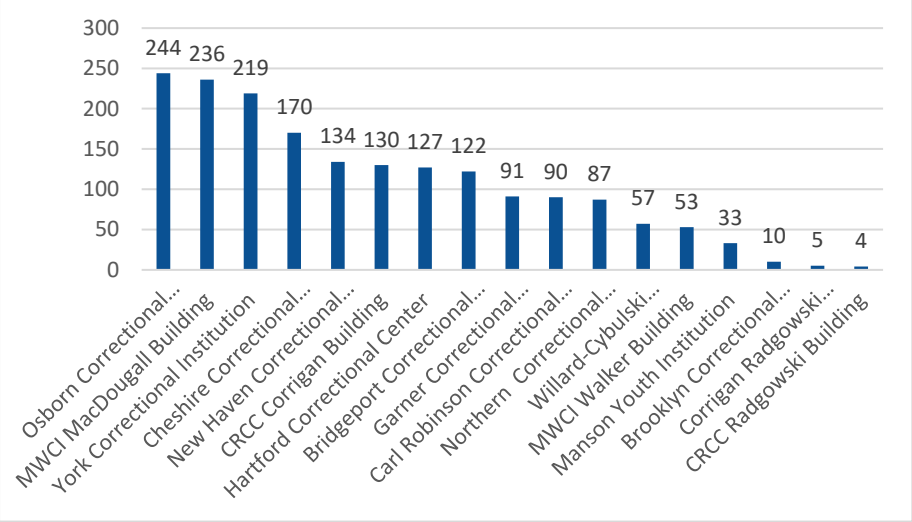
The table below shows wide variation in the rate of transport to ED per 100 inmates in August 2020, ranging from 0 to 6.67.

Snapshot: Emergency Room Transport during August 2020
Period: (Rate of ER transports per 100 inmates)

Facility	Aug 2020 ADP	ER Transports	Rate
Bridgeport Correctional Center	598	7	1.17
Brooklyn Correctional Institution	321	Not avail.	0.00
Carl Robinson Correctional Institution	807	13	1.61
Cheshire Correctional Institution	1098	14	1.28
CRCC Corrigan Building	611	16	2.62

Snapshot: Emergency Room Transport during August 2020 Period: (Rate of ER transports per 100 inmates)			
CRCC Radgowski Building	239	1	0.42
Garner Correctional Institution	521	11	2.11
Hartford Correctional Center	733	13	1.77
Manson Youth Institution	215	8	3.72
MWCI MacDougall Building	1403	32	2.28
MWCI Walker Building	410	2	0.49
New Haven Correctional Center	607	15	2.47
Northern Correctional Institution	90	6	6.67
Osborn Correctional Institution	988	23	2.33
Willard-Cybulski Correctional Institution	434	10	2.30
York Correctional Institution	516	21	4.07

The figure below displays the raw number of ER transports by facility for the period January 1 – October 15, 2020. There were 1,812 ED visits during this period.



Variance in ED visit rates are to be expected, based on facility mission, patient population, and staffing. However, the HMA team did not find any evidence of CT DOC analyzing the use of EDs by facility, the reasons for ED visits, or the variance across settings. This should be part of regular central office management and data reporting. It would illuminate opportunities to reduce expensive ED use through several avenues, including providing after-hours ED or IM consultation to facilities with no providers, increasing point-of-care testing, and using the ED for ambulatory care-sensitive conditions.

Inpatient Hospitalizations

CT DOC is accessing Medicaid coverage for inpatient admissions of greater than 24 hours for inmates enrolled in Medicaid. This is an important financial management tool and should be optimized.

As with ED visits, the HMA team did not find a facility-specific, regional, or statewide process that analyzes inpatient hospital use for clinical appropriateness or for variance. This should be part of regular facility-specific population health management and QI, and of central office management and data reporting.

ADMINISTRATIVE FUNCTIONS

Health Services leadership plays a critical role in setting the culture and expectations at each facility and is ultimately accountable for each facilities' system performance and health care operations. It is extremely positive that the nursing leadership positions have finally been filled, as there has been a significant and deleterious effect of not having a nursing executive leading the nursing workforce. Time and time again, staff have noted that although the "120's" provided some leadership to nursing supervisors, there has been a serious absence of nursing leadership for too long.

Correctional health care is a health care system with unique challenges. Together, executive health care staff must lead all strategic planning efforts, create an accountable system that relies on system metrics to evaluate the functions of the health care system. This includes the development of a robust and real-time quality assurance (QA) program that is based on standard and evidence-based policy, procedures, and protocols.

Strategic Planning

The HMA team has noted in many parts of this report that CT DOC currently works hard and is committed to providing ever-improving inmate health care. Most of the agency's energy since the UConn transition has been directed to components of the transition and not to the larger whole. The creation of a visual strategic framework that captures five priority domains (see Medical Management Model below), the request for this health care system analysis and the desire for an alternative medical model is evidence that CT DOC leadership is ready to consider a longer view. We recommend that - once this report is digested and a medical model is identified - CT DOC health care leadership frame it under the umbrella of a strategic plan that has clearly articulated objectives, timelines, and measurable outcomes. The strategic plan should cover a four- to five-year period and be regularly and clearly communicated to all CT DOC staff. All QI, staffing, operational, and administrative initiatives should tie directly to the elements of the strategic plan.

Quality Improvement

In keeping with correctional health standards and best practices across the health care system, CT DOC should operate a statewide Quality Improvement Council (QIC) that reflects all health care disciplines, custody health care populations, and administrative departments, e.g. HR, IT (EHR). The QIC will be responsible for the development and implementation of a statewide Quality Improvement Plan (QIP) that is data driven and focuses on priorities. QIP priorities should reflect emerging or extant problems identified through a variety of data inputs. Priorities should also address elements of an overall strategic plan and should reflect the intent of CT DOC's strategic objectives.

The QIC should also identify a calendar of audits/reports conducted across the state that will continuously inform it of emerging problems. This should include, at a minimum, audit/reporting of the following:

- Sick call process components
- Nursing referral to providers
- Wait lists
- Specialty care referral components
- Infectious disease data
- Incidents and other sentinel events
- Inmate grievances
- Emergency department visits
- Prescription medication elements

The QIP should be clearly communicated throughout CT DOC and should be acted on by facilities. The QIP should articulate problems and design QI projects that include baseline data, desired outcomes, interventions, responsible parties, timelines, periods for re-measurement, and remediation. The Council should meet monthly until the first QIP is completed and then possibly move to bi-monthly or quarterly.

In addition, each facility should operate a facility-specific QIC responsible for implementing the statewide QIP and identifying facility-specific emerging trends and outliers in the data reported to headquarters. The facility QIC should design its own QIP with at least 3 – 5 projects per year that address trends, outliers, or other problems to identify root causes and develop and test interventions.

CT DOC's ability to make data-driven decisions is hampered by a lack of actionable data and performance improvement feedback. Staff report inconsistent and infrequent QI processes at the system or facility level. According to staff reports and data and information HMA received, there are major drivers impacting the lack of QA/QI at this time including a limited ability (or instructions how) to mine data/information from the EHR and, of particular importance, no regular dashboards to flag concerns and inform administrators or providers. Reporting from contracted providers is limited as well. An exception to this is the pharmacy contract, which requires reporting from the vendor and should be a

model for reporting for other vendors. There are some other notable exceptions in facility-specific QI documents and ISBARs (Identify, Situation, Background, Assessment and Recommendation). It is very good that some of the facilities are identifying areas for performance improvement.

A well-planned and consistent process for data collection, analysis, and performance processes is needed. The health care system needs a formalized approach that can provide real-time data to identify service challenges, gaps, and issues that will automatically generate process improvement activities.

Policy and Procedures

The importance of having well-defined policies in place cannot be overstated. Having formal policies can make an organization run more smoothly and efficiently. Policies and procedures bring order to operations and provide employees with a clear understanding of what is expected of them by establishing boundaries, guidelines, and best practices as they deliver care. Policies also protect the organization when relevant regulations and nationally accepted correctional health care standards are incorporated into their content.

At HMA's request, NCCHC Resources Inc. (NRI) additionally (and separately) completed a review of CT DOC's health care policies and procedures. The review was guided by current correctional health care standards as defined by NCCHC and the American Correctional Association (ACA), and general knowledge of correctional health care. A crosswalk of these standards and the CT DOC Administrative Directive, Chapter 8: Health Care Service, Hygiene and Sanitation, is attached to this report as Appendix 6. High-level findings from both HMA's and NRI's review include the following:

- The documents listed in the CT DOC procedure column are treatment protocols and were not considered to be policy statements. Treatment protocols require a separate review by medical and nursing leadership to ensure they are current in their clinical content and that they meet the scope and standards of practice for those who use them.
- Topics addressed in the national standards are mentioned in some of the policies, but the policies do not provide the information needed for uniformity of approach across the facilities.
- The national standards have been developed to address key organizational aspects of the health care delivery system. These include standards that address governance, health promotion and disease prevention, personnel and training matters, ancillary health care services, patient care and treatment processes, special needs, and medical and legal issues. Policies that fall into the associated care area provide clarity for the user; however, the current policies are not organized in this manner.
- In general, the policies do not match the content of the most current versions of the NCCHC or ACA standards.
- The policies routinely use the following language: "the contracted health services provider shall..." This language does not reflect the current administrative organization for the delivery of health care in the Department.

- Essential concepts in correctional health care include a "responsible health authority" whose role is to ensure that all inmates have access to needed care and that the medical providers have medical autonomy. The policies did not make clear who is designated to serve in this vital role (e.g., Chief Medical Officer/Chief Operating Officer).

The crosswalk report contains several recommendations. The list below highlights some notable recommendations that encourage CT DOC do the following:

- Conduct a thorough review of all current health care policies as compared to the most current correctional health care standards and jurisdiction regulations.
    - Establish a team to direct and complete this task. Select team members based on their knowledge of the Department's needs and their knowledge of correctional health care standards. Team members should be mature in their ability to think critically, problem solve, and work as a team. A strong leader is required to keep this project on track to reach its completion.
- Adopt the format of national correctional health care standards as policies are updated. This supports ease of use for the staff using them, as topics are clearly identified, and relevant and required information is easily retrieved. For example, the 23 services covered in Directive 8.1 Scope of Health Services would benefit from each process having its own policy statement.
- Continue the excellent, current practice of noting all applicable references and authorities.
- Use compliance indicators from the correctional health care standards. These support documents are a valuable tool that can guide the policy developer and to ensure all important aspects of the topic of care are being addressed.
- Create clearly defined policies related to the responsible health authority role based on current Department organizational structure. This would define the individuals by title and written job description within the organization across the central, regional, and facility levels of leadership who will be held accountable for the proper functioning of the program in each facility. There should be a written job description for the individual who serves in this role at the facility level.

Once clearly defined policies have been created, the Department should work with facility leadership to develop procedures for each policy and step-by-step instructions for how the policy will be achieved. While the policy defines the rules, the procedure will provide guidance regarding who is expected to do it and how they are expected to do it. This document can then be used to develop post orders for every position on every shift within each facility to support more efficient program oversight. This process should occur in consultation with the stakeholders at the facility level and with oversight from central office leaders. An annual review process of all policies should be established within the central office.

Nursing Protocols

CT DOC's Policy Comparison Matrix lists over 110 "nursing protocols." Many refer to specific clinical tasks such as the cleaning of a tracheostomy cannula. A few address common primary care complaints such as lice and menstrual cramps. CT DOC does not appear to have comprehensive set of nursing assessment protocols that govern sick call assessments and interventions. Nursing protocols are an important NCCHC standard, defined as *"written instructions or guidelines for the steps to be taken in evaluating a patient's health status and providing interventions."* Protocols address first aid, over-the-counter medication, patient self-care instruction, and sequential steps to follow to evaluate and stabilize a patient while higher level clinical care is summoned. They also address prescription medications to be used in life-threatening situations such as anaphylaxis or chest pain. Nursing protocols ensure that patient complaints are thoroughly assessed and that appropriate interventions are implemented for common conditions. They serve to enhance the quality of care and reduce unnecessary provider visits.

Nursing protocols generally enumerate subjective and objective data to collect in assessing common patient complaints, appropriate interventions, and patient education for the condition. They serve as the standard of care for nursing. CT DOC should develop a comprehensive set of nursing protocols, train all nurses in their use, and routinely audit sick call for compliance with protocols.

The HMA team did not see evidence of standing orders for nursing in the materials received and researched. Standing orders are also addressed under NCCHC's Nursing Assessment Protocol standard, which specify a standard set of orders to be used for a given condition and can include prescription drugs. They are very useful in a correctional setting for assessing infectious conditions at intake, providing immunizations and other preventive interventions, and addressing emergency situations. CT DOC should have standing orders for these situations that are clinically up-to-date and widely published for nursing staff to reference.

Electronic Health Record

Implementation of the Centricity EHR within CT DOC was a gigantic undertaking and a major accomplishment. The EHR includes ICD10 codes and CPT codes, which is both highly unusual in a correctional setting and highly valuable for tracking types of care and provider practices. CT DOC has not yet mined the ICD10 or CPT data, but they hold great promise.

Based on provider interviews and chart audits, the HMA team notes that other benefits of the EHR have not been fully realized. After a new EHR implementation, many more steps are required to optimize its performance. They fall under two main headings: 1) provider documentation within the record and 2) data extraction from the record.

Provider Documentation

Providers report broad dissatisfaction with the EHR. "One and done" trainings are often ineffective and inefficient. Common complaints include the following:

- No integration with other systems
- Operations are difficult and time-consuming, not user-friendly
- Medical information is hard to find because templates are not used
- The EHR is unfriendly, obsolete, and hard to use
- Despite efforts for a comprehensive training in EHR use, it was not effective and there has been an absence of follow-up

Note that the HMA team did not review psychiatric use of the EHR. Some EHRs have reduced the productivity of corrections' psychiatrists by as much as 50 percent.

These complaints are very common and reflect the current state of Centricity at CT DOC: up and running, but with too few "guardrails and traffic cones" to direct providers to templates and limit "free form" narrative, and insufficient provider support through audits, training, and input sessions. An EHR is only as good as the data entered into the system.

All systems must invest additional resources (e.g. report building; new modules specific to the system) to optimize correct provider documentation in their EHR. CT DOC should consider the following common measures taken across the health care system to address the issue:

- Statewide user group that reviews provider concerns and recommends amendments to the EHR
- Regular audit of records to determine provider compliance with reporting requirements and remediation.
- Customization process with two objectives:
    - Modify templates to "force" documentation in proper templates (mandatory fields)
    - Redesign templates to address provider concerns
- Consider the use of "scribes" to prep EHR data for PCP visits and accompany PCPs during patient encounters to enter data. This can significantly increase clinical productivity.

EHR Reporting and Metrics

Although the EHR has full reporting capabilities, interpreting any such report is compromised if data is not entered correctly. At two years into EHR operations, CT DOC needs to re-dedicate efforts to create reports to support their objectives and priorities. These include the following:

- Patient registries for chronic disease, ADA limitations, and other special needs. Registries form the basis for population health management.
- Dashboards for system measurement of productivity, service utilization, and more. All dashboards are able to report at the facility and provider level.
- Clinical compliance reports, by disease state, facility and provider, to monitor compliance with standards of care.

California's Department of Corrections and Rehabilitation has an extremely sophisticated set of dashboards, a sample of which is included as Appendix 7.

As the medical chart review findings bore out, ongoing training and auditing must be an immediate priority of DOC HSU going forward.

Off-Site Claims Processing

CT DOC processes claims for off-site services provide by specialists and hospital diagnostic, emergency, outpatient, and inpatient care all over the state. The majority are from UConn, but there are other providers of specialty care.

With respect to claims submittal, UConn reportedly submits claims to CT DOC at very irregular periods – up to every 10 months or so. This process is far outside the norms of health care administration and makes CT DOC unable to manage Incurred But Not Reported (IBNR) costs and creates havoc for CT DOC budgeting projections and financial contingency processes. Review of the master contract, as well as supplements, indicates that UCONN must invoice within 30 days, and CT DOC must pay within 30 days. There are no implications for late invoicing or late payment. UConn is a public institution and agency managed by a Board of Trustees, not the executive branch. Nevertheless, UCONN's fiduciary responsibilities to state organizations such as CT DOC must not be understated.

Regarding CT DOC payment of claims from all off-site vendors, CT DOC has a well-developed payment authorization process to ensure that all claims are confirmed as delivered to inmates while they were in CT DOC custody. However, the HMA team did not find evidence that CT DOC used claims adjudication software or had claims payment staffing expertise that would identify duplicate payments, employ edits for common billing errors, identify claims that should have been bundled, or manage claim adjustments to ensure that no duplicate payments are made. Medical claims payment is a specialized field, and CT DOC should consider using a third-party vendor to adjudicate and track payments for all off-site services. This should include cross-referencing all ED claims to be sure that if an inpatient admission resulted, the ED visit was not billed separately.

STAFFING ANALYSIS

Methodology and Limitations

To review medical staffing, HMA obtained numerous source documents, including:

- Health Care Staffing by Facility and Vacancy Reports (IMS Employee Roster)
- Nurse/Provider to Inmate Ratios (January 2020 report date)
- CT DOC analysis of CT DOC staffing vs. Pew Charitable Trusts Prison Health Care: Costs and Quality reports
- RN Staffing plan
- Medical chart reviews
- 2015 Pew Charitable Trusts Prison Health Care: Costs and Quality reports (for baseline setting)
- Staff/Leadership interviews

As noted elsewhere, the HMA team intended to do onsite reviews to gain greater insight into medical needs, utilization, and staffing patterns, but the COVID-19 pandemic precluded any site visits. This impacted the staffing analysis more than any other component of this contract. The team was not able to observe workflows, provider "busyness", patient flow, top-of-license issues, and other factors.

It also appears that there is no one consistent health care staffing document to refer to as authoritative. Leadership interviews noted that different documents were used for different purposes, such as budgeting documents, Human Resources reports tracking hiring and recruitment, employee rosters, and inmate-to-provider ratios. HMA noted inconsistencies across these documents, making conclusions difficult to determine. For example, most reports are not labeled to indicate if they consider FTEs versus people or budgeted versus filled positions. CT DOC also does not have a report that provides a real-time snapshot into facility or systemwide staffing. We recommend developing a consolidated report with the following elements:

	Budgeted FTE	Staffed FTE	% Locum/ Agency	FTE Vacancy	Vacancy Duration
Physician					
APN/PA					
RN Supervisor					
RN					
LPN					
EMT					
Medical Assistant					
PPT					
Admin Assistant					
Scribe					
All Mental Health Staff					

Finally, it is not clear what factors inform the department-wide or facility staffing decisions. For example, it is unclear if medical services staffing is based on a definable patient or service target, historic staffing levels, assessment of patient clinical needs, or a combination of factors. Nevertheless, the HMA team

provides the following statements about current staffing levels and suggestions for a framework to assess staffing adequacy and needs going forward.

Staffing Structure

State and Regional Staffing

Medical operations are supervised by the Chief Operating Officer (COO), Chief Medical Officer (CMO), two Regional Medical Directors (RMD), a Chief Nursing Officer and two Regional Nurse Directors. The latter three positions were vacant for a lengthy period and are just being filled. The COO, CMO, and two RMDs provide a solid infrastructure for efficient medical operations. Job descriptions are consistent with the current roles and necessary functions. However, it is important to note that lack of hazardous pay and different retirement rules afforded to most central office health care executive staff will likely impact the ability to retain executive health care staff over the long term. This presents the likelihood for considerable "brain drain" of seasoned executives with deep knowledge of correctional health.

When health care operations were moved from UConn to CT DOC, the position of the Health Services Administrator (HSA) was eliminated. In its place, four new Regional COOs (RCOOs) were appointed, each with executive responsibility for several facilities. RCOOS are "accountable for directing the planning, implementation, management and evaluation of the overall health services for assigned correctional facilities." The "supervision exercised" and extensive "examples of duties" in the RCOO position description are critical elements of daily on-the-ground, facility-specific health care operations. Managing operations from afar for multiple large facilities has not evolved successfully despite the qualifications and determination of the RCOOS. Staff at all levels across the system note the absence of an HSA. Nursing supervisors are pulled to manage shift assignments, patient crises, vacancies, and daily operational problems, which leaves little time for nursing leadership. As almost unanimously noted across the staff interviews, the loss of the HSA position has resulted in less oversight of medical operations, less advocacy for staff needs, and less attention to overall care. Although the RCOOs are engaged and positive to work with, staff noted RCOOs are spread too thinly and largely are not medical professionals.

Facility Staffing

The HMA team believes that the HSA position is vital to smooth and accountable operations, and the role features prominently in the proposed medical management model. An HSA per facility (or at most, shared across two geographically close facilities) allows daily coordination of interdisciplinary care, efficient management of staff resources, verification of appropriate specialty care referrals, ensuring follow-up care after a specialty or emergency/hospital admission and critical care oversight. Further, the HSA is responsible for managing the overall operations of a clinical program at a designated correctional facility or within a complex of facilities. Additional responsibilities include planning, coordinating, directing, and supervising the clinical program providing services to patients in a facility or complex of facilities. Since an HSA is "on

the ground," s/he can organize QA activities, advocate for patient care, and communicate staff concerns up the chain of command.

HSU does not have facility medical directors or senior physicians who serve as the facility responsible health authority, despite having physicians assigned to a facility. The absence of a facility medical leader and an HSA causes the facilities to function very independently from each other and prevents HSU from conducting efficient system evaluation, uniform population health management, and consistent systemwide QA activities.

Health Care Staff Disciplines

Physicians

Nearly all of the CT DOC physicians are trained in primary care. However, CT DOC does not operate a provider credentialing process with the rigor expected by health systems.[4] The elements of CT DOC Directive 8.6 regarding credentialing are outdated and vague and should be revised to spell out the specific elements of credentialing a provider and the frequency of updates.

The appropriateness and adequacy of physician staffing levels are difficult to assess in the absence of data on wait lists, ED visits, ambulatory care-sensitive conditions and other inputs. In general, there appear to be providers assigned to every facility, but the HMA team could not fully determine whether physicians are optimally deployed.

In moving toward optimal physician staffing, the HMA team suggests the following steps that CT DOC can undertake to ensure that *demand* for providers is managed:

- Query the providers about the genesis of "unnecessary visits."
- Review policies that drive unnecessary provider demand, such as provider visits for low bunk assignment and mandatory provider visits for transfers.
- Ensure that nurses use robust protocols for sick call encounters and monitor the rate that sick calls are referred to providers by each nurse.
- Review practices whereby mental health staff make provider referrals and amend as appropriate.
- Review provider overnight staffing and ED visits from facilities without 24-hour coverage.
- Explore opportunities to enhance telemedicine consultation across facilities, especially for second and third shifts.

CT DOC can further ensure provider *productivity* is optimized with the following steps:

- Produce and analyze the number of daily provider visits by site and provider

[4] https://www.medpro.com/documents/10502/2837997/Guideline_Credentialing+and+Privileging.pdf

- Explore and correct contributors to variance including:
    - Custody staffing to escort patients to clinic
    - Provider instructions to schedulers
    - Conflicts between clinic hours and custody functions such as counts, court appearances, mealtimes, etc.
    - Practices for clinic holding areas
    - Provider clinical versus administrative time
    - EHR use factors (see EHR section of report calling for consideration of "scribes")

It is also important to point out that some physicians noted the classic conflict of "dual loyalties" created by CT DOC's chain of command whereby a provider reports both to the health care operation and to the Warden. Although, as noted earlier, physicians are making medically autonomous decisions.

Mid-Level Providers

CT DOC seems to make good use of advance practice nurses (APNs) and physician assistants (PAs). The HMA team was not able to assess Connecticut requirements regarding levels of supervision and scopes of practice for nurse practitioners (NPs) or PAs and whether additional mid-level providers could be engaged given supervision and market issues. These are important considerations for staffing optimization. In particular, the proposed model of care calls for mid-level providers to explicitly staff same-day open schedules.

Nursing

Nursing is the backbone of correctional health care. In these settings, "nursing" is a broad category that encompasses all non-prescriber direct-care providers and includes registered nurses (RNs), licensed practical nurses, and non-licensed staff including medical assistants, nurse aides, and community health workers. Some systems also effectively utilize Emergency Medical Technicians (EMTs), though CT DOC does not. Pharmacy technicians may also overlap with nursing.

Nurse staffing levels should provide for adequate supervision and direct care to ensure that all patient needs are met in a timely manner while ensuring all nursing staff are working at the top of their licenses. Supervisory nursing staff needs increase with the number of facilities, specialty units such as infirmary care and high acuity mental health housing units, and higher patient acuity across a facility. There is no simple formula for nurse-to-patient ratios in corrections. Rather, CT DOC must evaluate the unique demands of various patient settings, and establish the following patient care practices:

- Confirm that each staff member is working to the top of their license. This could include using EMTs or licensed vocational nurses (LVNs) to conduct many parts of the intake process, using EMTs to distribute keep-on-person medications, using LVNs to triage sick call requests, and much more.

- Ensure that nursing supervision is right sized to allow an appropriate number of nurses per supervisor (dependent on level of medical acuity).
- CT DOC should consider adding EMTs to the CT DOC team, as EMT scope in Connecticut allows for basic patient assessment, response to "man down" situations, blood sugar checks, and administration of some medications in emergency situations including oxygen, glucose, charcoal, epi-pens, nitroglycerine, aspiring and naloxone.

Lengthy vacancies in Director of Nursing and regional nursing leadership positions (although these positions have since been filled) have left a significant void in nursing leadership and in the overall morale of CT DOC nurses. Further, the removal of the HSA position has resulted in nursing supervisors becoming mired in daily administrative duties and "putting out fires" at their facilities. This has further diminished the tenor and tone of nursing across the system. It is incumbent on CT DOC to bolster professional nursing across the system with visible attention to the matter. The proposed model of care creates new opportunities for primary care nursing that will assist in this quest.

Support Staff

Support staff are often under-utilized in correctional settings. As a result, nurses and providers spend significant time on paperwork. The HMA team was not able to directly observe the level of administrative support in CT DOC clinical settings, nor could we interview line staff about their perceptions on this matter.

The PPT system offers important support to verify that specialty referrals are executed as ordered. It is not clear whether this function keeps a person busy all day or whether this staff assignment has other duties to perform. This role is featured as an important component of the proposed medical model.

With respect to support staff, CT DOC should audit its operations across the system to determine the degree to which provider and nursing staff time could be shifted to support staff. A plan to optimize support staff should be part of a strategic plan and incorporated into the adoption of a revised medical model of care.

CT DOC health care leadership has a vision and its finger on the pulse of these staffing matters and will need to work with all staff on creating, and in particular, leading the culture of change. The system is ripe for a solid plan supported by leadership and created in collaboration with staff, and for regular communication of progress and encouragement.

Recruitment and Retention

The Health Services Unit continues to be significantly hampered with their ability to quickly hire staff, and multiple supervisors and leadership noted that often by the time formal offers can be made, an applicant has taken another position. Despite efforts at expediting the hiring process, it remains a significant challenge and outside the control of the DOC.

Salaries for full-time correctional health staff are frequently below market, and as such, many of the nursing hires are newly, or almost newly, licensed with minimal nursing (or correctional) experience. Once they gain meaningful clinical experience, they can obtain much more lucrative private health care employment, and often do.

The state's retirement and pension benefits have changed to require additional years of service, and as such, are no longer a significant incentive for most health care staff, particularly those younger in their careers. There also may be generational factors, in which younger health care staff expect a higher starting salary and consistent salary bumps. State compensation often cannot compete with compensation packages afforded in private health care. Further, many staff reported having become disappointed with the lack of professional development opportunities since the transition from UConn.

Physician complements have been patched together between full-time, part-time, contractual, and locums' staff. The creation of a medical team can be compromised if there are fewer full-time equivalent positions in the staffing mix. Hazzard pay is afforded to most health care staff in the facilities, but not for the regional directors who may spend a considerable amount of time in the facilities.

Finally, full-time health care staff are part of a powerful statewide union and collective bargaining unit (for many state agencies). As such, management and leadership are restricted from making necessary changes in structure and functional duties if precluded by the collective bargaining unit and negotiation.

Training

Physicians loudly criticized training and professional opportunities provided by CT DOC. Orientation to correctional health care is significantly under-developed with no training beyond what the academy provides. This creates a high risk for errors, poor outcomes, excessive diagnostic testing, and safety concerns. CT DOC should develop a new provider shadowing and mentoring capacity.

CT DOC should also give providers access to *Epocrates* and *UpToDate* or other web-based clinical resources, as they provide important clinical information for direct patient care and help correctional health providers feel less isolated and more connected to mainstream health care. In addition, providers should conduct "grand rounds" for one another in order to share complex cases. CT DOC should also invite the providers to recommend a robust clinical training program in response to clinical concerns found in this and other analyses and emerging correctional health priorities. This is an essential investment.

Training for nurses also needs attention and should be addressed in the context of bolstering professional nursing as noted above. Nurses should have annual continuing education requirements and opportunities, as well as a means to form practice groups around issues such as chronic care and wound care through which they can enhance the quality of their nursing practice.

Training falls under the element of the proposed model of care that calls for a continuous learning environment. The benefit that this will provide to CT DOC providers and nurses in improving their clinical skills, improving morale, and advancing clinical excellence cannot be overstated.

CT DOC Staffing Metrics

Pew Charitable Trust conducted a national comparison of prison health care staffing in 2015.[5] It showed that the inmate-to-provider ratio at CT DOC was considerably higher than the median of the DOCs studied, but just under the average. Based on the median, CT DOC provider staffing is low in comparison to other systems. The same study showed that the nurse-to-inmate ratio at CT DOC was notably lower than the average and the mean of the DOCs studied, implying that CT DOC nursing staffing is high in comparison to other systems. The study also showed that CT DOC's nurse-to-provider ratio was much higher than the average and the median of the DOCs studied. This also indicates that CT DOC nursing levels are high in comparison to other systems.

2015 Data: National Scan of Inmate to FTE Provider Ratios	
CT DOC Inmate per Provider	**541:1**
National Average Inmate per Provider	**555:1**
National Median Inmate per Provider	**462:1**

2015 Data: National Scan of Inmate to FTE Nurse Ratios	
CT DOC Inmate per Nurse	**43:1**
National Average Inmate per Nurse	**72:1**
National Median Inmate per Nurse	**67:1**
2015 Data: National Scan of FTE Nurse to FTE Provider **Ratios**	
CT DOC: **Nurse to Provider ratio**	**13:1**
National Average: Nurse to Provider ratio	**8:1**
National Median: Nurse to Provider ratio	**7:1**

The HMA team cautions against overreliance on these data for several reasons including:

- The study precedes the transition from UConn.

[5] ***Source:*** The PEW Charitable Trusts: Prison Health Care: Costs and Quality; How and why states strive for high-performing systems. October 2017

- It addresses FTEs but not whether the reported positions are budgeted versus filled.
- The systems compared do not mirror CT DOC's rather unique feature as a combined system in which jails and prisons are under one administration.

The following table illustrates actual CT DOC health care staffing. Note that the ratio of inmates to health care staff decreased by 28 percent over the last three years (2018-2020). Given the drastic changes in census that occurred in response to COVID-19, it is difficult to determine the current ratio.

Point-in-time snapshot: Health Care (HC) Staff to Inmate Ratios			
Calendar Year	**HC Headcount**	**Inmate Population**	**Ratio**
2018	614	13,400	21.8
2019	655	13,039	19.9
2020	649	10,194	15.7

Right-Sizing Correctional Health Staffing

It is a great frustration across jails and prisons that staffing ratios for correctional health care are not standardized. The reason for the variability is that correctional health staffing needs are driven by a wide variety of factors, and each prison system and jail is quite unique. The figure below illustrates some of the many factors that drive staffing levels in a prison or jail.

In the absence of standard staffing ratios, jails and prisons must use sensitive markers to measure the adequacy and impact of staffing in one area of care on resources and outcomes in another. HMA recommends that CT DOC develop a dashboard of indicators that are reviewed collectively to understand the adequacy of staffing at the facility-level at any point in time. Metrics to consider include the following:

- Intake evaluations processed on time
- Sick call visits triaged and seen in timeframes and by clinicians appropriate to the clinical need
- Size of waiting lists for routine and chronic care
- Number of patients bumped from scheduled visits, and repeated bumps
- Ambulatory care-sensitive emergency room visits and inpatient admissions
- Medications given on time and correctly
- Patient grievances and complaints
- Monitoring of patients waiting for specialty care
- Follow up on patients returning from hospitalization/ED
- All-cause hospital readmissions within 30 days

Such a dashboard can clearly illustrate where strains in the system are occurring and their effect on other clinical areas and outcomes, which allows resources to be deployed accordingly.

Recommendations

In addition to recommendations for metrics to track medical services performance and "strain" provided in Right-Sizing Correctional Health Staffing (above), HMA recommends the following revisions to support alignment of staffing to medical services need:

- Adoption of a single, monthly (or as near to real-time as possible) staffing dashboard for providers, nursing staff, paraprofessionals, and health care support positions that can serve as an accurate reference point across CT DOC leadership for actual staffing levels compared to established (and regularly updated) staffing targets.
- Identify and clearly define staff functions and optimal scope of practice for each level of staff, including Principal Physician, Physician Assistant, Physician Per Diem, Head Nurse-Correctional Facility, Supervising Nurse-Correctional Facility, Nurse Correctional Facility, LPN, LPN per diem; in addition to consideration of the role of HSA, as noted above.
- Compare staffing level and current staff duties to defined optimal scope of practice to support staff functioning efficiently and effectively "at the top of licensure" to support optimal use of staffing resources and appropriate medical utilization, as part of regular, ongoing performance improvement activities. Use analysis of established metrics to identify staffing needs and update staffing targets.
- Consider additional metrics when establishing medical services staffing targets. Based upon review of national literature and community-based practice standards, these indicators may include:

- Gender within the facility
- Prevalence of chronic conditions in inmate population (overall and by facility)
- Prevalence of multiple co-morbid chronic conditions (overall and by facility)
- Historical utilization of health care services by facility

CHART REVIEWS – SUMMARY OF FINDINGS

The complete Medical Chart Review analysis is available in Appendix 8. The following is a high-level summary of the analysis.

Overview

NCCHC Resources, Inc. (NRI), reviewed 632 patient health records and interviewed several providers on their perceptions of the health services delivery system of the Connecticut Department of Correction (CT DOC). These activities were part of an overall health system analysis by Health Management Associates (HMA). The purpose was to evaluate the quality and organization of the health record system and to gauge, through content analysis of the health records, the quality of essential clinical processes and quality of care provided. The evaluation used the standards of the NCCHC and other authorities as a benchmark.

The CT DOC is to be commended for undertaking this important project to understand the status quo of its health care delivery system and the corresponding health records, and to implement changes to improve quality. The health records were found to be disorganized, used improperly by providers, and lacking evidence of care provided even if it did indeed occur. This obscures information needed for continuity of care. That said, we also found the following strengths in the current system, which are noted throughout the findings:

- Almost all records documented an intake screening, and these were usually completed in a timely manner.
- The process for obtaining and administering medication appears to function well.
- Referral to specialty care was appropriate and ordered when needed.
- Almost all patients identified as needing emergency care did receive it.
- Almost all diagnostic tests ordered were completed and findings were reviewed.
- Efforts to streamline the sick call process are commendable and should continue.

Topline Recommendations

Our topline findings/recommendations focus on six areas:

- **Electronic health record:** Hands-on, user-friendly training is needed to ensure providers are using the record as intended, including consistent use of templates rather than free text. Ongoing quality checks and targeted retraining are recommended.

- **Initial and periodic health assessments:** Policies and procedures are needed to ensure continuity of care for each patient. A standardized, systemwide approach would be beneficial.
- **Sick call:** Efforts to streamline the process should continue, with clear delineation between sick call, Prompt Care, and triage timeframes that ensure quick access to needed care and reduction of backlogs. Documentation should be strengthened.
- **Chronic care:** A clearly defined program that adheres to national clinical practice guidelines is needed, with appropriate templates for the health record.
- **Infirmary care:** Provider orders for admission must be completed and documented. The patient coding system should be based on acuity of care and monitoring needed.
- **Personnel issues:** A comprehensive orientation program for new staff would be beneficial, as would adoption of a "teamwork" culture throughout the institutions.

Within each category examined, key findings are as follows:

Intake Process

Screening should be performed on all inmates upon arrival to ensure that emergent and urgent health needs are identified and met. The CT DOC is now doing a nurse intake screening that meets this requirement.

- 95% of intake screenings done after adoption of an EHR were found in the records and were usually completed in a timely manner.
- Use of the intake screening process and template could be improved through staff training.
- Verification of medications was sometimes lacking; further study and training is recommended.
- Referral to medical or mental health providers needs to be consistently entered into the record.
- CT DOC should consider a standardized, systemwide process, with facility-level oversight and centralized monitoring.

Initial Health Assessment

In contrast to the intake screening, the initial health assessment provides a more in-depth assessment to identify health needs and develop a treatment plan.

- Documentation of an established process for routine initial health assessments was not found.
- Of the few documented exams, nearly half were completed outside of the 14-day timeframe.
- CT DOC should implement a standardized, systemwide initial health assessment program, with facility-level oversight and centralized monitoring.
- The program should include a means of tracking each inmate and scheduling the assessments to occur a few days before the 14-day deadline.

Periodic Health Assessments

- Documentation of an established process for routine initial health assessments was not found.
- Of the few exams we identified, only 30% found that a provider addressed the findings.

- CT DOC should establish and maintain a periodic health assessment program with guidelines for frequency and content of assessments, a scheduling system, and training for staff.
- The EHR should incorporate templates to document these assessments and ensure the desired elements are addressed.

Sick Call

- The lines between the Prompt Care and regular sick call system have been blurred, with patients not making appropriate use of sick call slips.
- Efforts to streamline the sick call process should continue, with focus on clearly defining the process, including triage; establishing timeframes; ensuring sufficient staffing; removing barriers; and monitoring for quality.
- The documentation process should be reviewed, and training provided as needed.

Chronic Care

- Evidence shows that care for chronic conditions is being provided to a limited extent, but a clearly defined program is lacking.
- Documentation of chronic care visits in the health record is often attached to other encounters, making it difficult to get the "big picture" of the patient's treatment plan and status.
- Diagnostic studies are being done and results acknowledged, but documentation of action taken for abnormal findings is often lacking.
- Implementation of chronic care guidelines should be consistent with national clinical practice guidelines, with staff education and oversight on their use.
- A well-organized program would include a system to schedule and track patients and a consistent approach to maintaining problem lists.

Medication Management

- The process for obtaining and administering medications appears to function well.
- The keep-on-person process should be examined to ensure that patients are requesting and receiving their medications each month.
- Documentation regarding patient noncompliance could be improved, including signed patient refusals.
- The process for addressing noncompliance would benefit from a review to identify deficiencies.

Specialty Care

- Although we could not evaluate the utilization review process, we found that referral to specialty care was appropriate and ordered when needed.
- The referral and specialty care system should establish guidelines that determine which diagnostics and treatments are appropriate to be done in-house.
- Periodic audits of metrics such as referral patterns and length of wait time should be conducted.

Emergency Care

- Almost all patients identified as needing emergency care did receive it.
- Accompanying clinical paperwork was exchanged (in both directions) most of the time, although it was difficult to locate scanned return documents in the record; we recommend assessing communication between facilities and emergency departments, including receipt of return documents.
- The process for scheduling patient follow-up should be examined and documentation of such follow-up should be entered into the record.

Infirmary Care

- Of those patients documented to receive infirmary-level care, only 54% had a provider order and admission orders were often incomplete; the factors underlying the lack of complete, documented orders should be determined.
- The blanket assignment of code M5 for infirmary care patients should be replaced with a system based on patient acuity level, i.e., level of care and monitoring needed.
- Documentation of rounds by physicians and nurses was often lacking; further study is needed.
- A review of the process for follow-up care after discharge would be beneficial.

Diagnostic Services

- Completion of ordered diagnostic testing was at a very high level, 98%.
- The same level, 98%, was achieved with review of the tests.
- Providers need to address abnormal findings and document this in the health record.

Durable Medical Equipment

- We noted that many assistive devices are being ordered and recommend review of the criteria for such orders.
- Documentation that assistive devices have been provided to patients should be strengthened.

Health Record Organization

- Information is not entered into the record in a consistent manner, which impedes the ability to easily and quickly identify patient needs, care plans, and status; we recommend review of actual use practices to support staff training.
- Providers need training and reinforcement on proper use of templates as opposed to free text.
- The problem list should be maintained in a consistent position and kept current.
- A clearly defined process is needed to address consents and refusals, in keeping with informed consent practices in Connecticut.
- Consents and refusals require necessary signatures and proper documentation.

Provider Feedback

- Providers interviewed expressed concerns about teamwork, collaboration, and coordination among the health staff and between health staff and custody staff.
- Providers noted a lack of proper orientation.
- Processes for provider referrals and utilization review are lacking or insufficient.
- Processes for chronic care are lacking or insufficient.
- Inmate diets were described as poor/unhealthy, and we found no evidence of medical diets in the records reviewed. However, CT DOC has stated that medical diets are reviewed and approved by their nutritionist.
- Providers expressed frustrations regarding the EHR.

Opportunities from Chart Review

The HMA/NRI team has performed a comprehensive and deep dive into the health services of the CT DOC. Working in partnership with CT DOC leadership and health services staff, we have discovered many areas for improvement. Despite the depth and breadth of these opportunities, nothing we have seen is surprising or unusual in correctional health care. In our 40 years of service to the field, we have seen each of the challenges before, and we have also seen them overcome. We have seen broken systems transform to high-performance, modern public health systems, helping to ensure the quality of care in their communities. The opportunities are especially important in Connecticut with its integrated pre- and post-adjudication model (i.e., prison and jail functions), tightly interwoven public health services, a robust Medicare and Medicaid system, and a limited number of large tertiary care provider systems.

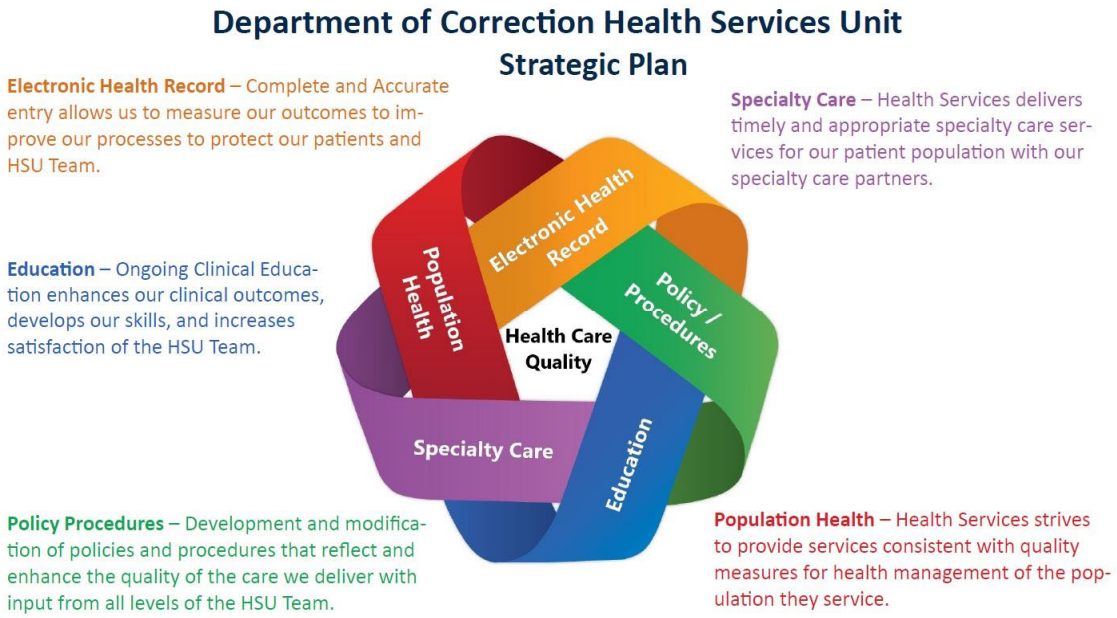
Taking advantage of these opportunities and seeing them to fruition will not be easy. Various political and technical factors all contribute to system performance and are not easily or quickly remedied. They require consistent leadership focus, political will, and technical expertise in order to achieve success.

Because of the challenges and time required to effect change of this scale, our experts have engaged numerous governments in long-term support relationships. Our proactive and preventive organizational posture has helped bring about and sustain needed cultural and technical change. We have assisted many correctional health clients that faced similar challenges and, therefore, recognize that the CT DOC has many opportunities to enhance the care provided, reduce liability, support financial goals, and assist with employee satisfaction and retention. The information presented here will guide decision making as the CT DOC embarks on a path of quality improvement.

RECOMMENDED MEDICAL MODEL

Background

The CT DOC's Health Services Leadership has developed a visual strategic framework that captures five priority domains under which future changes to health care services will be organized.



The HMA team was charged with recommending a "medical model of care" that would enhance the quality and efficiency of inmate health care moving forward. HMA's recommended model incorporates the CT DOC framework domains and the strengths and inherent risks in the current state of health care operations, which were identified through the operational assessment, chart reviews, and staffing assessment. The figure below highlights the primary high-level inputs the HMA team considered.

Strengths	Risks and Limitations
• Desire for a population health management approach is strong	• Insufficient daily operational health care leadership at facilities
• State and regional structure has potential to support facility-specific population health management	• Staff functions are linear and task-specific, not patient-driven
• Leadership desire for accountability for patient outcomes and system performance	• Few processes or metrics addressing outcomes or performance
• EHR has capacity to provide site-specific registries and reports	• Data reporting under-developed
• Staffing at facilities is largely stable	• Services are almost exclusively reactive – provider sees what inmate presents with little proactive care
• Staff passion and skills to conduct effective quality improvement analytics and interventions	• Sick call, health assessments, preventive care under-developed

Strengths	Risks and Limitations
• Providers want professional development, collegiality, training, and opportunity to get better at serving patients	• Few elements of learning organization and professional development are in place
• Labor unions support environments in which patients receive quality care, and provider and patient satisfaction is improved	• Labor unions can be resistant to change

HMA also applied our knowledge of innovations that other correctional health settings across the country have employed to address their challenges and to reconfigure the traditional linear approach to inmate care. This includes small, medium, large, and very large jails and prison systems.

Finally, the team applied our deep knowledge of health care for vulnerable populations served in the safety net across the county, and the many innovations that have become standard underpinnings of the safety net. These include the Wagner Chronic Care Model, the "Four Quadrant" approach to population health risk assessment, the Patient-Centered Medical Home, integrated behavioral and medical care, and basic population health management as practices in the safety net and throughout managed care.

The proposed model produces measurable improvements in patient outcomes, job satisfaction for all health care team members, and patient satisfaction. These features are highly important to labor unions, and the unions should be considered as partners integral to CT DOC's design and implementation processes. In addition, the components of this model are well known to and appreciated by community-based primary care providers. As CT DOC recruits new providers, they will increasingly expect to see these elements in clinical settings and will find traditional line-based services to be increasingly unattractive practice settings.

Medical Management Model

The HMA team recommends a medical management model built on three key components and which embeds elements that have become the foundations of successful health care delivery in community health. The components are:

Population health management, whereby each facility's health care staff "own" the population therein and are responsible for proactively managing the risk of every person, population sub-group, and disease state using risk-based metrics and practices.

Team-based care, whereby every member of the facility health care team and representatives of custody operate as an integrated team whose duty is to ensure that all patient needs are met every day, through team huddles and other features of the Patient-Centered Medical Home.

Continuous learning and quality improvement, whereby the facility-specific team, supported by the region and the state, continuously evaluate their individual and collective performance of duties in the provision of health care to continuously improve patient outcomes and efficiency.

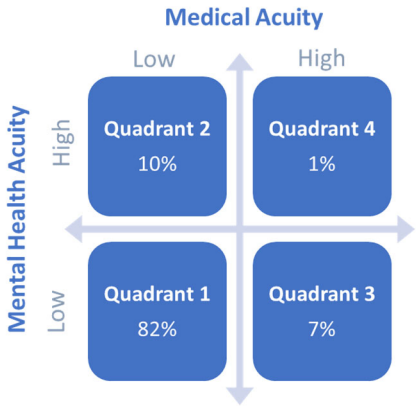
The proposed model is rooted in evidence-based health care delivery.

- Population health science is well documented to more efficiently distribute a system's health care resources – human and otherwise – to persons and populations with the most risk and to effectively mitigate that risk on many levels. By doing so, a system can manage existing resources to where the needs are most prevalent.
- Team-based care is well documented to produce better patient outcomes for chronic disease, behavioral health needs, and complex patients. It also provides significantly enhanced patient and provider/team member satisfaction. All team members work "at the top of their licenses" or practice scope which provides efficiency and professional satisfaction. For example, LPNs are used to check vitals, carry out adjunctive duties, including documentation, and ensure reports are collected to allow nurses to treat as directed and carry out other necessary duties.
- The model also comports with all six aims of the seminal work of the Institute of Medicine in "Crossing the Quality Chasm," which called for patient-centered care, patient safety, timeliness/responsiveness in care, efficient care, effective care, and equitable care.
- The model aligns with the continuous improvement/learning organization focus of the Institute for Health Improvements national and global health care improvement framework.
- The model is documented to engender improved job satisfaction for all members of the health care team.

Population Health Management

In the proposed model of care, presentenced and sentenced individuals in each CT DOC facility would comprise that site's "population." The health care team would be responsible for identifying the general risk category of each person based on Medical and Mental Health acuity as shown in Figure 2 below.

Figure 2. Population Stratification by Medical and Mental Health Acuity



At a high level, the model considers the relative medical and behavioral health complexity of its population using a four-quadrant model. This figure illustrates an entire prison population's risk. More than 80% of the population has low medical and mental health needs, and just 1% has high medical and mental health needs. At CT DOC, each prison would create a presentation of their entire population. To start, the current medical and mental health classification scores (e.g., "M levels") could be combined to create this picture. The methodology can be further refined with pharmacy data, off-site care utilization data, cost, and other variables. Persons in Quadrant 1 need annual health assessments, preventive care, and episodic primary care for acute illness. Those in Quadrant 2 need regular mental health care plus the same care as those in Quadrant 1. People in Quadrant 3 need their medical risk managed regularly plus Quadrant 1 services, and those in Quadrant 4 need intense, integrated medical and mental health care plus Quadrant 1 services. Facility health care staffing levels would be driven to a large degree by this stratification of population risk.

Facilities would further identify sub-populations of risk and would organize deployment of health care resources to these subgroups. They would include patients with specific chronic diseases identified through registries and cross-referenced by the level of control of the disease. Reporting would reveal persons with poor or lessening disease control and compliance with clinical guidelines for services/interventions. Care resources can address patient needs to reduce risk.

Facilities would also identify and aggressively manage a population of inmates with acute high risk. This list changes daily and includes persons coming back from an ED visit or hospitalization, suicide risk, psychiatric decompensation, acute illness, wounds, dehydration, etc.

Facilities would also use registries to address the preventive screening and immunization needs of the whole population in a proactive manner.

The intent of this approach to care is to deploy resources proactively to reduce all levels of patient risk. This is completely different from the current reactive practice of seeing patients who have requested care. It recognizes that within a population, not everyone needs the same care processes, and the smartest use of resources is to apply them where they are most needed. This approach also moves away from strict health care staffing comparison "ratios" and focuses on specific system need-based health care staffing matrices.

Team-Based Care

Team-based care arose from the Wagner Chronic Care Model and was further codified under the Patient-Centered Medical Home model and the integration of medical and behavioral health care with primary care. This practice is ideal for correctional settings but has not been widely adopted. It departs from the ubiquitous "line-based" care – nurse line, doctor line, pill line – used in correctional health care. HMA worked with the largest and most fully developed prison system to adopt team-based care.[6]

[6] A Call for New Models of Care in Correctional Health, CorrectCare Spring 2016.

The "Complete Care Model" implemented within the California Department of Corrections and Rehabilitation has a decade of outcomes proving its efficacy.[7,8]

Under team-based care, every health care discipline and representatives of custody operate as an integrated team whose duty is to ensure that all patient needs are met every day. The hallmark of team-based cares it that "today's work gets done today." Teams are attentive every day to the patients scheduled to be seen *and* to new risk that has been identified in their population. The team is nimble in its use of every member to be sure that all routine and urgent needs are addressed.

The care team creates individualized, integrated care plans for each patient with moderate to high risk. Plans integrate all medical and behavioral conditions and interventions, and each team member seeing the patient is able to refer them to meet all the patient's needs. For example, a mental health clinician may not understand all the treatment goals for a patient's diabetes but can discuss the effect of diabetes on the patient's mental health and can also support the medical team's objectives by helping to engage the patient in treatment adherence. The effects of this level of team integration are profound for patients and for clinicians.

An essential feature of team-based care is the "Daily Huddle," which is a brief, fast-paced review of the daily schedule, needs of the patients on that schedule, and the new risk that has presented. Input from the whole team is essential, though there are many ways to accomplish this without everyone being in the same room. New risk can include:

- Abnormal lab or diagnostic results that have arrived
- New admissions to the facility who have not yet been assessed for risk
- Information from custody about prisoners exhibiting signs of mental or physical decompensation or risk
- Information from staff about who has refused or missed medications
- Patients entering or leaving the infirmary
- Missed appointments from previous day/week
- Patients with new assessments and recommendations from specialists
- Patient returning from ED or inpatient hospital
- Patients with complex needs who have put in sick call request

A critical component of this model is to have a health care executive at each facility (or shared for less medically intensive facilities). Typically, this would be a Health Services Administrator, who along with administrative support, marshals the information for the daily huddle and oversees population health management. CT DOC would adapt the current RCOO role to allow for the critical facility (or multiple facilities based on health care quadrant/needs), administrative, and clinical oversight and support

[7] New Models of Care in Correctional Health. The California Prison Systems Complete Care Model, CorrectCare Winter 2017.
[8] A Call for New Models of Care in Correctional Health, CorrectCare Spring 2016.

necessary for this model. Its current RCOO model precludes this level of health care leadership at the facility level.

During the huddle, the team decides who will carry out specific actions to address these needs. Everyone shares the duties, and everyone is responsible for the population. Most importantly, care is organized so that each team member works at the top of his/her license and scope of practice.

Effective team-based care requires access to daily open scheduling, for nurses and providers, so that patients with "today's" risk can be worked in without bumping others. It also requires same-day scheduling capacity for sick call visits that are of an acute nature. Optimally, an NP or PA is assigned to same-day needs, and physicians attend to complex cases and chronic care visits.

Once a month, the team holds a separate meeting to review its chronic care, complex care, and "waiting" patients. The team reviews patients in poor clinical control (based on labs, diagnostics, recent clinic visits, specialty referrals, medication refusals, ED/inpatient care), and a plan is developed to proactively reach out to those patients for assessment, patient education, and other interventions intended to be sure the patient gets better, not worse. Nurses are key in this role to help patients understand their conditions and actively engage in managing them. Nurses independently bring patients in for visits and may also conduct group visits. For patients with complex needs, the team reviews the status and decides if changes in the care plan are warranted. "Waiting" patients are those who have been referred for specialty consultation or an intervention. The team reviews this list and someone on the team has an encounter with each patient who has been waiting for more than a month. This ensures that patients do not unknowingly decompensate during the waiting period.

For complex cases, the team is supported by existing facility PPT staff, regional care managers, statewide bed management functions, and referral management activities.

Finally, on a periodic basis (at least quarterly) the team reviews a list of patients due for annual health assessments, screenings, and immunizations. The list is created through the EHR.

The end result of team-based care is that the whole team knows the status and plans for the patients in its population at the highest risk, risk is mitigated for the whole population, and the team successfully manages its population through proactive, person-centered, timely care. As noted earlier, the mission of this model, "today's work gets done today," keeps the focus on individual and team accountability for positive health outcomes.

Input into this model must come from health care staff represented by the labor union. Because all those who provide health care share the goals of good patient care and excellent health outcomes, this team-based model is integrative, collaborative and progressive.

Continuous Learning and Improvements

The final pillar of the recommended medical model creates a learning organization for all health care team members.

Individual Team Performance Improvements

As care teams meet and function over time, they organically and continuously review and modify their performance. At a system level, CT DOC would create venues for disciplines, facilities, and HSAs to compare their experiences and share emerging best practices under a continuous improvement rubric.

Outcomes and Performance Improvements

The facility-specific team, supported by the region and the state, regularly evaluates its individual and collective performance of duties and provision of health care to continuously improve patient outcomes and efficiency.

CT DOC should develop a series of dashboards displaying trackable metrics and performance measures to apply to all teams. Refer to Appendix 7 to see the California prison system's dashboards, which are very well developed. Sample metrics for CT DOC would include:

- Chronic disease management
    - Level of control metrics for each chronic illness population
    - Facility-wide and individual provider compliance with clinical guidelines (i.e., % patients on rescue inhalers who also have steroid inhaler)
    - ED and inpatient use by disease
- ED and inpatient utilization for ambulatory care sensitive conditions
- Selected HEDIS measures (and any relevant HUSKY measures)
- Hospital readmissions within 30 days
- Immunization rates
- Compliance with sick call management
- Provider productivity
- Patients with polypharmacy

Metrics should also reflect statewide and facility-specific QI program objectives. Regional clinical staff would review facility and provider metrics with appropriate individuals, and results would be used to identify training and remediation needs for people, teams, facilities, topics, disciplines, diseases, etc. This creates a learning organization that supports ongoing professional development and continuous improvement across the system.

Provider-Level Clinical Improvement

Provider-specific metrics regarding clinical outcomes and productivity are powerful incentives to drive improvements. Support from regional and state clinicians through mentoring and training and can help providers become more compliant with clinical guidelines.

The addition of e-consultation capacity for selected clinical specialties, as discussed elsewhere in this report, is an important element of the proposed medical model. It will afford clinicians the ability to

learn better management of conditions common to primary care and to prepare more robust and actionable referrals to specialists.

This proposed medical model depends on significant improvement in providers' and nurses' ability to accurately use the EHR, as well as real-time reporting and system and facility-based dashboards published for all to review. QA activities would be markedly more planned and consistent with a performance improvement organization.

ADDITIONAL RECOMMENDATIONS

As key recommendations in many areas of this report were incorporated and flagged throughout, HMA is offering several additional recommendations for consideration and action as appropriate. We note those we recommend for short-term (less than 6 months), mid-term (6 months-1.5 years) and longer-term (plus 1.5 years) action.

Staffing:

1. The facilities are in great need of facility-specific medical leadership. Although the RCOO is responsible for some of these functions, there is no accountable coordinating and facilitating medical leader at the facility-level. The former job position, Health Services Administrator (HSA), functioned in this role. HSU and DOC should strongly consider re-instituting this role for the upper level medical facilities. Not every facility would need their own HSA and could share as need. If this is not possible, HSU and DOC should increase the number of RCOOS in their complement. (MID-TERM)

2. The new CNO, Regional Nursing Directors, and Regional Medical Directors (and Chief Mental Health Officer) must work collaboratively and constitute regional teams. Each team would be accountable for the metrics and dashboard set by health care leadership. The RCOOs are integral members of each team and all report up to the system's Health Authority, the Chief Operating Officer. (SHORT-TERM)

3. The issue of hazard pay for central office medical leadership is problematic and outside of the DOC control. However, all central office leadership staff who are spending 50% or more of their time inside facilities should be considered for this or some type of pay differential. Continuity of senior health care leadership is critical for sustainability. (LONGER-TERM)

4. Recruitment for correctional health care is notoriously challenging. Federal, state, and county compensation is often significantly lower than the private market. Jurisdictions who have been more successful recruiting full- and part-time staff as well as specialists willing to provide services to inmate patients will engage in sustained top-down marketing strategies. Despite the state salary differential, CT DOC is doing what it can to hire providers. Although contract and locum hires are often not ideal for creating a consistent team, they provide an opportunity to

allow providers "to try" correctional health care. However, those not in state positions must be afforded similar professional development opportunities to encourage retention. (MID-TERM)

5. The Governor's outside consulting firm is due to make a recommendation to the Governor in early 2021 regarding reducing costs by as much as $500 million a year and will be timed to take advantage of a projected surge in state employee retirements over the next two years.[9] CT DOC should immediately analyze the impact of probable retirements in their workforce will have on current operation staffing needs. The impact of any cut on systems who employ "essential employees" is unknown at this time. However, CT DOC should be in a position to clearly explain the critical role any position plays in the safety (inmates and staff) and health care of inmates (SHORT-TERM).

6. CT DOC must work hard to become less dependent on UConn Healthcare through ongoing and sustained recruitment of other health systems. It would behoove CT DOC health care leadership to **regularly** meet one-on-one with other health systems to discuss possibilities for collaboration, teaching, and research, as well as with any other professional association that may "break the ice" for working with DOC inmate patients. As most inmates return to the community, it is strongly encouraged that health care leadership meet regularly across the state with local FQHCs and look for opportunities for a "shared-care" model whereby the FQHC and DOC partner to manage the health care of a patient (e.g. jail/prison). HMA would strongly encourage these marketing approaches be part of the DOC's HSU strategic plan. (MID-TERM)

Quality Assurance:

1. It is clear that there are staff scattered around the organization performing QA activities; however, health care leadership should closely examine whether there are sufficient staff with the right skills to form a Health Care Quality Assurance and Compliance unit. (SHORT-TERM).

2. In keeping with correctional health standards and with best practices across the health care system, CT DOC should operate a statewide Quality Improvement Council (QIC) that reflects all health care disciplines, custody health care populations, and administrative departments, (e.g., HR, IT (EHR)). The QIC will be responsible for the development and implementation of a statewide Quality Improvement Plan (QIP) that is data driven and focuses on priorities. QIP priorities should reflect emerging or extant problems identified through a variety of data inputs. Priorities should also address elements of an overall strategic plan and should reflect the intent of CT DOC's strategic objectives. (MID-TERM)

[9] Harford Courant. Lamont taps Boston Consulting Group to prepare overhaul of state government, eliminating jobs and cutting $500M. Keith Phaneuf, Sept 28, 2020.

3. HSU should adopt a set of dashboards and metrics that reflect the critical areas of health care performance such as those used in the California Department of Corrections and Rehabilitation. See Appendix 7 for an example. These dashboards must be published and available for review by health care leadership and facility teams. Performance Improvement cycles often follow review of data from quarter to quarter. (SHORT-TERM)

Electronic Health Record:

1. All metrics and QA measures will flow from accurate documentation into the correct areas of the EHR. There must be immediate re-training of providers and nurses in "how-to-use" the EHR. Although written and electronic reference materials are important adjuncts for training, training modules should incorporate short videos and other multi-media platforms to maximize learning styles. CT DOC and Centricity may wish to create an internal (with necessary confidential protections) "You Tube-like" channel for all training materials. EHR training should be ongoing for staff as different features are added. (SHORT-TERM)

2. CT DOC should increase the number of "super-users" across health care disciplines who can act as the primary trainers, conducting peer-to-peer trainings whenever possible. The "super-users" should meet frequently to assess the effectiveness of the training and make changes to the curriculum as needed. In concert with Quality Assurance and Compliance staff there must frequent and random chart audits of provider and nurse entries into the chart. (MID-TERM)

3. It is essential that providers and nurses immediately begin to use the appropriate templates in the EHR. Meaningful data reports and performance metrics are exclusively dependent on the intended use of the EHR. If the scheduling function is not working to the requirements of each facility and provider serving the facility, this must be addressed. Simple scheduling functions of the EHR are meant to facilitate, not impede, health care provision. (SHORT-TERM)

Administrative:

1. DOC should aggressively pursue the ongoing discussions with their Medicaid sister agency regarding their ability to forecast expected claims administration and perform utilization management for specialty visits. It is critical that DOC be in a better position to project expenditures and budget needs. Receiving claims in bulk and towards the end of a fiscal year is fiscally inappropriate and puts the DOC at a fiduciary disadvantage every year. (SHORT-TERM)

2. DOC's UM for specialty visits must be overhauled. If HSU moves toward the medical management model delineated above, a referral for specialty care would be an outgrowth of team input and "vetted" for appropriateness. Absent this approach, or in concert with the team-based care medical management model, clear criteria must be established for when specialty visits are requested. Providers must ultimately have authority for making the referral. However, the referral should flow from the EHR with specific questions for the specialist and summary

material (from the EHR) must accompany the referral to the specialist. Although it is not practical for the regional medical directors to approve several hundred referrals (for appropriateness) per month, the Regional Medical Directors and Chief Medical Officer should conduct a monthly audit of a random sample of current (in process) and past referrals. (SHORT-TERM)

3. HSU should strongly consider utilizing an e-consultation service to assist providers, when requested, in thinking through diagnostic and care planning recommendations. The e-consultation providers do not prescribe or direct care but assist the provider in problem solving and suggest further assessment or treatment regimens as they are considering a subsequent specialty visit. Many of the private correctional health care systems are using e-consultation services at this time. (MID-TERM)

Prevention and Wellness:

1. Preventive care is designed to ward off later illness and/or prevent acute problems from becoming chronic problems. As noted earlier, this area is in great need of enhancement. Although some preventative care is apparent in a "sick call" visit, there does not appear to be any designed effort for preventive care in the current system. Again, the EHR and scheduling functions can assist the provider in triggering the need for a preventive and wellness visit. (MID-TERM)

2. As many inmates entering the correctional system are often not in excellent health and/or have not paid much attention to lingering and developing health concerns (e.g., weight gain, diet, dental), the DOC may wish to consider piloting and "incentivizing" inmate efforts toward good health outcomes. Using incentives, such as additional privilege, commissary, or additional contact with family/friends (over and above what is currently offered), may increase the inmate-patient's own accountability for positive health outcomes. This type of program could be adapted for all levels of medical care and be part of the patient's care plan. As many private health insurance companies offer incentives for their subscribers, there is no reason that this "model" could not be tried with a section of the correctional population. Targeting weight-loss, increased exercise (movement), lowered blood pressure, and lowered A1c, can serve as targeted metrics. A healthy patient *will* impact the system. (MID-TERM to LONG-TERM)

3. There were multiple reports that the diet and meals for inmates were in need of significant improvement. Staff reported that there was a considerable amount of generally processed, artificial foods that were high in fat. Although CT DOC does have a dietician who reviews medical diets, it may be helpful for HSU to convene a workgroup to evaluate this area more. (SHORT-TERM)

Pharmacy:

1. Polypharmacy is an issue for all correctional health care systems. The pharmacy provider is not incentivized to provide additional medication as they are providing medication at-cost. However, real-time data reports on polypharmacy must be made available for the medical team, and summary reports must be available to health care leadership. It is strongly recommended that this be another important domain for the QIP. (MID-TERM)

Recommendations by Priority from Operational Assessment and Staffing Analysis

Categories	Short Term (<= 6 months)	Mid Term (6-18 months)	Long Term (>18 months)
On-Site	• Sick call process needs an overhaul. • Written policy and defined procedures should address all aspects of clinical services related to periodic health assessments. • One policy that addresses the structure of the chronic care program at the facility level, inclusive of treatment protocols and guidelines. • Infirmary bed policy must be overhauled. • Re-start P and T meetings.	• Each identified chronic illness should have an associated clinical protocol and process for patient management. • A program for health education for patients with chronic disease can be developed adapting best practice models to the jail/prison settings. • Plan how special populations (e.g., TBI, Physical Disabilities, LGBTQ) can be addressed across facilities. • LEAN process flow on intake.	• Explore increased use of 60 West. • Plan for centrally tracking complex cases.
Off-site	• Revamp UM processes with criteria.	• Strongly consider e-consultation (advisory, not treatment model).	
Administrative	• Review and adopt P and P format of all NCCHC procedures. • Nursing protocols must be updated. • Standing Orders for nursing. • Review and re-do EHR documentation training	• Comprehensive 4-5-year strategic plan. • Develop QIP, establish QIC. • Create EHR user groups. • Establish EHR audit process. • EHR report functioning.	• Create provider advisory group to address demand. • Consider adding EMTs. • Consider using support staff to reduce administrative load on nurses.

Categories	Short Term (<= 6 months)	Mid Term (6-18 months)	Long Term (>18 months)
	(focus on template use). • Develop dashboards of indicators by facility that will assess adequacy of staffing and system performance.	• Preventive and Wellness care re-design.	• Consider "pilot" to incentivize inmates to improve self-care.
Staffing	• Medical Model focused on staffing based on acuity. • Develop professional recruiting and marketing plan for provider and nurse complement. • Enhance Quality Assurance and Compliance complement and units. • Analysis of potential retirees and impact on health care operations.	• Consider bringing back HSA role/increase RCOO role in facility. • Revisit professional development opportunities. • Provide Epocrates and UpToDate to clinicians. • Target other Health Systems and FQHCs for collaboration and cooperation (and recruitment).	• Review hazard pay for leadership staff.
Other	• Aggressively pursue discussions with Medicaid regarding UM and third-party claims. • Overall dietary planning should be examined.	• Target Polypharmacy.	

APPENDICES

Appendix 1. Project Staff Bios

Marc Richman, PhD, Principal

Marc Richman is a licensed and practicing psychologist with more than 30 years of experience. He is a strong clinical, systems, and policy leader who believes merging his clinical and policy knowledge allow him to be more impactful in both areas.

Prior to joining HMA, Dr. Richman held various executive leadership positions throughout the State of Delaware before retiring after 27 years of state service. He began his career in the child mental health division, spending five years as the division deputy director. In this role, his primary focus was incorporating mental health and substance use into an integrated and holistic system. Dr. Richman also served as the chief liaison between the health division and Delaware's Family Court. He served on the adult side of the behavioral health system as an assistant director of community mental health and substance abuse services. In this role, among other initiatives, he co-led expansion of the Substance Use Disorder Continuum to address the rising opioid epidemic ravaging the community, public, and private behavioral health systems. He also oversaw the statewide case management and assessment system for individuals with behavioral health challenges who were involved in the adult judicial system.

He was appointed bureau chief of health care services for the Delaware Department of Correction and administered all the medical, behavioral health, and pharmacy contracts for the statewide prison system. In that role and until his retirement from the state, he proudly led his team on several key strategic initiatives throughout the system.

Dr. Richman led the bureau and department through several class action lawsuits to improve health care, resulting in a reduction in restrictive housing for the seriously mentally ill, as well as significantly increasing services for this vulnerable population.

His bureau also successfully tackled the expansion and management of clinical services for the transgender population. In addition, he and his team oversaw the increase in assessment and treatment of offenders with hepatitis C, while managing the significant fiscal impact of those activities on the system.

Dr. Richman's proudest and most notable contribution was leading the design and implementation of a full continuum of medications for addiction treatment throughout the entire Delaware prison system.

He earned a doctorate in clinical and school psychology and a master's degree in psychology, both from Hofstra University, and a bachelor's degree in psychology from Gettysburg College.

Donna Strugar-Fritsch, RN, MPA, Principal

Backed by more than 30 years of health care policy, administration, program development, research and evaluation, and clinical nursing experience, Donna Strugar-Fritsch has consulted with a wide variety of clients during her 17-year tenure with HMA.

A nationally recognized expert in correctional health care, she built a strong consulting capacity around the interface of the justice system and the Affordable Care Act, as well as helping clients establish innovative models of care in correctional health and comprehensive treatment of addictions in jails, prisons, and other justice settings.

Appendix 1. Project Staff Bios

Ms. Strugar-Fritsch currently directs a California project with teams from 32 counties that are providing evidence-based medications for addiction treatment (MAT) in jails and collaborative courts. She also led a national project with 16 county-based teams to expand access to MAT in jails and drug courts and is working with two large prison systems to implement MAT.

Under her leadership, a comprehensive training on addiction and its treatment has been developed. This training is tailored to six disciplines in child welfare and criminal justice whose professionals influence the use of MAT. The training has been provided to more than 2,000 people in California and has been converted to web-based modules available nationwide at no cost.

Ms. Strugar Fritsch is a passionate advocate for jails as a key component of community healthcare safety nets and for evidence-based treatment of addiction in prisons and jails.

She earned a master's degree in public administration from Western Michigan University and a bachelor's degree in nursing from Michigan State University. She is a certified Correctional Health Care Professional, a National Public Health Leadership Institute Fellow, and a licensed registered nurse.

Rich VandenHeuvel, MSW, Principal

Rich VandenHeuvel is a former behavioral health executive with more than 20 years' experience working with and designing services, programs, and policies for adults and children living with intellectual/developmental disabilities, mental illness, and/or substance use disorders.

Prior to joining HMA, Mr. VandenHeuvel served as the CEO for a newly formed public behavioral health managed care organization responsible for community-based services to adults and children with developmental and behavioral health needs. In addition to managing multiple funding streams, he led integration and management of substance abuse services (Medicaid and block grant), collaboration with Medicaid managed care health plans, and governing board and leadership development. Mr. VandenHeuvel led the creation of regional service standards, cost comparison standards, and provider network management and development including home- and community-based outpatient services and inpatient services. Mr. VandenHeuvel also served as spokesperson and lead contract negotiator with the State of Michigan for the 10 Prepaid Inpatient Health Plans responsible for the Specialty Behavioral Health Services Benefit throughout Michigan, including the first integration of substance use disorder services into the Prepaid Inpatient Health Plans contract.

Prior to this, Mr. VandenHeuvel served in multiple roles for a regional, public community mental health organization, serving adults and children living with mental illness, developmental disabilities, and/or substance use disorders including direct service, performance improvement, and clinical director roles and nearly a decade as executive director.

Since coming to HMA, Mr. VandenHeuvel has specialized in the areas of home- and community-based services for persons with intellectual/developmental disabilities, behavioral health, and corrections health including best practices research, market analysis, and services integration.

He earned his master's degree in social work from Grand Valley State University and his bachelor's degree from Michigan State University.

Appendix 1. Project Staff Bios

John Volpe, LCSW, Principal

John Volpe is an experienced senior health official with a demonstrated record of success at the intersection of health, social service, public safety, and the criminal justice system.

Prior to joining HMA, Mr. Volpe served as special advisor on criminal justice for the New York City (NYC) Department of Health and Mental Hygiene, founding the Office of Criminal Justice. The office was designed to lead in the areas of policy, system design, cross-sector collaboration, and service delivery development and improvement where health and social services intersect with crisis systems, law enforcement, the courts, probation and parole, as well as jails and prisons.

Mr. Volpe's key accomplishments in support of a strong public safety and public health paradigm include work with the New York Police Department (NYPD) intervention training program, police/mental health co-response teams, crisis centers for NYPD drop off, Academy for Justice Informed Practice, NYC Crisis System Task Force, and probation and health homes.

Prior to joining city government, Mr. Volpe served at the NYC Legal Aid Society as a founding member of an interdisciplinary criminal defense project. Later, in an administrative role, he designed and secured grant funding to spearhead new efforts for at-risk populations, including frontline clinical court services to divert people from jail, immigrants facing deportation, and victims of human trafficking.

Before entering the criminal justice field, Mr. Volpe served as a team leader for an innovative holistic nutrition program for a highly marginalized NYC HIV+ population and previously served as director of NYC's only group residence for gay and transgender young people in NYC's foster care system. His earliest social service roles were in the areas of case management, training, and program development in one of NYC's premier foster care agencies.

A skilled public speaker and writer, Mr. Volpe's passion for innovation, transformation, and social justice fuel his commitment to improve opportunities for people most often left behind.

Mr. Volpe earned a master's degree in social work from Hunter College School of Social Work and his bachelor's degree from Georgetown University.

Laquisha Grant, Senior Consultant

Laquisha Grant provides clients assistance with strategic planning, training, technical assistance, implementation support, guidance and project management to support organizations and agencies as they navigate the healthcare system. Ms. Grant is an expert at bridging the gap between communities and healthcare systems. At HMA, she has served as Project Manager and technical assistance provider for projects with cross-sector agencies, such as health departments, police departments, homeless services, etc., and service provider organizations to align around common goals and to address systemic issues as they relate to behavioral health crises and other health disparities. She has worked with diverse groups of stakeholders seeking to build consensus and collectively develop policies and programs. She has helped community-based organizations establish governance structures and create strategic plans to concretize their path forward in an ever-changing healthcare climate. Similarly, she provided technical assistance and program development support to community-based organizations and health care providers looking to improve population health outcomes.

Prior to HMA, she worked for the NYC Mayor's Office of Criminal Justice as the Program Administrator for the Mayor's Task Force on Behavioral Health in the Criminal Justice System managing the

implementation and assessment of over 40 initiatives designed to keep individuals with behavioral health needs from cycling in and out of the criminal justice system. Prior to that she spent several years at the NYC Department of Health and Mental Hygiene, where she oversaw the bureau's Consumer Advisory Board and was involved in the development and implementation of NYS' Medicaid redesign efforts around behavioral health services in NYC. Ms. Grant also developed and managed the budgets for grant-funded programs, including a $17 million CMMI grant, a $30 million SAMHSA crisis counseling grant, and $4.2 million health integration grant. She was responsible for ensuring that grant funds were spent in accordance with federal and state guidelines. She co-chaired a workgroup aimed at using DOHMH resources to increase employment for individuals in NYC with serious mental illness. Prior to working at DOHMH Laquisha served as a Grants Analyst at Harlem Hospital Centers.

Ms. Grant earned Community Resilience Initiative Trauma-Informed certification and is a trauma-informed trainer. She earned her master's in public administration from Long Island University and her bachelor's in political science from Trinity College.

Michelle Janssen, Consultant

Michelle Janssen is skilled at providing project management and research assistance to colleagues across the country. Ms. Janssen's experience includes working on complex projects, program evaluation, stakeholder engagement, policy analysis, and behavioral health research.

Adept at simultaneously managing multiple complex projects and using a data-driven approach, she focuses on healthcare policy research, analysis, and project management for clients ranging from small, community-based organizations to national managed care organizations.

At HMA, she facilitated continuous research and provided project management assistance on projects, including surveys of more than 100 women's healthcare providers in four states aimed at examining demographic, health, and provider access data. This project focused on gathering data to better understand the impact state Medicaid participation has on access to healthcare options for underserved women's populations provided by providers and clinics.

Ms. Janssen conducted research and finalized reports and presentations on best practices for behavioral health crisis diversion in select states for a large non-profit organization. She analyzed outcome data related to supportive housing programs for elderly individuals with serious mental illness in Brooklyn and assisted with facilitating learning collaborative meetings for primary care and behavioral health providers in the State of Delaware.

Ms. Janssen managed projects, evaluation, stakeholder engagement, and document production for managed care proposals for local and national health plans and an evaluation related to the 1115 wavier for the Texas Health Human Services Commission.

Prior to joining HMA, she worked at multiple information technology companies focused on technological solutions for healthcare and non-profit organizations. She began her healthcare career as a non-licensed direct service provider for individuals with intellectual/developmental disabilities.

Ms. Janssen earned a bachelor's degree in English and a bachelor's degree in government from the University of Texas at Austin.

Appendix 1. Project Staff Bios

Missy Garrity, MBA, PMP, Senior Consultant

Missy Garrity's experience includes helping states, health plans, and other healthcare and nonprofit organizations achieve their goals through working on various projects. She successfully led large, strategic projects related to delivery system and payment reforms including, new health plan start-ups, systems implementation and replacements, operational process improvements, and clinical program implementation.

Since joining HMA in 2026, Missy has supported clients on a diverse collection of complex projects. Her project portfolio includes implementation of a new Medicaid LTSS health plan in Florida, in which her oversight extended to credentialing, network development, IT systems, member eligibility, claims payment and care management programs. She has also led teams to successfully gain accreditation by AAAHC, CMS D-SNP application approval, and contract award as a Medicaid Managed Care Plan. Ms. Garrity works closely with clients, maintaining close and careful communication to ensure a high-quality deliverable suitable for public release, such as a Delaware strategic planning project for the State Innovation Model (SIM) grant under the Centers for Medicare &Medicaid Services oversight. Ms. Garrity works with all levels of project staff to assure controls are in place to prevent schedule slippage and keep projects within budget. Controls include consistent communication and clear expectations of roles, a firm project oversight structure, engaging client leadership, transparency, issue logs, and team management criteria to ensure issues are resolved quickly and barriers to progress are removed.

Before joining HMA, Ms. Garrity led the Blue Cross and Blue Shield of Massachusetts Health Services Division redesign, a two-year project for which she implemented system replacement and redesign, care management systems, operations process improvement, care management functions, and program redesign. Ms. Garrity was senior director of the Enterprise Project Management Office at the Commonwealth Care Alliance a leading health plan for members with dual eligibility for Medicare and Medicaid. Prior the Commonwealth Care Alliance, she led initiatives as an independent consultant at local health plans and for state government that involved the implementation of care management systems, quality and cost trend reporting systems, all-payer claims data bases, strategic planning, and organizational redesign projects.

Ms. Garrity earned master's degree in business administration from Northeastern University, and a bachelor's degree in biology from Regis College. She is former chair of the Hallmark Health Patient and Family advisory council, a member of the Project Management Institute's local Mass Bay Chapter, and former president of the Women in Health Care Management board of directors. She is certified as a project management professional by the Project Management Institute.

Brent R. Gibson, MD, MPH, FACPM, CCHP-P

Dr. Gibson has dual, complementary roles. As Chief Health Officer at the National Commission on Correctional Health Care, he works in both a leadership and technical capacity and is deeply engaged in defining the organization's overall strategy and direction. Dr. Gibson advises the CEO, the Board of Directors, and its committees on a variety of matters, with emphasis on issues with clinical and public health implications. He works closely with thought leaders, clinicians, and government officials to facilitate education, training, and technical assistance as they develop local solutions for providing quality health care to incarcerated persons.

He also serves as Managing Director for NCCHC Resources, Inc., the affiliated, nonprofit consulting firm. He and his team provide critical technical assistance to correctional health care programs nationwide. Under his leadership, NCCHC Resources has pioneered the Correctional Health Care Management Office, an innovative continuous quality improvement and risk reduction initiative. The CHCMO provides national health care experts on an ongoing basis to advise leaders and clinicians, monitor performance, perform auditing services, and support an overarching aim of continuous quality improvement.

Dr. Gibson is board-certified by the American Board of Preventive Medicine. He is also a Certified Association Executive.

Becky Pinney, MSN, RN, CCHP-RN, CCHP-A

Ms. Pinney possesses extraordinary leadership skills, evidenced by her role advancements to Senior Vice President, Chief Nursing Officer, at Corizon Health, from which she recently retired after 25 years, with a total of 30 years in this field. Her experience encompasses both clinical and nonclinical roles, having managed large jail programs and served as the lead on several state prison contracts. Her career has given her a deep understanding of clinical trends and operations practices and how they can impact the daily custody and clinical management of the inmate population. Through collaboration with other clinical and operations executives, Ms. Pinney takes a comprehensive, systemwide approach to nursing issues, standards, training, education, and staffing that supports patient safety and quality efforts.

A member of the American Nurses Association and Georgia Nurses Association, Ms. Pinney has significant involvement with NCCHC. She assisted with development of the 2014 editions of the *Standards for Health Services* manuals for prisons and jails, served on the committee that launched the Certified Correctional Health Professional – Registered Nurse (CCHP-RN) program, and is a member of the CCHP-RN subcommittee, the NCCHC Nurse Advisory Council, and the NCCHC Correctional Health Care Foundation.

Appendix 2. Interview Guides

Connecticut Department of Correction

Interview Guide for Central Office Dental Staff

Name/Title:_____

Date:_____

Interviewed by:_____

1. How long have you worked in correctional healthcare? For CTDOC? Describe your role and responsibilities.

2. Describe the experience of DOC with the transition from UConn.
   - *What is different? Same?*
   - *Are there lingering cultural issues or other concerns among the dental staff?*
   - *How do they get addressed?*

3. Describe staffing/vacancies concerns.
   - *what critical staff are you missing*
   - *barriers to hiring – security screening; credit checks; length of time it takes to hire; salary*
   - *leverage and challenges with retention of qualified dental staff*
   - *role of temp/registry/contract staff*

4. Describe the working relationship between dental staff and medical.
   - *How are problems able to be addressed?*
   - *What venues do you use to discuss workflow, QI, communication issues between your team and providers?*

5. Describe the working relationship between medical and dental staff.
   - *How are problems able to be addressed?*
   - *What venues do you use to discuss workflow, QI, communication issues?*

6. Describe the working relationship between dental and custody.
   - *How are problems able to be addressed?*
     - *What venues do you use to discuss workflow, QI, communication issues between your team and custody?*
     - *Do dental staff feel safe in all their practice settings?*

7. Do you have clear, appropriate protocols for dental sick call, chronic care, etc.?

8. How do the protocols support dental staff to work at the top of their license? How is compliance with policy, procedure, and protocols assessed and managed?

9. What dental health delivery practices/performance measures are monitored/measured?

10. How are dental healthcare issues brought forward from the field? What venues are used to address local issues? Systemic issues?

11. Since the transition from UConn, are dental health care policies and written guidance sufficiently developed? Does the policy-making practice capture and reflect field experience/reality?

12. How well does the dental sick call process work?
    - *Are inmate sick call requests handled timey?*
    - *Are inmate seen by nursing timely?*
    - *Are nurse referrals to providers carried out timely?*
    - *Who does scheduling? How well does it work? What is your view of providerproductivity expectations?*
    - *Can the same patient be "bumped" repeatedly? Who oversees this?*
    - *Do patients get "lost" waiting to see on -site or off-site providers?*
    - *Do inmates have sufficient access to OTC medications through commissary to reduceunnecessary sick call requests?*
    - *Are co-pays levied for dental health care? Medications? To what effect?*
    - *How would you improve the sick call process?*

13. Let's talk about what keeps you up at night. What is your biggest current challenges with
    - *Overall patient care*
    - *Access to …. services in segregation units, specialty care, BH, psychiatry, etc.*
    - *Staffing*
    - *Application of central office policies at facility level, etc.*
    - *Sick Call*
    - *Pharmacy*
    - *Medication administration*
    - *Infection control*
    - *Transports*
    - *Release planning*

14. Describe how you measure quality
    - *On a scale of 1-10, please rate the quality of dental healthcare provided*
    - *Please describe the quality of care and how it is measured*

15. What improvement would you most like to see implemented

16. Describe the dental healthcare role in reentry/discharge planning

17. Please describe offender access to dental health services
    - *Please rate on a scale of 1-10 the level of access to care for the offender population*
    - *Describe offender access to care.*
    - *Do inmates in segregated housing have appropriate access to health care?*
    - *From your perspective, do inmates receive appropriate access to necessary dental services? What could be done to improve dental care?*

18. Given your experience with COVID, what should DOC change so that future outbreaks are better managed?
    - *Did staff have necessary PPE?*
    - *Did health care staff receive timely and appropriate training on COVID and new P&Ps?*
    - *Was custody appropriately trained for COVID practices? Was custody supportive of changesnecessary to manage COV*

19. How well does the DOC manage other infectious diseases – STIs, scabies, TB, HIV, HepC. Is the DOC a partner with public health in these matters?

Appendix 2. Interview Guides

Connecticut Department of Correction

Interview Guide for Central Office Healthcare Staff

Name/Title:_____

Date:_____

Interviewed by:_____

1. How long have you worked in correctional healthcare? For CTDOC? Describe your role and responsibilities.

2. Describe the current healthcare structure at the system level. Facility level. Plans for improvements.

3. Describe the experience of DOC with the transition from UConn.
    - *What is different? Same?*
    - *Are there lingering cultural issues or other concerns among the healthcare staff?*
    - *How do they get addressed?*

4. Describe staffing/vacancies concerns.
- *what critical staff are you missing*
- *barriers to hiring – security screening; credit checks; length of time it takes to hire; salary*
- *leverage and challenges with retention of qualified healthcare staff*
- *role of temp/registry staff*

5. Describe staffing/vacancies concerns.
- *what critical staff are you missing*
- *barriers to hiring – security screening; credit checks; length of time it takes to hire; salary*
- *leverage and challenges with retention of qualified healthcare staff*
- *role of temp/registry staff*

6. Describe the working relationship between medical and mental health/SUD staff.
   - *How are problems able to be addressed?*
   - *What venues do you use to discuss workflow, QI, communication issues?*

7. Describe the working relationship between health care and custody.
   - *How are problems able to be addressed?*
     - *What venues do you use to discuss workflow, QI, communication issues between your team and custody?*
     - *Do healthcare staff feel safe in all their practice settings?*
     - *What is custody's role in med pass/diversion control?*

8. Let's talk about what keeps you up at night. What is your biggest current challenges with
   - Overall patient care
   - Access to …. services in segregation units, specialty care, BH, psychiatry, etc.
   - Staffing
   - Application of central office policies at facility level, etc.
   - Sick Call
   - Pharmacy
   - Medication administration
   - Infection control
   - Transports
   - Release planning

9. Describe how you measure quality
   a. *On a scale of 1-10, please rate the quality of primary healthcare provided*
   b. *Please describe the quality of care and how it is measured*

10. What improvement would you most like to see implemented

11. Describe the healthcare role in reentry/discharge planning

12. Describe pre-natal/pregnancy related services (York only)
    - *To what degree are recommendations made by OBGYN for pregnant women carried out at the facility?*
    - *What could be done to improve services provided to pregnant women and to improve pregnancy outcomes?*

13. Please describe offender access to health services
    a. *Please rate on a scale of 1-10 the level of access to care for the offender population*
    b. *Describe offender access to care.*
    c. *Do inmates in segregated housing have appropriate access to health care?*
    d. *From your perspective, do inmates with serious mental illness receive appropriate treatment for their mental health and medical conditions? What could be done to improve MH care?*
    e. *From your perspective, do inmates receive appropriate access to necessary dental services? What could be done to improve dental care?*

14. Given your experience with COVID, what should DOC change so that future outbreaks are bettermanaged?
    a. *Did nursing have necessary PPE?*
    b. *Did health care staff receive timely and appropriate training on COVID and new P&Ps?*
    c. *Was custody appropriately trained for COVID practices? Was custody supportive of changesnecessary to manage COVID?*

15. How well does the DOC manage other infectious diseases – STIs, scabies, TB, HIV, HepC. Is the DOC apartner with public health in these matters?

Appendix 2. Interview Guides

Connecticut Department of Correction

Interview Guide for Central Office Mental Healthcare/Psychology Staff

Name/Title:_____

Date:_____

Interviewed by:_____

1. How long have you worked in correctional healthcare? Describe your role and responsibilities.

2. Describe the experience of DOC with the transition from UConn.
   - *What is different? Same?*
   - *Are there lingering cultural issues or other concerns among the healthcare staff?*
   - *How do they get addressed?*

3. Describe staffing/vacancies concerns.
   - *what critical staff are you missing*
   - *barriers to hiring – security screening; credit checks; length of time it takes to hire; salary*
   - *leverage and challenges with retention of qualified staff*

4. Describe the working relationship between medical and mental health/SUD staff.
   - *How are problems able to be addressed?*
   - *What venues do you use to discuss workflow, QI, communication issues?*

5. Describe the working relationship between MH staff and custody.
   - *How are problems able to be addressed?*
     - *What venues do you use to discuss workflow, QI, communication issues between your team and custody?*
     - *Do healthcare staff feel safe in all their practice settings?*
     - *What is custody's role in observing/referring?*
     - *What MH training is provided to custody staff?*

6. Please describe offender access to mental health services
   - *Please rate on a scale of 1-10 the level of access to care for the offender population*
   - *Describe offender access to care.*
   - *Do inmates in segregated housing have appropriate access to health care?*
   - *From your perspective, do inmates with serious mental illness receive appropriate treatment fortheir mental health and medical conditions? What could be done to improve MH care?*

7. Let's talk about what keeps you up at night. What is your biggest current challenges with
   - *Overall patient care*
   - *Access to …. services in segregation units, specialty care, BH, psychiatry, etc.*
   - *Staffing*
   - *Application of central office policies at facility level, etc.*
   - *Sick Call*
   - *Pharmacy*
   - *Medication administration*
   - *Infection control*
   - *Transports*
   - *Release planning*

8. Describe how you measure quality/outcomes
   a. *On a scale of 1-10, please rate the quality of primary healthcare provided*
   b. *Please describe the quality of care and how it is measured*

9. What improvement would you most like to see implemented

10. Describe the mental health staff role in reentry/discharge planning

11. Describe special population related services are provided
    - *Youth? Women? Segregated? Dementia care?*

12. Given your experience with COVID, what should DOC change so that future outbreaks are better managed?

Appendix 2. Interview Guides

Connecticut Department of Correction

Interview Guide for Nursing Supervisors

Name/Facility:_ ____

Date_____

Interviewed by:

1. How long have you worked in correctional healthcare? at this facility? Describe your current role.

2. Describe the general experience of DOC nursing with the transition from UConn.
   - *What is the current level of morale?*
   - *Are there lingering cultural issues or other concerns among the nursing staff? How do they get addressed?*

3. Describe your current staffing/vacancies
   - *what critical staff are you missing*
   - *barriers to hiring – security screening; credit checks; length of time it takes to hire*
   - *leverage and challenges with retention of qualified healthcare staff*
   - *role of temp/registry staff*
   - *Is there a trained float pool of nurses*

4. Describe the working relationship between nursing and the providers.
   - *How are problems able to be addressed? What venues do you use to discuss workflow, QI, communication issues between your team and providers?*

5. Describe the working relationship between nursing and mental health staff.
   - *How are problems able to be addressed? What venues do you use to discuss workflow, QI, communication issues between your team and MH staff?*

6. Describe the working relationship between health care and custody. • *How are problems able to be addressed? What venues do you use to discuss workflow, QI, communication issues between your team and custody? Do nurses feel safe in all their practice settings? What is custody's role in med pass/diversion control?*
7. Since the transition from UConn, are health care policies and written guidance sufficiently developed? Does the policy-making practice capture and reflect field experience/reality?
8. Do you have clear, appropriate protocols for sick call, chronic care, etc.?
9. How do the protocols support nurses to work at the top of their license? How is compliance with nursing protocols assessed and managed?
10. What nursing practices/performance measures are monitored/measured?
11. How are nursing issues brought forward from the field? What venues are used to address local nursing issues? Systemic nursing issues?
12. RE: medication practices: • *How efficient is the ordering and procurement process?* • *Are Keep on Person meds (KOPs) used appropriately?* • *Are med lines efficient? What could be done to improve them?* • *Do inmates generally adhere to prescription drug regimens? Is nursing sufficiently engage tohelp inmates adhere to med regiments? (teaching, reviewing missed/refused meds, etc)*

13. Please describe offender access to health services
    - *Please rate on a scale of 1-10 the level of access to care for the offender population*
    - *Describe offender access to care.*
    - *Do inmates in segregated housing have appropriate access to health care?*
    - *From your perspective, do inmates with serious mental illness receive appropriate treatment fortheir mental health and medical conditions? What could be done to improve MH care?*
    - *From your perspective, do inmates receive appropriate access to necessary dental services? What could be done to improve dental care?*
    - How well does the sick call process work?
        - Are inmate sick call requests handled timey?
        - Are inmate seen by nursing timely?
        - Are nurse referrals to providers carried out timely?
        - Who does scheduling? How well does it work? What is your view of provider productivity expectations?
        - Can the same patient be "bumped" repeatedly? Who oversees this?
        - Do patients get "lost" waiting to see on -site or off-site providers?
        - Do inmates have sufficient access to OTC medications through commissary to reduce unnecessary sick call requests?
        - Are co-pays levied for health care? Medications? To what effect?
    - How would you improve the sick call process?

14. Let's talk about what keeps you up at night. What is your biggest current challenges with
    a. Overall patient care
    b. Access to ….specialty care, BH, psychiatry, etc.
    c. Staffing
    d. Application of central office policies at facility level, etc.
    e. Sick Call
    f. Pharmacy
    g. Medication administration
    h. Infection control
    i. Transports
    j. Release planning

15. Describe how you measure quality
    a. *On a scale of 1-10, please rate the quality of primary healthcare provided at your facility*
    b. *Please describe the quality of care and how it is measured*

16. What improvement would you most like to see implemented

17. Describe nursing role in reentry/discharge planning

18. Describe pre-natal/pregnancy related services (York only)
    - *To what degree are recommendations made by OBGYN for pregnant women carried out at the facility?*
    - *What could be done to improve services provided to pregnant women and to improve pregnancy outcomes?*

19. Given your experience with COVID, what should DOC change so that future outbreaks are better managed?
    a. *Did nursing have necessary PPE?*
    b. *Did health care staff receive timely and appropriate training on COVID and new P&Ps?*
    c. *Was custody appropriately trained for COVID practices? Was custody supportive of changes necessary to manage COVID?*

Appendix 2. Interview Guides

Connecticut Department of Correction

Interview Guide for Nursing Supervisors

Name/Facility

Date:_____

Interviewed by:___

1. How long have you worked in correctional healthcare? At this facility? Describe your current role.

2. Describe the general experience of DOC nursing with the transition from UConn.
   - *What is the current level of morale?*
   - *Are there lingering issues or other concerns among the nursing staff? How do they get addressed?*

3. Describe your current staffing/vacancies
   - *what critical staff are you missing*
   - *barriers to hiring – security screening; credit checks; length of time it takes to hire*
   - *leverage and challenges with retention of qualified healthcare staff*
   - *role of temp/registry staff*
   - *Is there a trained float pool of nurses*

4. Describe the working relationship between nursing and other MD staff.
   - *How are problems able to be addressed? What venues do you use to discuss workflow, QI, communication issues between your team and providers?*

5. Describe the working relationship between nursing and mental health staff.
   - *How are problems able to be addressed? What venues do you use to discuss workflow, QI, communication issues between your team and MH staff?*

6. Describe the working relationship between health care and custody.
   - *How are problems able to be addressed? What venues do you use to discuss workflow, QI, communication issues between your team and custody? Do nurses feel safe in all their practice settings? What is custody's role in med pass/diversion control*

7. Since the transition from UConn, are health care policies and written guidance sufficiently developed

8. Does the policy-making practice capture and reflect field experience/reality?

9. Do you have clear, appropriate protocols for sick call, chronic care, etc.? Describe them!

10. Do the protocols support nurses to work at the top of their license? How is compliance with nursing protocols assessed and managed?

    i.

11. What nursing practices/performance measures are monitored/measured?

    i.

12. How are nursing issues brought forward managements attention? What venues are used to address local nursing issues? Systemic nursing issues?

13. RE: medication practices:
    - How efficient is the ordering and procurement process?
    - Are Keep on Person meds (KOPs) used appropriately?
    - Are med lines efficient? What could be done to improve them?
    - Do inmates generally adhere to prescription drug regimens?
    - Is nursing sufficiently engage to help inmates adhere to med regiments? (teaching, reviewing missed/refused meds, etc.)

14. Please describe offender access to health services
    - *Please rate on a scale of 1-10 the level of **access to care** for the offender population*
    - *Describe offender access to care. Where it works well and where are room for improvements?*
    - *Do inmates in segregated housing have appropriate access to health care?*
    - *From your perspective, do inmates with serious mental illness receive appropriate treatment fortheir mental health and medical conditions? What could be done to improve MH care?*
    - *From your perspective, do inmates receive appropriate access to necessary dental services? What could be done to improve dental care?*
    - How well does the sick call process work?
        - *Are inmate sick call requests handled timey?*
        - *Are inmate seen by nursing timely?*
        - *Are nurse referrals to providers carried out timely?*
        - *Who does scheduling? How well does it work? What is your view of provider productivity expectations?*
        - *Can the same patient be "bumped" repeatedly? Who oversees this?*
        - *Do patients get "lost" waiting to see on -site or off-site providers?*
        - *Do inmates have sufficient access to OTC medications through commissary to reduce unnecessary sick call requests?*
        - *Are co-pays levied for health care? Medications? To what effect?*
        - *How would you improve the sick call process?*

15. Let's talk about what keeps you up at night. What is your biggest current challenges with
    - *Overall patient care*
    - *Access to ….specialty care, BH, psychiatry, etc.*
    - *Staffing*
    - *Application of central office policies at facility level, etc.*
    - *Sick Call*
    - *Pharmacy*
    - *Medication administration*
    - *Infection control*
    - *Transports*
    - *Release planning*

16. Describe how you measure quality
    - *On a scale of 1-10, please rate the quality of primary healthcare provided at your facility*
    - *Please describe the quality of care and how it is measured*

17. What improvement would you most like to see implemented

18. Describe nursing role in reentry/discharge planning

19. Describe pre-natal/pregnancy related services (York only)
    - *To what degree are recommendations made by OBGYN for pregnant women carried out at the facility?*
    - *What could be done to improve services provided to pregnant women and to improve pregnancy outcomes?*

20. Given your experience with COVID, what should DOC change so that future outbreaks are better managed?
    a. *Did nursing have necessary PPE?*
    b. *Did health care staff receive timely and appropriate training on COVID and new P&Ps?*
    c. *Was custody appropriately trained for COVID practices? Was custody supportive of changes necessary to manage COVID?*

21. How well does the DOC manage other infectious diseases – STIs, scabies, TB, HIV, HepC. Is the DOC a partner with public health in these matters?

Appendix 2. Interview Guides

Connecticut Department of Correction

Interview Guide for District Administrators/Deputy Commissioner

Name:_____

Date:_____

Interviewed by:_____

1. How long have your worked for the CTDOC? How long in your current role?

2. Briefly describe your current role with the CTDOC
   - *Priorities*
   - *Upcoming system changes*
     a. *Healthcare*
     b. *Special programming*

3. What has been the COVID-19 impact on system/facilities

4. Describe the transition from UConn health
   - *And any lingering issues*

5. How are you engaged in planning for and delivery of healthcare?

6. Is healthcare responsive? proactive? siloed?

7. How would you describe the access to healthcare services?
   - *Do you have access to data that track timeliness from request to access?*
   - *If so, what does data show?*

8. What do you hear from offenders/families/legislators/stakeholders related to healthcare?
   - *Quality of Care (by type – PH, Specialty PH, BH, Dental, etc.)*
   - *Access/timeliness by type*

9. Describe the relationship of custody and healthcare staff for delivering health services • *On a scale of 1-10 (with 10 being outstanding collaboration), rate this working relationship* • *Please describe this relationship*
10. How and how often are prison staff/custody professionals trained regarding specific healthcareissues? • Academy • Ongoing
11. In your opinion, what is the greatest healthcare need across the system?
12. Describe the quality of your current healthcare services • *On a scale of 1-10 (with 10 being outstanding quality), how do you rate the quality of healthservices* • *Do you have metrics/dashboard to track/report on quality?* • *How does healthcare, in your opinion, compare to the community standard of care?*
13. Describe the impact of the Patient Prioritization Transport (PPT)/Special Medical Appointment

Appendix 3. CT DOC Inmate Medical Services System Overview

The CT DOC is one of only six state correctional agencies in the country with a combined system of pre-trial jails for accused offenders and prisons for sentenced offenders. As of 10/1/2020, the Department incarcerates approximately 9378 offenders throughout fourteen (14) facilities and/or campuses and is responsible for incarceration of youth (in the adult court system), male, and female sentenced and un-sentenced individuals. Approximately 33 percent are accused, and 67 percent are sentenced.

CT DOC provides a continuum of services including medical, dental and behavioral health care services at all levels of clinical acuity which is available for offenders beginning with the initial intake process and throughout their incarceration. Services for offenders range from preventive and primary care to hospital inpatient and outpatient, including chronic and specialty care. All medical and behavioral health services include access to 24 hour on-call coverage to address emergent/critical care issues.

Health Services Unit Leadership

- Led by Chief Operating Officer; supported by 4 Regional COOs
- Chief Medical Officer; 2 Regional Medical Directors
- Chief Mental Health Officer; 2 Regional APRNs, Director of Behavioral Health Services; Deputy Warden for Addiction Services
- Dental Director
- Chief Nurse Executive; 2 Regional Nursing Directors

Healthcare Process Overview

The initial medical assessment for new and or returning offenders is conducted by a licensed nurse typically prior to being assigned housing. The purpose of the initial medical assessment is to identify current medical needs and collect past medical history. Information collected through this process allows intake staff to ensure continuity of care, inform housing needs, ensure that all healthcare needs are known, referrals made, and offenders' care is clinically managed. At intake offenders are given information on how to access mental health and medical services at their facility.

Based on the initial medical assessment, offenders are classified according to their medical needs. CT DOC defines criteria for assigning medical levels:

- M1 - No medical problems that require nursing attention, other than problems that might arise in the future due to illness or injury
- M2 - Are not expected to require nursing care on any regular basis; have some sub-acute or chronic disease that requires occasional nursing attention, but not on an urgent basis
- M3 - Need predictable access to nursing care for 16 hours a day, 7 days a week (Any need for directly observed therapy at least once a day qualifies as M3)
- M4 - Need 24-hour access to nursing care, but most of the time do not actually access that care. There is a reasonable likelihood that from time to time they will need 24-hour actual nursing care (not just access to it)
- M5 - Need 24-hour nursing care, possibly for an extended time

Appendix 3. CT DOC Inmate Medical Services System Overview

All facilities have health care outpatient services, and most can accommodate some on-site specialty services. There are five facilities with on-site infirmaries (196 infirmary beds state-wide includes both medical and mental health), which provide acute care services such as post-operative care, IV fluids and medications and wound care. When the medical needs cannot be met within facilities offenders are referred to a local area provider for specialty services.

CT DOC implemented an electronic health records (EHR) system (GE Centricity-Fusion) in spring 2018. CT DOC maintains a comprehensive health record on each offender and includes all reports received from all care providers. CT DOC requires that all services be properly recorded in the offender's health records. The implementation of any EHR comes with complications and kinks, however, CT DOC should be applauded for its commitment to this initiative. As the interfaces and report functions continue to grow over time, the EHR will be able to give real time or near real time information on patient care and essential utilization of the correctional health care system.

Pharmacy services are provided by a contracted vendor and medication distribution to offenders take place in each facility. Diamond Pharmacy is a new vendor to CT DOC and provides comprehensive pharmaceutical management for the Department. Diamond and CT DOC launched the electronic medication assisted record (EMAR) in October, 2019 which closely tracks medication administration for its offenders. Over time, the EMAR will be able closely manage ordering, dispensing and administration of inmate medication. CT DOC has expectations that the EMAR and EHR will be able to routinely produce reports on patient care, utilization, cost and other mission critical information on the health care system.

Currently outpatient services are largely centralized, although, offenders are transported to outpatient services as needed. Transportation and supervision of the offenders while in the community are provided by DOC. Offenders requiring emergency care are transported to the nearest hospital. Offenders requiring inpatient care are admitted to a dedicated, secure hospital unit.

Although HMA's evaluation does not include review and analysis of mental health or addiction services (or dental services), it is important to provide a brief overview of how behavioral health issues are addressed for offenders as CT DOC aims to provide coordinated and integrated care whenever possible. The behavioral health units (mental health and addiction) offer a full array of services (outpatient, infirmary level through residential) care and employ a full range of behavioral health providers, including psychiatrists and prescribers. All services are overseen by the Director of Behavioral Health and Deputy Warden for Addiction Services who report up to the Chief Mental Health Officer.

An initial mental health assessment is conducted to ascertain treatment history, social development, education, inform housing and employment needs, and identify mental health levels and a brief treatment plan. If an offender enters a correctional facility on psychiatric medication they are categorized as a mental health level 3 and receive the social worker's mental health initial evaluation and then a referral for an initial psychiatric evaluation by a MD or APRN. If there is a need for diagnostic clarification, offenders can receive psychological testing as well. The following is the criteria for assigning mental health levels:

Appendix 3. CT DOC Inmate Medical Services System Overview

- MH1 - No history of mental health treatment
- MH2 - Prior treatment in the past but currently not in treatment prior to arrest or is in no active treatment in CT DOC
- MH3 - Current mental health treatment whether therapy, mental health groups and/or mental health medications. Seen at least monthly with Social worker and at least every 90 days by prescriber
- MH4 - Requires a higher level of mental healthcare. They are seen weekly by a social worker and at least every 90 days by prescriber
- MH5 - Infirmary level of care

Appendix 4. Best Practices in Managing Sick Call

Standards and Common Practices

A jail health system's primary objective is to assure access to health care services for all detainees, at the level of care and within timelines appropriate to the clinical need. The system must constantly assess the demand for services, the capacity to address the demand, and the outcomes of the process to determine whether patients were seen when they should have been and by the right level of personnel. Assuring that all licensed health care staff are working at the top of their licenses assures that detainees who need physician-level care can receive it, because the physicians are not being used for services that an RN or PA could perform. This applies to urgent/emergent, acute, preventive, and chronic care, all of which the jail addresses. Managing sick call falls squarely in the middle of the jails' health care processes.

NCCHC and ACA standards require that detainees have the opportunity to request health care services every day, and that requests are addressed by a health care professional. Several factors are implicit in this standard and are addressed explicitly in the sick call standard or in other standards:

- The detainee request must state a reason for the request, so that it can be properly triaged by the health care team.
- Requests in which the detainee states a clinical concern must be evaluated by a health care professional in a face-to-face encounter within 24 hours (or 72 hours for weekends).
- The sick call process is under the direction of the responsible physician, but not every clinical evaluation needs to be carried out by a provider.
- Health care requests are confidential and a jail's process for collecting and triaging health care service requests should not divulge protected health information to custody staff.

In the optimal sick call process, the following occur:

Just as in community primary care, triage of sick call requests is central to assuring that limited resources are optimized to manage those at the most risk for poor health outcomes. ***Not every request can or should be addressed in the same way, either in a jail or a community physician's office.***

- Sick call requests are triaged by an RN. This may include accessing the detainee's medical record to ascertain prior similar problems, other conditions, and medications. The triage nurse may also know the detainee's recent medical history
- Detainees with emergent requests are addressed immediately
- Detainees with urgent requests are evaluated by the nurse and seen by a provider that day or the next day, or an on-call provider is contacted to provide verbal orders
- Detainees with non-emergent needs are evaluated in a face-to-face encounter within 24 hours by an RN using nursing protocols, and where appropriate, interventions are provided by the nurse in accordance with protocols
- The RN performs an assessment and documents in a SOAP or similar format
- The RN implements interventions in accordance with clinical protocol. They may include a wide range of non-pharmaceutical interventions (application of ice packs, exercises for low back pain,

etc.), patient education and self-care instruction, and provision of over-the-counter medications as allowed by protocol

- Detainees with non-emergent needs that warrant evaluation by a provider are scheduled for a provider visit within timeframes established in jail policy
- Detainees requesting a sick call visit for a condition that has not resolved with one or two nursing encounters or self-care are automatically scheduled for a provider visit
- Custody staff are provided with a list of detainees who need to be seen for nurse and provider sick call visits the next day, and bring detainees as requested
- Health care staff track completion of scheduled sick call visits
    - Detainees not seen as scheduled are rescheduled
    - Detainees that have been bumped are tracked, rescheduled, and seen appropriately

Virtually every jail uses the process described above. In most jails, RNs manage 50% - 75% of sick calls, and 25% - 50% are referred to a provider.

In the best run sick call process, the following also occur:

- The person scheduling the provider visits consults the provider schedule to determine if a visit is already scheduled. Where appropriate, the visits are combined
- Health care staff routinely monitor sick call statistics to assure that timeframes are met for
    - Daily (at least) collection of sick call request form
    - Timely triage
    - Timely face-to-face assessment
    - Timely provider visits
- Variance from acceptable performance are addressed and corrected
- RNs and providers discuss the nurse triage process to assure it is appropriate and efficient
- In larger systems, the Health Services Administrator also tracks provider referral rates among the RNs to identify and address outliers
- The health care team employs population heath management strategies to assess the adequacy of the sick call process, in the context of the larger jail health care system. This includes:
    - Analysis to determine if sick call access or processes contribute to preventable emergency room visits and inpatient admissions
    - Analysis to tie access to chronic care services and sick call services together, to find options to optimize access
    - Analysis to tie outcomes for chronic conditions to sick call access, to identify whether demand is appropriately met. This includes assessing backlogs, avoidable emergency room and inpatient care, level of control of chronic conditions, other outcomes of care

Appendix 5. CT DSS Intensive Care Management Requirements

Reference: CT DSS Contract with Community Health Network of Connecticut

(ASO) Highlights: Program Requirements

- Review requests against established ICM criteria
- Identify high risk members
- AppICM staff shall collaborate with a multi-disciplinary care team made up of clinicians, service providers, and the member or the member's designee, to develop a personal plan of care, as defined in the ICM policies and procedures in order to improve individual outcomes.
    - complete an initial assessment, as defined in the ICM policies and procedures, within thirty (30) days of a member's enrollment into ICM.
- Develop a personal care plan as define in the ICM policies and procedures for each enrolled member within the fourteen (14) calendar days of completing the initial assessment
- Update the care plans at least every 90 days
- Conduct a formal reassessment, as defined in the ICM policies and procedures, of a member every six (6) months, beginning from the date of the initial assessment.
- The average monthly caseload requirements shall be included in the ICM Program Description and approved by the Department.
- ICM teams include ICM nurses, CHWs, BH Nurses

A.70. Intensive Care Management (ICM): Intensive care management refers to a collaborative person-centered process of assessment, planning, facilitation, care coordination and advocacy for options and services to meet an individual's and/or family's comprehensive health needs through communication and available resources to promote quality, cost effective outcomes. Intensive Care Manager: An independently licensed clinician employed by the Contractor who is responsible for managing and coordinating the care of individuals and/or families who are eligible for intensive care management.

- 0 .5.10. The Contractor shall implement a protocol for reviewing authorization requests against Intensive Care Management (ICM) criteria that might trigger the involvement of ICM staff and shall refer to ICM staff. ICM staff shall be responsible for outreaching to the member.

E. INTENSIVE CARE MANAGEMENT
E.1. General Provisions
E.1.1 . Intensive Care Management is the organization and implementation of activities to assess needs, maximize coordination of resources and improve the health and outcomes for individuals with significant clinical conditions that severely impact their daily lives. These members may have one or more chronic conditions with or without co-occurring behavioral health conditions, or environmental and social circumstances which prevent an efficient utilization of medically necessary care and resources.

E.1.2. The goal of the Intensive Care Management (ICM) Program is to promote the overall care experience, wellness and health outcomes of high-risk members by leveraging the delivery of person-centered ICM services. A successful ICM Program will:

E.1.2.1. Identify high risk members with potential for improved management of their conditions, and improved outcomes through a predictive modeling system, other data analytic methods and referral sources;
E.1 .2.2. Require that a member consent to receive ICM services and opt-out to terminate ICM services. A member or member's legal representative may provide either verbal or written consent for the member to participate or terminate their participation in ICM. The Contractor's ICM staff shall document the consent in the care management system;
E.1 .2.3. Engage members in their own care through education and self-help coaching;
E.1.2.4. Increase use of preventive care services;
E.1.2.5. Integrate the delivery of physical health and BH services;
E.1.2.6. Mitigate poor outcomes and high costs at the individual and system levels; and
E.1.2. 7. Work collaboratively with practice transformation specialists according to but not limited to support(s) listed in G.1.3, G.1.4, G.2.2, and G.2.3.

E.1.3. To ensure the appropriate delivery of health care services through an ICM program the Contractor shall:

E.1.3.1. Organize care using a person-centered approach, and a multidisciplinary primary care and specialty practice team,
E.1.3.2. Identify community supports and other resources required to support the individual and to address their needs,
E.1 .3.3. Exchange information among those responsible for different aspects of the member's care, including the member, family and circles of support. If required by the HIPAA Privacy standards or Department policies the Contractor shall obtain the written approval of the member or member's legal representative prior to the exchange of any information with other individuals responsible for the member's care;
E.1.3.4. Delineate and inform participants about each other's roles in the member's care and the available resources to fulfill the care plan; and
E.1.3.5. Conduct an annual ICM member satisfaction survey for members engaged in ICM to assess their level of satisfaction with the quality of the program.

E.1 .4. The Contractor shall comply with the ICM standards included in its ICM policies and procedures, as approved by the Department.

E.1.5. For each member requiring ICM services the Contractor's ICM staff shall collaborate with a multi-disciplinary care team made up of clinicians, service providers, and the member or the member's designee, to develop a personal plan of care, as defined in the ICM policies and procedures in order to improve individual outcomes.

E.1 .5.1. The Contractor shall enroll a member into ICM when the Contractor has received notification from the member or member's guardian that the member has consented to receive ICM services.
E.1.5.2. The Contractor shall begin assessment upon member enrollment to ICM and complete an initial assessment, as defined in the ICM policies and procedures, within thirty (30) days of a

member's enrollment into ICM. The initial assessment shall
determine the member's health status and environmental and social circumstances which may prevent the efficient utilization of medically necessary care and resources. The member will be engaged into the ICM program once the initial assessment has been completed.
E.1.5.3. The Contractor shall develop a personal care plan as define in the ICM policies and procedures for each enrolled member within the fourteen (14) calendar days of completing the initial assessment.
E.1.5.4. The Contractor shall update the care plans of those members identified through the initial assessment as moderate or high need, upon every encounter, but not less frequently than every ninety (90) days, and shall monitor the effectiveness of the care plans
ongoing.
E.1.5.5. The Contractor shall conduct a formal reassessment, as
defined in the ICM policies and procedures, of a member every six
(6) months, beginning from the date of the initial assessment.

E.1 .6. The Contractor's ICM Program shall provide intensive care management for special populations, identified and agreed to by the two parties.

E.2. ICM - Service Delivery

E.2.1. The Contractor shall provide ICM within the State of Connecticut, with the regional deployment of Intensive Care Managers in the field assigned to five (5) regional teams as defined by and agreed to by the parties in the Contractor's ICM Program Description, sized to correspond to the level of membership and provider presence in each of the five regions. The Contractor shall provide ICM services for specified number of members across all member populations identified in the ICM Program Description as approved by the Department. The average monthly caseload requirements shall be included in the ICM Program Description and approved by the Department.

E.2.2. Each of the five (5) ICM regional teams will include ICM nurses who will support provider practices and their patients in each geographic area of the State.
E.2.3. Community Health Workers will support all five (5) ICM regional teams.
E.2.4. Behavioral Health (BH) nurses will also participate on the regional teams to serve members with co-morbid BH conditions.

E.3. ICM Team Roles and Credentials

E.3.1 . The Contractor's ICM program shall include staff members with experience in the care of members from diverse cultural and socioeconomic backgrounds.
E.3.2. The Contractor shall engage a variety of expertise on the ICM team to ensure that each member receives the services they personally need. The Contractor shall ensure that the individuals who provide ICM services to members possess the following minimum credentials:
Title and Role of the Team Minimum Credentials
ICM Nurses: Each of the ICM Nurses shall be responsible for R. N. with 3-5 years of developing and executing person-centered integrated care clinical experience.
plans in collaboration with the interdisciplinary care team. Managed care and
They shall work directly with the member telephonically and, case management
when appropriate, face to face. The ICM Nurses shall experience preferred.
integrate with provider staff to support practices to achieve

member-specific care planning goals; integrate BH care needs within the ICM medical care plan; and shall collaborate with the CTBHP ICM when appropriate.

Integrated Behavioral Health Care Coordinator: will review and assist with development of behavioral health care plans for mental health-related members with complex needs and acute and/or chronic behavioral health care challenges in collaboration with the ICM team and members.

Master's Degree in field or social services (e.g., LCSW, LMFT, Psychologist, Counselor)

The BCC will educate the ICM behavioral team on the distinctions of the behavioral health condition, treatment options and appropriate clinical protocols.

3+ years of experience in mental health-related care settings.

Community Health Workers: responsible for helping members and their families navigate and access community services, and adopt healthy behaviors. The CHW provides social support, community-based outreach, advocacy, culturally- based education, health promotion and referrals to services for individuals and families enrolled in the HUSKY Health program. The CHW develops positive, supportive relationships with members through a series of ongoing telephonic contact and face-to-face visits in the member's home or community setting to promote compliance with the care plan. This allows the CHW to guide members toward self-management and community-based improved outcomes.

High school diploma or GED; Associates degree preferred in Social services, vocational nursing or allied health discipline

1-3 years' experience in managed care or working in a

ICM BH Nurse: shall educate the Contractor's Regional team members on BH care delivery issues and needs.

R. N., with 3-5 years of behavioral health clinical experience. Managed care and case management experience preferred

E.4. The Contractor shall provide Health Informatics Analysts and Quality Data Analysts resources to the ICM regional teams. The ICM regional teams shall be required to further integrate services with other clinical and non-clinical areas within the Medical ASO.

E.5. ICM Training: The Contractor shall train all staff and any new hires.

E.5.1. Comprehensive ASO Orientation services will be provided on an ongoing basis, including a mixture of in-person classroom learning, mentoring, monitoring and web-based learning. The Contractor shall participate in cross-training efforts to maximize knowledge of ICM strategies and functions across the Regional Teams. ICM training will include the following components:

E.5.1.1. Core Training: staff orientation will include strategies and content on: engagement and building member rapport, active listening, motivational coaching, use of ASO technology, personcentered management strategies, care integration, chronic condition management and ASO services and benefits among

other topics.
E.5.1.2. Cultural Competency: All ICM staff will be trained to enhance cultural awareness and knowledge of cultural and ethnic influences. Cultural sensitivity training will include exercises in empathy, interpersonal communication, appropriateness, and respect as well as assessment, diagnostic and clinical skills. A cultural competency self-study and testing will be required for staff.
E.5.1.3. Preceptor and Mentoring program. Preceptors will actively train staff. The Contractor shall have senior staff as mentors for more junior staff related to mentoring of job responsibilities, such as demonstrating member coaching techniques.
E.5.1.3.1. The Contractor shall ensure that their ICM staff receive training in person-centered care planning as part of its mentoring program.
E.5.1.4. Shall include an integrated care management approach to manage patients who have physical and psychological health comorbidities; inadequate social networks and limited or poorly coordinated access to needed health services

E.5.2. Continuing Education: Post-core continuing education will be an integral component of the ICM program for all staff. The Contractor shall, throughout the term of this contract provide distance learning opportunities as well as a library of online and classroom-based learning opportunities in chronic care and medical home among other issues.

E.6. Data Analytics to Support Intensive Care Management
E.6.1. The Contractor shall use a predictive modeling decision-support tool that has the ability to meet or exceed the following requirements:
E.6.1.1. Production of predictive modeling reports to inform the Contractor, the Department and individual providers of the highest risk members who require ICM program outreach;
E.6.1.2. Identification of frequent Emergency Department utilizers which will require the Contractor to conduct telephonic and/or inperson outreach;
E.6.1.3. Stratification of identified members to further define member needs and prioritize level of care management required;
E.6.1.4. Ability for Contractor to drill down to member- and providerspecific care delivery patterns; and allow the user to configure data including annual and ad hoc provider-and member-centric performance reports; and
E.6.1.5. Ability to connect the Department, the Contractor and participating Network Providers through a provider portal allowing providers to access their own performance metrics, including utilization, quality scores and gaps in care of their attributed members.

Appendix 6. Policy Cross Walk

CT DOC IMS Assessment - Healthcare Policy Matrix

NCCHC Policies	NCCHC Jail Standards 2018	NCCHC Prison Standards 2018	ACA-ACI (Prison)	ACA-ALDF (Jail)	ACA-ACRS (Work Release)	CT DOC Directives	CT DOC Procedures
Access to Care	J-A-01	P-A-01	5-ACI-6A-01 (M)				A 10.1 Chest Pain
Responsible Health Authority	J-A-02	P-A-02	5-ACI-6B-01 (M)	4-ALDF-4D-01	4-ACRS-4C-02		A 10.2 Heat Exhaustion
Medical Autonomy	J-A-03	P-A-03	5-ACI-6B-02 (M)				A 10.3 Heat Stroke
Administrative Meetings and Reports	J-A-04	P-A-04	5-ACI-1A-15				A 11.1 Hypoglycemia
			5-ACI-6D-01				A 12.1 Nicotine Dependence
Policies and Procedures	J-A-05	P-A-05	5-ACI-6D-10	4-ALDF-7D-06	4-ACRS-7B-07		A 12.2 Alcohol Detox
			5-ACI-1A-12	4-ALDF-7D-07	4-ACRS-7B-08		A 3.18 Lice
			5-ACI-1A-13	4-ALDF-7D-08	4-ACRS-7B-09		A 3.19 Scabies
			5-ACI-1A-14	4-ALDF-7D-09			A 3.20 Snake Bites
Continuous Quality Improvement Program	J-A-06	P-A-06	5-ACI-6D-02	4-ALDF-7D-02	4-ACRS-7D-02	8.10 Quality Assurance and Improvement	A 3.21 Tick Bites
			5-ACI-6D-08				A3.22 Warts
			5-ACI-6D-09				A 5.1 Menstrual Cramps
Privacy of Care	J-A-07	P-A-07	5-ACI-6C-10	4-ALDF-4D-19			A 5.2 Premenstrual Syndrome
Health Records	J-A-08	P-A-08	5-ACI-1E-02	4-ALDF-4D-13	4-ACRS-4C-22	8.7 Health Record Management	A 5.3 Urinary Tract Infection
			5-ACI-6A-09	4-ALDF-4D-26	4-ACRS-4C-23		A 5.6 Vaginal Discharge
			5-ACI-6C-03 (M)	4-ALDF-4D-27	4-ACRS-4C-24		A 6.1 Asthma
			5-ACI-6D-05	4-ALDF-4D-28			A 6.2 Hayfever Allergic Rhinitis
			5-ACI-6D-06				A 6.3 Comon Cold
			5-ACI-6D-07				A 6.4 Sore Throat
Procedure in the Event of an Inmate Death	J-A-09	P-A-09	5-ACI-6C-02	4-ALDF-4D-23	4-ACRS-7D-15	8.2 Offender Death	A 6.5 Anaphylactic Reaction-Shock
			5-ACI-6C-16				A 6.6 Influenza Like Illness Nursing Protocol
			5-ACI-6D-02 (M)				A 7.1 Conjunctivitis
Grievance Process for Health Care Complaints	J-A-10	P-A-10	5-ACI-6A-01 (M)	4-ALDF-2A-27	4-ACRS-6B-03	8.9 Administrative Remedy for Health Services	A 7.2 Ear Wax-Excess Cerumen
			5-ACI-6C-01	4-ALDF-6B-01			A 7.3 Earache-Acute Otitis Media or Otitus Externa
			5-ACI-5E-02				A 7.4 Eye Injuries
Healthy Lifestyle Promotion	J-B-01	P-B-01	5-ACI-6A-20	4-ALDF-4C-21	4-ACRS-5A-10		A 7.5 Nosebleeds
							A 7.6 Toothache (Pulpitis)

Appendix 6. Policy Cross Walk

NCCHC Policies	NCCHC Jail Standards 2018	NCCHC Prison Standards 2018	ACA-ACI (Prison)	ACA-ALDF (Jail)	ACA-ACRS (Work Release)	CT DOC Directives	CT DOC Procedures
Infectious Disease Prevention and Control	J-B-02	P-B-02	5-ACI-6A-12 (M)	4-ALDF-4C-14 (M)	4-ACRS-4C-09		A 8.1 Back Pain
			5-ACI-6A-14 (M)	4-ALDF-4C-15	4-ACRS-4C-10		A 8.2 Chest Wall Pain
			5-ACI-6A-16 (M)	4-ALDF-4C-16 (M)			A 8.3 Contusions
			5-ACI-6A-17 (M)	4-ALDF-4C-17 (M)			A 8.4 Fx, Dislocations, Sprains and Strains
				4-ALDF-4C-18 (M)			Appendices - Flushes for Central Venous Access
Clinical Preventive Services	J-B-03	P-B-03	5-ACI- 6A-03	4-ALDF-4C-03			B 3.1 Application of Topical Medications
Medical Surveillance of Inmate Workers	J-B-04	P-B-04	5-ACI- 6E-05				B 3.2 Changing a Dry Dressing
Suicide Prevention and Intervention	J-B-05	P-B-05	5-ACI-4A-11	4-ALDF-2A-52	4-ACRS-4C-16 (M)	8.14 Suicide Prevention and Intervention	B 3.3 Changing Wet to Dry Dressing
			5-ACI-6A-35 (M)	4-ALDF-4C-32 (M)			B 3.4 Amputee Care
			5-ACI-6D-02 (M)	4-ALDF-4C-33			B 3.5 Pressure Sore Prevention
			5-ACI-6E-01				B 3.6 Suture-Staple Removal
Contraception	J-B-06	P-B-06					B 3.7 Wound Irrigation
	J-F-06	P-F-06					B 5.1 Applying Condom Catheter
Communication on Patients' Health Needs	J-B-07	P-B-07					B 5.2 CAPD
Patient Safety	J-B-08	P-B-08					B 5.3 Insertion-Care of a Suprapubic Tube
Staff Safety	J-B-09	P-B-09	5-ACI-6E-05				B 5.4 Continuous Bladder Irrigation
Credentials	J-C-01	P-C-01	5-ACI-6B-03 (M)	4-ALDF-4D-05	4-ACRS-4E-05	8.6 Credentials of Health Services Staff	B 5.5 Foley Catheter Irrigation
Clinical Performance Enhancement	J-C-02	P-C-02	5-ACI-6D-03 (M)				B 5.6 Foley Catheterization (Female)
Professional Development	J-C-03	P-C-03	5-ACI-1D-14				B 5.7 Foley Catheterization (Male)
			5-ACI-6B-08				B 5.8 Permanent Urinary Diversions
Heath Training for Correctional Officers	J-C-04	P-C-04	5-ACI-1D-01				B 5.9 Straining Urine
			5-ACI-1D-03				B 6.1 Oxygen Administration

Appendix 6. Policy Cross Walk

NCCHC Policies	NCCHC Jail Standards 2018	NCCHC Prison Standards 2018	ACA-ACI (Prison)	ACA-ALDF (Jail)	ACA-ACRS (Work Release)	CT DOC Directives	CT DOC Procedures
Medication Administration Training	J-C-05	P-C-05	5-ACI-6A-43 (M)				B 6.5 Nebulizer Therapy
Inmate Workers	J-C-06	P-C-06	5-ACI-6B-12				B 6.6. Oxygen Concentrator
Staffing	J-C-07	P-C-07	5-ACI-6D-04				B 6.7 Nasotracheal Suctioning
Orientation for Health Staff	J-C-09	P-C-09	5-ACI-1D-14				B 6.7a Oropharyngeal and Nasopharyngeal Suctioning
							B 6.8 Peak Expiratory Flow Rate (PERF)
Pharmaceutical Operations	J-D-01	P-D-01	5-ACI-6A-43 (M)			8.3 Pharmacy Services	B 6.9 Pulse Oximeter
			5-ACI-6A-44				B 6.11 Tracheostomy
Medication Services	J-D-02	P-D-02	5-ACI-6A-43 (M)				B 6.12 Tracheostomy Ties-Changing
			5-ACI-6A-44				B 6.13 Stoma and Outer Cannula Cleaning
Clinic Space, Equipment, and Supplies	J-D-03	P-D-03	5-ACI-2F-01				B 6.14 Trach Tube -Inner Cannula Cleaning
			5-ACI-2A-03				B 7.4 Contact Lens Care
On-Site Diagnostic Services	J-D-04	P-D-04	5-ACI-2A-03				B 7.5 Ear Irrigation
Medical Diets	J-D-05	P-D-05	5-ACI-5C-04 (M)				B 7.8 Use of Eye Ointment
			5-ACI-5C-05				B 8.1 Applying an Air Splint
			5-ACI-5C-06				B 8.2 Applying an ACE Bandage
			5-ACI-5C-08				B 8.3 Applying Elastic Stockings
Patient Escort	J-D-06	P-D-06	5-ACI-5F-04				B 8.4 Care of Casts
			5-ACI-6A-06	4-ALDF-4C-06			B 8.5 Caring for Inmate-Patient with External Fixation
			5-ACI-6C-10				B 8.6 Crutch Walking
Emergency Services and Response Plan	J-D-07	P-D-07	5-ACI-3B-10(M)	4-ALDF-4C-08	4-ACRS-1C-01		B 8.7 Cyro Cuff-Aircast
			5-ACI-6A-08 (M)	4-ALDF-4D-08 (M)	4-ACRS-1C-02		B 9.2 Administering IV Meds by IV Bolus
			5-ACI-6B-07 (M)		4-ACRS-4C-03		B 9.3 Administering IV Meds by Piggy Back
			5-ACI-6B-09 (M)				B 9.4 Central Lines-Dressing Catheter Site Care
			5-ACI-6A-05				B 9.5 Central Lines Implanted Port Accessing Port w Huber Needle

Appendix 6. Policy Cross Walk

NCCHC Policies	NCCHC Jail Standards 2018	NCCHC Prison Standards 2018	ACA-ACI (Prison)	ACA-ALDF (Jail)	ACA-ACRS (Work Release)	CT DOC Directives	CT DOC Procedures
Hospital and Specialty Care	J-D-08	P-D-08	5-ACI-6A-08 (M)				B 9.6 Central Lines and Implanted Ports
			5-ACI-6D-06				B 9.7 Catheter Multi-Lumen
Telehealth			5-ACI-6C-11				B 9.8 Changing Infusion Tubing
Information on Health Services	J-E-01	P-E-01	5-ACI-6A-01 (M)	4-ALDF-4C-01 (M)		8.1 Scope of Health Care Services	B 9.9 Changing IV Solution
			5-ACI-6A-02	4-ALDF-4C-02			B 9.10 Clave Heparin Lock
Receiving Screening	J-E-02	P-E-02	5-ACI-6A-21 (M)				B 9.11 Guidelines for Admin, Antiobiotic and Emergency IV Meds
			5-ACI-6A-31 (M)				B 9.12 Guidelines for Amin, Med. Ordered Emergency IV Push Meds
			5-ACI-6A-41 (M)				B 9.13 Peripheral Lines-Changing-Insertion Site Dressing
Transfer Screening	J-E-03	P-E-03	5-ACI-5A-05				B 9.14 Regulating IV Flow
			5-ACI-6A-04				B 9.15 Termination of IV Line
			5-ACI-6A-22 (M)				B 9.16 Short Peripheral Line Device Selection Placement General Care Education and Documentation
			5-ACI-6A-24				B 9.16 Venipunctrue
			5-ACI-6A-31 (M)				B 9.17 Therapeutic Phlebotomy
			5-ACI-6A-32 (M)				B 9.18 Remicade Infusion Policy and Procedure
			5-ACI-6D-06				B 9.18 Remicade Infusion Policy and Procedure
Initial Health Assessment	J-E-04	P-E-04	5-ACI-6A-25 (M)	4-ALDF-4C-24 (M)	4-ACRS-4C-07		B 10.1 EKG
Mental Health Screening and Evaluation	J-E-05	P-E-05	5-ACI-6A-31 (M)	4-ALDF-4C-29 (M)	4-ACRS-4C-06 (M)		D 2.19 Medication Administration
Oral Care	J-E-06	P-E-06	5-ACI-6A-17 (M)			8.4 Dental Services	E 4.01 Health Assessment
			5-ACI-6A-19				E 14.01 Prescriber Orders
Nonemergency Health Care Requests and Services	J-E-07	P-E-07	5-ACI-6A-03	4-ALDF-4C-03			E 7.04 Nurse Sick Call
Nursing Assessment Protocols and Procedures	J-E-08	P-E-08					G 1.00 Chronic Disease Services
Continuity, Coordination, and Quality of Care During Incarceration	J-E-09	P-E-09	5-ACI-6A-04	4-ALDF-4C-04			G 1.00a Diabetes Management
			5-ACI-6A-04	4-ALDF-4C-04	4-ACRS-5A-12		G 1.04 HIV

Appendix 6. Policy Cross Walk

NCCHC Policies	NCCHC Jail Standards 2018	NCCHC Prison Standards 2018	ACA-ACI (Prison)	ACA-ALDF (Jail)	ACA-ACRS (Work Release)	CT DOC Directives	CT DOC Procedures
Discharge Planning	J-E-10	P-E-10		4-ALDF-5B-13	4-ACRS-5A-13		G 2.08 Anticoagulation Management Guidelines
				4-ALDF-5B-18	4-ACRS-6A-13		G 2.08 Appendix A Rec INR Target and Duration of Warfarin Therapy by Indication
Treatment of Transgender Persons	J-E-02	P-E-02	5-ACI-5B-11			8.17 Gender Non-Conforming	G 2.08 Appendix B Warfarin Initial Dosing Algorithm
			5-ACI-6A-07				G 2.08 Appendix C Warfarin Dosage Adjustment Algorithms
			5-ACI-6C-06				G 2.08 Appendix D Management of High INR Values
			5-ACI-6C-12				G 2.08 Appendix E Warfarin Interactions
			5-ACI-7B-10				G 3.01 Infirmary Admission and Care
Patients with Chronic Disease and Other Special Needs	J-F-01	P-F-01	5-ACI-6A-07			8.11 Human Immunodeficience Virus Infection;	G 6.01 Intoxication and Withdrawal
			5-ACI-6A-06				G 6.01a ETOH Nurse Guidelines
Infirmary-Level Care	J-F-02	P-F-02	5-ACI-6A-09	4-ALDF-4C-09			G 6.01a CIWA-Ar Scale
Hunger Strike			5-ACI-3B-14 (M)	4-ALDF-1C-05			G 6.01a ETOH MD Guidelines
Mental Health Services	J-F-03	P-F-03	5-ACI-6A-28 (M)			8.5 Mental Health Services; 8.8 Psychoactive Medication; 8.13 Sex Offender Programs	G 6.01b Benzo Guidelines
			5-ACI-6A-33				G 6.01b CIWA-B Scale
			5-ACI-6A-37				G 6.01c COWS Scale
			5-ACI-6A-38				G 6.01c Opiate Detox
							G 11.01 Care of the Terminally Ill
Medically Supervised Withdrawal and Treatment	J-F-04	P-F-04	5-ACI-6A-41 (M)				
Counseling and Care of the Pregnant Inmate	J-F-05	P-F-05	5-ACI-6A-10 (M)	4-ALDF-4C-13 (M)	4-ACRS-4C-14	8.12 Placement of Children Born to Incarcerated Women	
			5-ACI-3A-17				
Response to Sexual Abuse	J-F-06	P-F-06	5-ACI-3D-11	4-ALDF-4D-22-2			
			5-ACI-6C-14 (M)	4-ALDF-4D-22-6 (M)			
Care for the Terminally Ill	J-F-07	P-F-07	5-ACI-6A-07				
Substance Use Treatment Programs			5-ACI-5E-11				
			5-ACI-5E-12				
			5-ACI-5E-13				
			5-ACI-5E-14				

Appendix 6. Policy Cross Walk

NCCHC Policies	NCCHC Jail Standards 2018	NCCHC Prison Standards 2018	ACA-ACI (Prison)	ACA-ALDF (Jail)	ACA-ACRS (Work Release)	CT DOC Directives	CT DOC Procedures
			5-ACI-5E-15				
Restraints	J-G-01	P-G-01	5-ACI-3A-18 (M)				
			5-ACI-6C-13 (M)				
Segregated Inmates	J-G-02	P-G-02	5-ACI-4A-01 (M)				
			5-ACI-4A-10				
			5-ACI-4A-12				
			5-ACI-4A-15				
Emergency Psychotropic Medication	J-G-03	P-G-03	5-ACI-6C-08 (M)	4-ALDF-4D-17 (M)			
Non-Emergency Involuntary Medication Administration	J-G-03	P-G-03	5-ACI-6C-08 (M)	4-ALDF-4D-17 (M)			
Therapeutic Relationship, Forensic Information, and Disciplinary Actions	J-G-04	P-G-04					
Informed Consent and Right to Refuse	J-G-05	P-G-05	5-ACI-6C-04 (M)	4-ALDF-4D-15 (M)	4-ACRS-4C-19		
Medical and Other Research	J-G-06	P-G-06	5-ACI-6C-09 (M)	4-ALDF-4D-18 (M)	4-ACRS-4C-20 (M)		

Other:

**CT DOC 8.15 Corrections Compact Health Services

**CT DOC Nursing Home Release

Appendix 7. Sample Dashboard

HEALTHCARE SERVICES DASHBOARD

Statewide

November 2017

Main Menu

SCHEDULING & ACCESS TO CARE

	6 Mo. Trend	SW
ACCESS		
Medical Services		79%
Dental Services		97%
Mental Health Services		75%
APPTS COMPLETED AS SCHEDULED		
Cancelled Due to Custody		2.2%
Seen as Scheduled		85%
EFFECTIVE COMMUNICATION		
Effective Communication Provided		97%
Sign Language Interpreter (SLI) Provided		79%

POPULATION HEALTH MANAGEMENT

	6 Mo. Trend	SW
Asthma Care		85%
Therapeutic Anticoagulation		80%
Diabetes Care		84%
End Stage Liver Disease Care		83%
Colon Cancer Screening		75%
Women's Care		84%
Diagnostic Monitoring		93%
Utilization Specialty Services		88%
Polypharmacy Medication Review		89%

CARE MANAGEMENT

	6 Mo. Trend	SW
Appropriate Placement High Risk Patients		80%
High Risk Patient Care Plan		
Follow-Up After MHCB/DSH Admission		92%
30-Day Community Hospital Readmission		11.6%
30-Day MHCB or DSH Readmission		24%
Potentially Avoidable Hospitalizations*		9.2
EOP/MHCB Treatment Plan		15%
Suicide Watch Discharge Plan		58%
Suicide Risk Evaluation		62%

MEDICATION MANAGEMENT

	6 Mo. Trend	SW
NON-EHRS INSTITUTIONS - *MAPIP*		
Medication Continuity-Transfer		-
Medication Non-Adherence Counseling		-
Medication Administration		-
EHRS INSTITUTIONS - *Med Administration*		
All Medications Received Timely (EHRS)		86%
FORMULARY MANAGEMENT		
Non-Formulary by Psychiatrists		4.9%
Non-Formulary by Medical Providers		5.8%
Central Fill Prescriptions		64%

AVAILABILITY OF HEALTH INFORMATION

	6 Mo. Trend	SW
All Documents		100%
Specialty Notes		93%
Community Hospital Records		99%
Scanning Accuracy		98%
EHRS Timely Documentation		90%

COMPLETE CARE MODEL INFRASTRUCTURE

	6 Mo. Trend	SW
QM Program		
Patient Safety Program		-

RESOURCE MANAGEMENT

	6 Mo. Trend	SW
Specialty Teleservices		76%
Availability of Medical Equipment		69%
Health Care Environment		-

WORKLOAD PER DAY

	6 Mo. Trend	SW
Appointments per PCP		7.5
Appointments per PCRN		5.5
Encounters per Primary MH Clinician		4.2
Encounters per Psychiatrist		3.2

Appendix 7. Sample Dashboard

CONTINUITY OF CLINICIANS & SERVICES

	6 Mo. Trend	SW
Primary Care Provider (PCP)		96%
Mental Health Primary Clinician		76%
Psychiatrist		76%

MAJOR COSTS PER INMATE PER MONTH

	YTD 16/17	YTD 15/16
Total Labor Cost	$1,278	$1,064
Total Non Labor Cost	$282	$317

OTHER TRENDS

	6 Mo. Trend	SW
Hospital Admissions*		4.8
Emergency Department Visits*		8
Specialty Care Referrals*		53
Prescriptions Per Inmate		2.6
Diagnostics Per Inmate		0.8
Grievances Received*		27
Prison Population Capacity		132%

STAFFING

	6 Mo. Trend	SW
Operational Vacancies		-
Average Time to Hire		-

GRIEVANCE PROCESSING

	6 Mo. Trend	SW
Timely Grievances		99%

Scheduling & Access to Care	SW	ASP	CAC	CAL	CCC	CCI	CCWF	CEN	CHCF	CIM	CIW	CMC	CMF	COR	CRC	CTF	CVSP	DVI	FSP	HDSP	ISP	KVSP	LAC
Medical Services	79%	96%	95%	86%	86%	75%	96%	91%	70%	75%	89%	84%	73%	53%	97%	90%	85%	75%	96%	83%	89%	85%	58%
RN FTF Triage 1 Day	94%	99%	100%	100%	98%	100%	97%	99%	98%	99%	97%	97%	97%	95%	99%	98%	96%	94%	99%	98%	99%	99%	88%
PCP Urgent Referrals 1 Day	75%	-	89%	50%	100%	67%	100%	100%	40%	0%	88%	100%	100%	18%	100%	100%	92%	-	100%	80%	-	50%	47%
PCP Routine Referrals 14 Days	75%	99%	92%	83%	67%	77%	85%	82%	68%	-	88%	82%	72%	24%	100%	93%	80%	26%	100%	73%	100%	90%	68%
Chronic Care as Ordered	75%	99%	97%	83%	56%	86%	97%	79%	61%	96%	91%	71%	60%	28%	99%	78%	74%	60%	100%	57%	95%	90%	65%
High Priority Specialty 14 Days	62%	100%	94%	93%	100%	25%	100%	85%	62%	81%	75%	44%	32%	38%	78%	73%	67%	83%	91%	73%	71%	78%	45%
Routine Specialty 90 Days	76%	99%	88%	96%	91%	77%	90%	99%	89%	52%	92%	83%	66%	65%	98%	89%	89%	94%	94%	92%	94%	79%	45%
Return from HLOC 5 Days	69%	80%	100%	96%	76%	77%	100%	87%	44%	86%	92%	81%	54%	40%	100%	93%	78%	63%	100%	84%	68%	87%	23%
Laboratory Services as Ordered	94%	97%	96%	87%	92%	93%	96%	96%	90%	95%	89%	99%	91%	89%	98%	93%	92%	97%	97%	96%	95%	98%	77%
Radiology Services as Ordered	88%	98%	100%	92%	98%	72%	98%	93%	78%	90%	92%	99%	81%	79%	99%	91%	93%	80%	84%	97%	88%	90%	65%
Dental Services	97%	100%	98%	98%	99%	98%	98%	100%	98%	97%	97%	96%	99%	97%	100%	99%	99%	98%	100%	99%	98%	99%	98%
7362 Triage 3 or 10 Days	98%	100%	95%	95%	97%	99%	98%	99%	98%	99%	97%	98%	100%	100%	100%	98%	99%	97%	99%	98%	100%	99%	99%
Treatment within Timeframes	99%	100%	100%	100%	100%	97%	98%	100%	97%	100%	100%	99%	98%	99%	99%	100%	98%	99%	100%	98%	99%	100%	99%
RC Screening 60 Days	91%	-	-	-	-	-	99%	-	-	90%	-	-	-	-	-	-	-	99%	-	-	-	-	-
Patient Requested Exam 90 Days	98%	100%	98%	99%	100%	95%	96%	100%	100%	99%	98%	97%	100%	89%	100%	97%	100%	96%	100%	100%	95%	98%	98%
Notice of Exam 50 Y.O. or Chronic Care	96%	100%	98%	100%	100%	100%	98%	100%	98%	99%	93%	92%	99%	100%	99%	100%	98%	100%	100%	100%	98%	100%	97%
Mental Health Services	75%	99%	97%	96%	98%	96%	94%	99%	82%	85%	93%	79%	62%	63%	99%	97%	95%	93%	99%	98%	97%	80%	57%
Referral Timeframes	83%	99%	97%	92%	100%	94%	91%	98%	73%	88%	94%	95%	80%	68%	98%	95%	91%	90%	98%	97%	95%	90%	66%
EOP Structured Treatment	50%	-	-	-	-	-	96%	-	84%	68%	86%	44%	21%	39%	-	-	-	90%	-	-	-	52%	16%
Contact Timeframes	93%	100%	-	100%	95%	98%	95%	99%	89%	99%	98%	98%	85%	83%	99%	100%	98%	98%	100%	99%	100%	97%	89%
Primary Clinician Contact Timeframes	93%	100%	-	100%	90%	98%	96%	97%	93%	99%	99%	98%	84%	83%	99%	100%	94%	96%	100%	98%	100%	96%	93%
Psychiatrist Contact Timeframes	88%	100%	-	100%	-	97%	92%	100%	77%	99%	96%	96%	79%	71%	99%	100%	100%	99%	100%	99%	100%	95%	77%
IDTT Contact Timeframes	97%	100%	-	100%	100%	98%	97%	100%	98%	99%	99%	99%	91%	95%	100%	100%	100%	99%	100%	100%	100%	99%	98%
Cancelled Due to Custody	2.2%	0.1%	0.2%	0.6%	0.6%	0.6%	1.4%	0.0%	0.7%	0.4%	1.4%	1.7%	0.9%	1.9%	0.4%	0.7%	0.0%	0.4%	0.3%	0.8%	0.0%	0.1%	17.1%
Medical Services	0.4%	0.0%	0.0%	0.1%	0.6%	0.1%	1.3%	0.0%	1.6%	0.0%	0.3%	0.2%	0.1%	0.2%	0.2%	0.1%	0.1%	0.4%	0.0%	0.3%	0.0%	0.0%	2.1%

HMA

HEALTH MANAGEMENT ASSOCIATES

Health Record Review

PREPARED FOR

CONNECTICUT DEPARTMENT OF CORRECTION

BY

NCCHC RESOURCES, INC.

DATE

DECEMBER 18, 2020

DRAFT

Research and Consulting in the Fields of Health and Human Services Policy, Health Economics and Finance, Program Evaluation, Data Analysis, and Health System Restructuring

Table of Contents

Executive Summary

NCCHC Resources, Inc. (NRI), reviewed 632 patient health records and interviewed several providers on their perceptions of the health services delivery system of the Connecticut Department of Correction (CT DOC). These activities were part of an overall health system analysis by Health Management Associates (HMA). The purpose was to evaluate the quality and organization of the health record system and to gauge, through content analysis of the health records, the quality of essential clinical processes and quality of care provided. The evaluation used the standards of the National Commission on Correctional Health Care (NCCHC) and other authorities as a benchmark. Please see the Introduction for details on project aims and methods.

The CT DOC is to be commended for undertaking this important project to understand the status quo of its health care delivery system and the corresponding health records, and to implement changes to improve quality. The health records were found to be disorganized, used improperly by providers, and lacking evidence of care provided even if it did indeed occur. This obscures information needed for continuity of care. That said, we also found strengths in the current system, which are noted throughout the findings.

- Almost all records documented an intake screening, and these were usually completed in a timely manner.
- The process for obtaining and administering medication appears to function well.
- Referral to specialty care was appropriate and ordered when needed.
- Almost all patients identified as needing emergency care did receive it.
- Almost all diagnostic tests ordered were completed, and findings were reviewed.
- Efforts to streamline the sick call process are commendable and should continue.

Topline Recommendations

Our topline findings/recommendations focus on six areas:

- **Electronic health record:** Hands-on, user-friendly training is needed to ensure providers are using the record as intended, including consistent use of templates rather than free text. Ongoing quality checks and targeted retraining are recommended.
- **Initial and periodic health assessments:** Policies and procedures are needed to ensure continuity of care for each patient. A standardized, systemwide approach would be beneficial.
- **Sick call:** Efforts to streamline the process should continue, with clear delineation between sick call, Prompt Care, and triage timeframes that ensure quick access to needed care and reduction of backlogs. Documentation should be strengthened.
- **Chronic care:** A clearly defined program that adheres to national clinical practice guidelines is needed, with appropriate templates for the health record.
- **Infirmary care:** Provider orders for admission must be completed and documented. The patient coding system should be based on acuity of care and monitoring needed.
- **Personnel issues:** A comprehensive orientation program for new staff would be beneficial, as would adoption of a "teamwork" culture throughout the institutions.

Within each category examined, key findings are as follows:

Intake Process

Screening should be performed on all inmates upon arrival to ensure that emergent and urgent health needs are identified and met. The CT DOC is now doing a nurse intake screening that meets this requirement.

- 95% of intake screenings done after adoption of an electronic health record (EHR)were found in the records and were usually completed in a timely manner.
- Use of the intake screening process and template could be improved through staff training.
- Verification of medications was sometimes lacking; further study and training is recommended.
- Referral to medical or mental health providers needs to be consistently entered into the record.
- CT DOC should consider a standardized, systemwide process, with facility-level oversight and centralized monitoring.

Initial Health Assessment

In contrast to the intake screening, the initial health assessment provides a more in-depth assessment to identify health needs and develop a treatment plan.

- Documentation of an established process for routine initial health assessments was not found.
- Of the few documented exams, nearly half were completed outside of the 14-day timeframe.
- CT DOC should implement a standardized, systemwide initial health assessment program, with facility-level oversight and centralized monitoring.
- The program should include a means of tracking each inmate and scheduling the assessments to occur a few days before the 14-day deadline.

Periodic Health Assessments

- Documentation of an established process for routine initial health assessments was not found
- Of the few exams we identified, only 30% found that a provider addressed the findings.
- CT DOC should establish and maintain a periodic health assessment program with guidelines for frequency and content of assessments, a scheduling system, and training for staff.
- The EHR should incorporate templates to document these assessments and ensure the desired elements are addressed.

Sick Call

- The lines between the Prompt Care and regular sick call system have been blurred, with patients not making appropriate use of sick call slips.
- Efforts to streamline the sick call process should continue, with focus on clearly defining the process, including triage; establishing timeframes; ensuring sufficient staffing; removing barriers; and monitoring for quality.
- The documentation process should be reviewed, and training provided as needed.

Chronic Care

- Evidence shows that chronic care is being provided to a limited extent, but a clearly defined program is lacking.
- Documentation of chronic care visits in the health record is often attached to other encounters, making it difficult to get the "big picture" of the patient's treatment plan and status.
- Diagnostic studies are being done and results acknowledged, but documentation of action taken for abnormal findings is often lacking.
- Implementation of chronic care guidelines should be consistent with national clinical practice guidelines, with staff education and oversight on their use.
- A well-organized program would include a system to schedule and track patients and a consistent approach to maintaining problem lists.

Medication Management

- The process for obtaining and administering medications appears to function well.
- The keep-on-person process should be examined to ensure that patients are requesting and receiving their medications each month.
- Documentation regarding patient noncompliance could be improved, including signed patient refusals.
- The process for addressing noncompliance would benefit from a review to identify deficiencies.

Specialty Care

- Although we could not evaluate the utilization review process, we found that referral to specialty care was appropriate and ordered when needed.
- The referral and specialty care system should establish guidelines that determine which diagnostics and treatments are appropriate to be done in-house.
- Periodic audits of metrics such as referral patterns and length of wait time should be conducted.

Emergency Care

- Almost all patients identified as needing emergency care did receive it.
- Accompanying clinical paperwork was exchanged (in both directions) most of the time, although it was difficult to locate scanned return documents in the record; we recommend assessing communication between facilities and emergency departments (ED), including receipt of return documents.
- The process for scheduling patient follow-up should be examined and documentation of such follow-up should be entered into the record.

Infirmary Care

- Of those patients documented to receive infirmary-level care, only 54% had a provider order and admission orders were often incomplete; the factors underlying the lack of complete, documented orders should be determined.

- The blanket assignment of code M5 for infirmary care patients should be replaced with a system based on patient acuity level, i.e., level of care and monitoring needed.
- Documentation of rounds by physicians and nurses was often lacking; further study is needed
- A review of the process for follow-up care after discharge would be beneficial.

Diagnostic Services

- Completion of ordered diagnostic testing was at a very high level, 98%.
- The same level, 98%, was achieved with review of the tests.
- Providers need to address abnormal findings and document this in the health record.

Durable Medical Equipment

- We noted that many assistive devices are being ordered and recommend review of the criteria for such orders.
- Documentation that assistive devices have been provided to patients should be strengthened.

Health Record Organization

- Information is not entered into the record in a consistent manner, which impedes the ability to easily and quickly identify patient needs, care plans, and status; we recommend review of actual use practices to support staff training.
- Providers need training and reinforcement on proper use of templates as opposed to free text.
- The problem list should be maintained in a consistent position and kept current.
- A clearly defined process is needed to address consents and refusals, in keeping with informed consent practices in Connecticut.
- Consents and refusals require necessary signatures and proper documentation.

Provider Feedback

- Providers interviewed expressed concerns about teamwork, collaboration, and coordination among the health staff and between health staff and custody staff.
- Providers noted a lack of proper orientation.
- Processes for provider referrals and utilization review are lacking or insufficient.
- Processes for chronic care are lacking or insufficient.
- Inmate diets were described as poor/unhealthy, and we found no evidence of medical diets in the records reviewed. However, CT DOC has stated that medical diets are reviewed and approved by their nutritionist.
- Providers expressed frustrations regarding the EHR.

Opportunities

The HMA/NRI team has performed a comprehensive and deep dive into the health services of the CT DOC. Working in partnership with CT DOC leadership and health services staff, we have discovered many areas for improvement. Despite the depth and breadth of these opportunities, nothing we have seen is surprising or unusual in correctional health care. In our 40 years of service to the field, we have seen

each of the challenges before, and we have also seen them overcome. We have seen broken systems transform to high-performance, modern public health systems, helping to ensure the quality of care in their communities. The opportunities are especially important in Connecticut with its integrated pre- and post-adjudication model (i.e., prison and jail functions), tightly interwoven public health services, a robust Medicare and Medicaid system, and a limited number of large tertiary care provider systems.

Taking advantage of these opportunities and seeing them to fruition will not be easy. Various political and technical factors all contribute to system performance and are not easily or quickly remedied. They require consistent leadership focus, political will, and technical expertise in order to achieve success.

Because of the challenges and time required to effect change of this scale, our experts have engaged numerous governments in long-term support relationships. Our proactive and preventive organizational posture has helped bring about and sustain needed cultural and technical change. We have assisted many correctional health clients that faced similar challenges and, therefore, recognize that the CT DOC has many opportunities to enhance the care provided, reduce liability, support financial goals, and assist with employee satisfaction and retention. The information presented here will guide decision making as the CT DOC embarks on a path of quality improvement.

Introduction

This health record review was conducted as part of an overall health system analysis by Health Management Associates (HMA). HMA enlisted consulting firm NCCHC Resources, Inc. (NRI), to bring additional clinical and correctional health care expertise. This included a review of 632 patient health records and several interviews with providers. In collaboration with HMA, we developed processes and protocols for evaluation and analysis. Board-certified correctional physicians and other correctional health experts conducted the reviews. Process performance measures were novel for this project and were based on the standards of the National Commission on Correctional Health Care (NCCHC) and other authorities. NCCHC standards are regarded nationally and internationally as the gold-standard framework and foundation for health care provided in a correctional environment.

Areas of Focus

- Organization of the health record, content and quality of documentation, and ease of use
- Quality of essential clinical processes for delivery of care measured against national standards in the following areas:
    - Intake process
    - Initial health assessment
    - Periodic health assessments
    - Sick call
    - Chronic care
    - Medication management
    - Specialty care
    - Emergency care
    - Infirmary care
    - Diagnostic services
    - Durable medical equipment
    - Health record organization (e.g., problem lists, refusals)
- Quality of care provided through these clinical processes in terms of timeliness and appropriateness
- The integrity of the chronic care program in terms of its organization and the provision of appropriate and timely care
- Treatment provided by community health care providers, such as EDs, specialty care providers, hospitals, and nursing facilities

In addition, clinical case reviews were conducted to assess operational issues that impact access to and provision of health services according to the applicable standard.

Methods

Comprehensive health record reviews were conducted remotely via a VPN. Interviews were conducted by telephone. An on-site physical plant assessment did not occur. A Microsoft Teams portal was used to access the requested data and documents.

The CT DOC generated a list of 632 randomly selected patients with M Codes 3, 4, and 5, distributed as follows:

- M-3 345 records
- M-4 228 records
- M-5 59 records

The records were divided among the NRI team of highly experienced correctional physicians and nurses. The review was completed using the Centricity EHR and the eFusion pharmacy record. For each record, the reviewers entered data into a Microsoft Access database to enable statistical analysis of aggregate data and determine percentage compliance with process performance measures.

The findings presented in this report are based on the work of the health record review team and their expert opinions. Graphs illustrating the statistical findings accompany each subsection.

Findings

Intake Process

Process Performance Measures

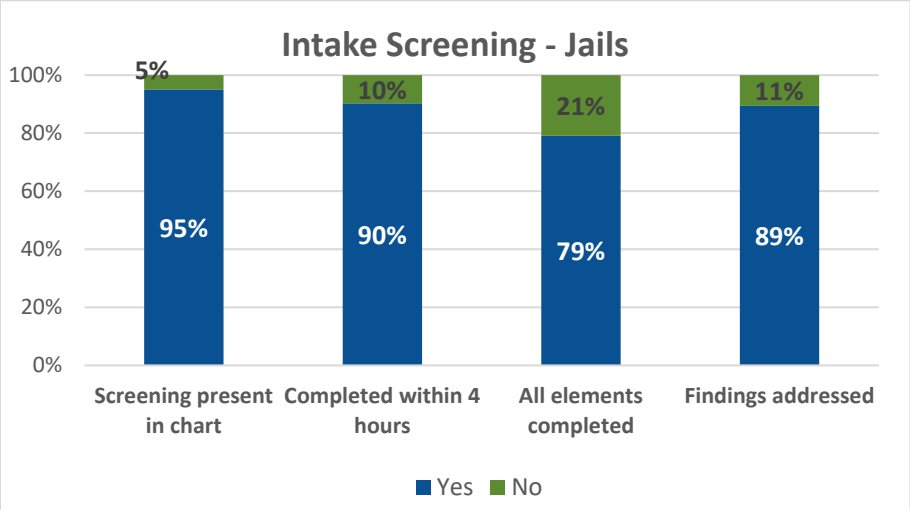
1. A receiving screening should be performed on all inmates upon arrival at an intake facility to ensure that urgent and emergent health care needs are met.
2. A qualified health care professional should complete a receiving screening as soon as possible after arrival of the inmate.
3. The receiving screening should be completed using a form whose content is approved by the appropriate medical authority.
4. The form should capture information that provides a clear picture of the inmate's current health status as well as the observations made by the qualified health care professional performing the intake screening.
5. A screening for latent tuberculosis is to be completed, with potentially infectious inmates isolated from the general inmate population.
6. The disposition of the inmate is appropriate to the findings from the receiving screening. This would include housing placement or referral to an appropriate level of health care services.

Key Findings

1. An intake screening process is in place at the receiving facilities, and inmates undergo this process.
2. The intake screening process was reviewed based on the activation date and time for each health record reviewed. It was noted that health records of inmates who entered the system before the 2018 move to Centricity did not include an intake screening because they were not scanned into the EHR. Of the 632 records reviewed, 285 contained intakes that should have occurred after the transition to the EHR. These records were expected to contain a completed nursing intake screening. For those intakes that occurred after the transition, screenings were located in the health record 95% of the time.
3. For the records that contained the intake screening, 79% had a screening form that was accurately completed. In addition, 90% of the screenings were completed within acceptable timeframes (defined here as 4 hours).
4. The screening is guided by an "intake template" in the health record. The nurse is to use the template to document the responses to health screening questions as well as observations of the patient. The form should cover essential components of a thorough intake assessment. For the template to be effective, the nurse must ensure that they complete each data element and properly document the findings.
5. Portions of the form sometimes contained information that required action based on findings from the screening. This was especially true for verification of medications the inmate reports to be taking. The nurse should obtain as much information as possible about current medications, try to verify those medications, and take steps to ensure orders are obtained and

medications are provided to the inmate in a timely manner. This did not always occur in the records reviewed.

6. The intake screening requires the nurse to note if the patient required a referral to a medical or mental health provider. We found that while the nurse documented a referral to a provider, verification that the patient was seen by the provider was not always documented. Our review found that required action from the screening occurred 89% of the time.



Recommendations

1. Continue the timely completion of the intake screenings.
2. Train everyone completing the intake screening on the intake process and the proper use of the intake template in Centricity.
3. Review the medication verification process, with training provided based on the findings of that review.
4. Revise the intake template to ensure tuberculosis screening questions are more thorough, and consider including additional TB screening questions.
5. Evaluate the process for referral to a provider at intake to determine whether the process is working properly and that all involved understand their role.
6. Standardize the intake process across all CT DOC intake facilities.
7. Monitor the intake process using a centralized approach. It would be beneficial to have oversight at the facility level with central monitoring for program performance and compliance.

Initial Health Assessment

Process Performance Measures

1. A receiving screening result is reviewed within 7 days (prison) / 14 days (jails).
2. All inmates receive an initial health assessment as soon as possible but no later than 7 calendar days after admission in prisons and 14 days after admission in jails.

3. The responsible physician determines the components of the initial health assessment.
4. A provider reviews and addresses abnormal findings.
5. Specific problems are integrated into the inmate's problem list.
6. Diagnostic and therapeutic plans for each problem are developed as clinically indicated.

Key Findings

The review team was unable to find a process for an initial health assessment or documentation that a process is in place. A Centricity training team member said that initial health assessments are not routinely done and occur only upon the recommendation of the nurse to a provider. This is not happening with certainty given the findings that referrals to a provider do not always have a documented provider encounter.

Nevertheless, our team did attempt to locate health assessments in the records. We found that for the 567 records that should have contained intake assessments after implementing the EHR, only 4% contained an exam that potentially could have been an initial health assessment. Of that number, 54% fell within the established 14-day timeframe, and 63% had documentation that findings were addressed by the provider completing the assessment. These numbers verify the lack of an established process for the initial health assessment efforts.

Recommendations

1. Design and implement a standardized initial health assessment program across the CT DOC facilities.
2. The program should include a method to capture and track each inmate entering the system through the jails. Given the jail/prison structure in the CT DOC, the location for the completion of the initial health assessment should be determined based on how inmates are moved through intake and into the prison system.
3. Develop a scheduling system that ensures inmates are scheduled for the initial health assessment such that it is completed within the established timeframes. It is best practice to schedule these a few days before the deadline in case of any delays.
4. The initial health assessment can be completed by a registered nurse, a nurse practitioner, physician assistant, or a physician. A provider should review all initial health screenings with abnormal findings.
5. The medical authority for the department should determine the components of the initial health assessment. If the record already has forms for the current history and physical, these could be used for the assessment.
6. Consider a centralized approach to monitoring of the initial health assessment process. It would be beneficial to have oversight at the facility level with central monitoring for program performance and compliance.

Periodic Health Assessment

Process Performance Measures

1. Patients' medical, dental, and mental health care is coordinated and monitored from admission to discharge.
2. Wellness assessments or periodic health assessments are completed based on a program defined by CT DOC medical administration.
3. Findings identified during the periodic health assessments are addressed and plans of care are established.

Key Findings

1. The review focused on the presence of a defined periodic health assessment program as documented in the health record. The reviewers were instructed to look for health assessments completed during the previous 18 months.
2. Connecticut Department of Correction Directive Chapter 8.1 Scope of Health Services Care (dated 2/15/2007) addresses both initial and periodic health assessments with associated timeframes. We did not find that this directive was in place and being completed as defined.
3. Of the 632 health records reviewed, 4% contained a locatable periodic health assessment; of those records documenting a health assessment, 30% showed that findings from the exam were addressed by the provider, although making a direct connection between an initial assessment and subsequent care was very difficult in many records.
4. It was difficult to locate information for these assessments in the health records either because methods and locations to document the health assessment were inconsistent or the assessment just did not occur.

Recommendation

1. Consider ways to establish and maintain a periodic health assessment program. Such a program would define, by age and gender, the frequency and content of the assessments and would provide a clear path to address Medicaid requirements.
2. Create templates for the Centricity system that would note a specific location for documentation of the assessments and would include the elements of the review in the template itself. This approach would ensure that the desired elements are addressed and properly documented for tracking purposes.
3. Use a tracking and scheduling system for these appointments to support compliance efforts for the program.
4. Train providers, nurses, and all other staff so they are proficient in these new processes and in maximizing the advantages of the current EHR, regardless of its limitations.

Sick Call

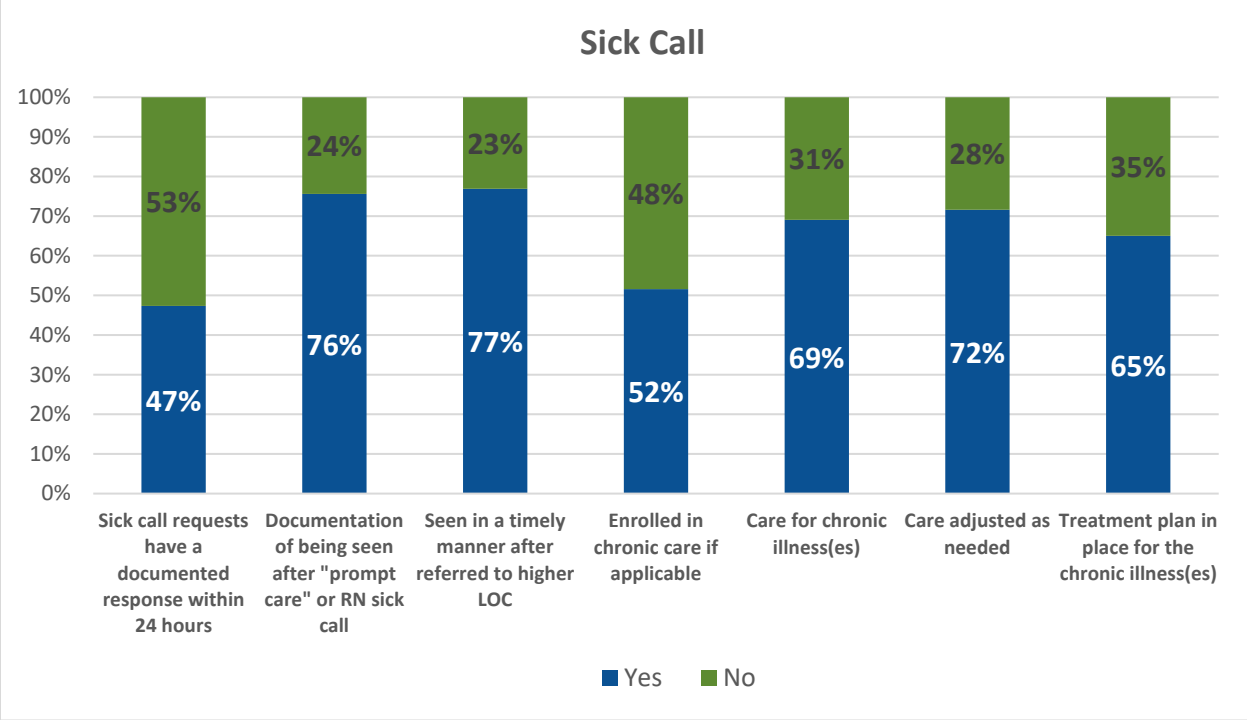
Process Performance Measures

1. Nonemergent health needs are to be met in a timely manner.
2. All inmates, regardless of housing assignment, have the opportunity to submit oral or written health care requests at least daily.
3. Health care requests are picked up, reviewed, and prioritized by a qualified health care professional daily.
4. The patient should be seen by a qualified health care provider within 24 hours of receipt of a health care request.
5. Patients should be evaluated in a clinical setting.
6. All aspects of the health care request process, from review and prioritization to subsequent encounter, are documented, dated, and timed to include name and title of the health care professional involved.

Key Findings

1. Prompt Care Program
    a. The team's initial review identified a program called Prompt Care. Further inquiry led us to a Lean study and program overview provided by central office staff. Per the study and progress reports, the program's intent was to streamline the sick call request process through a collaborative effort with their custody partners.
    b. The Lean study was led by a group of dedicated employees who represented key stakeholders in the health care system and sought feedback from these individuals. An expected state of performance was defined as:
        – Eliminating a significant number of steps in the sick call process
        – Eliminating a paper process for sick call
        – Decreasing patient complaints about timely access to care
    c. The Lean study team set goals over a 7-month period that would allow each facility identified in the study documents to evaluate its program and reach its goals for the Prompt Care process.
    d. For the purposes of our review, it was assumed that the facilities reviewed used the Prompt Care program or were working to implement it.
2. Our health record reviews were based on the established standard for a correctional health care sick call program and the information about the Prompt Care program. It should be noted that we reviewed sick call encounters from timeframes earlier than those established in the Lean process. Efforts were made to review the most recent sick call encounters found in the records.
3. It is essential that inmates have unencumbered access to the sick call process and be able to access care in a timely manner. Sick call requests are to be triaged and appropriate action taken to ensure that inmates are seen based on the type and urgency of the request. We recommend that the sick call request system undergo further evaluation. Comparing the time of the inmate's request to the time it was reviewed by a nurse (when both times were noted on the slip), 47% of requests were triaged within 24 hours.

4. Our team also evaluated the quality of the sick call request review and the associated response to the request. It was at times difficult to follow care provided to its conclusion. Some of the inmates who submitted sick call slips were referred to Prompt Care, which means that inmates are still using sick call slips instead of the designated method to access Prompt Care in their housing units. Even though they were seen in Prompt Care, the intended process improvements in the Lean study of eliminating steps in the sick call process may require further attention. The record review revealed that of the inmates who were referred to Prompt Care, 76% had an associated Prompt Care documented in the health record.
5. The documented times on the sick call slips and the nurse's acknowledgment of review were often out of sync. This can be easily remedied by retraining staff to write legibly, to accurately note dates and times on notes, and to always include their title in their signature.
6. When patients were referred to a higher level of care by a nurse, documented encounters were located 77% of the time. The true percentage could be higher, as the absence of an encounter could be because the reviewer could not locate the encounter in the health record.



Recommendations

The Department and the Lean study team are highly commended for their efforts to streamline the sick call process. In establishing a strong correctional health care program, a guiding principle is to improve patient care and safety through more efficient processes. The use of inmate grievances is an excellent element to include in the assessment of quality. It is highly recommended that these efforts continue for the sick call process to include a focus on the following recommendations.

1. Ensure that the sick call process is sufficient to meet the needs of the population in each facility. That includes sufficient staffing, a clearly defined process, efficient provision of care, and quality monitoring of the program for effectiveness.
2. The best first step is to define the timeframes assigned to the sick call process. That would include providing sick call 7 days a week, the 24-hour triage process, the timeliness of a clinical encounter based on the report of medical need request, and time taken to complete provider referrals. Established expected timeframes will serve as the guidepost for all decisions made as an effective sick call program is built.
3. Monitor backlogs for sick call services in each facility to determine and address the causes of any existing backlogs as they further refine the sick call process.
4. Further refine and streamline the process for accessing sick call services. If the goal is to establish a well-functioning Prompt Care program, the Lean team should continue its efforts to identify and remove barriers.
5. The triage process must identify the types of requests submitted and ensure that they are addressed appropriately. It is important to note that not all requests are actually a health care request that requires a face-to-face encounter. For example, a request for an extra blanket or a religious diet or questions about a co-pay do not require a face-to-face encounter. Properly triaging and sorting requests will support efforts to see the most urgent needs first; nonmedical issues can be addressed through other established channels.
6. Review the documentation process in the EHR, and provide training to staff as needed. Our reviewers reported that nurse encounters and/or Prompt Care encounters were not consistently documented in the same location within the health record.

Chronic Care

Process Performance Measures

1. Patients with chronic disease, other significant health conditions, and disabilities receive ongoing multidisciplinary care aligned with evidence-based standards.
2. Medical leadership establishes and annually approves clinical protocols consistent with national clinical practice guidelines.
3. Individualized treatment plans are developed by a physician or other qualified provider at the time the condition is identified and updated when arranged.
4. Documentation in the health record confirms that providers are following chronic disease protocols and special needs treatment plans as clinically indicated by:
    a. Determining the frequency of follow-up for medical evaluation based on disease control.
    b. Monitoring the patient's condition and documenting that condition in the health records.
    c. Indicating the type and frequency of diagnostic testing and therapeutic regimens (diet, exercise, medication).
    d. Clinically documenting any deviation from the established protocols.

Key Findings

1. Although there was evidence of chronic care treatment occurring as documented in the health record, it was challenging to see a clearly defined program.
2. Providers are left to their own devices to track patients' chronic care.
3. Based on the 632 health records reviewed:
    a. 52% of patients with identified chronic illness were noted as enrolled in chronic care services.
    b. Of those enrolled, care provided was appropriate for the condition and based on patient need 69% the time.
    c. Chronic care approaches were adjusted based on patient presentation 72% of the time.
    d. A clearly defined treatment plan was in place for 65% of the patients reviewed.
4. No disease-specific guidelines were identified during the record reviews.
5. Problem lists were not consistently maintained and updated to reflect past and current clinical issues.
6. We were unable to determine how facilities handle patient scheduling for chronic care visits. The review revealed that chronic care visits were often documented or attached to other non-chronic care encounters in the health record as opposed to a scheduled focus chronic care visit.
7. This approach also makes it difficult for other health staff to locate chronic care visits in the record and to clearly identify treatment plans and a continuum of care for each patient. This has resulted in episodic care encounters versus a planned approach to chronic care treatment.
8. Chronic care documentation did not consistently define the patient's degree of chronic disease control, nor were all identified chronic care issues noted in the problem lists addressed during provider visits.
9. A great number of lab studies were found in the record. Our review revealed that the studies were completed in a timely manner and were acknowledged by provider electronic signature. However, often there was no documented action taken for abnormal findings, nor did we find documentation that the test results shared with the patients.
10. Of particular concern, diabetes care is not well defined for long-term care. Most patients identified were on sliding scales as opposed to a defined treatment and educational plan.

Recommendations

1. Implement chronic care guidelines that are consistent with national clinical practice guidelines. If these are already in place, then staff education, guidance, and oversight would greatly enhance the appropriate use of the guidelines.
2. Maintain a list of all chronic care patients in a roster system. This would facilitate tracking of patient need as well as scheduling of chronic care visits based on patient presentation and degree of control for their chronic disease.
3. Design a consistent approach to problem list maintenance to benefit continuum of care needs. Providers also need to consistently document the degree of patient control and their plan for the patient to have defined care approaches with improved outcomes.

4. Review diagnostic testing approaches from a clinical and financial perspective. If the ordered diagnostic tests are truly needed for effective patient care, the providers need to respond to and use the study findings to direct care approaches.
5. Review diabetes care across all facilities with an established approach to long-term care. This is more easily done in the prison facilities.

Medication Management

Process Performance Measures

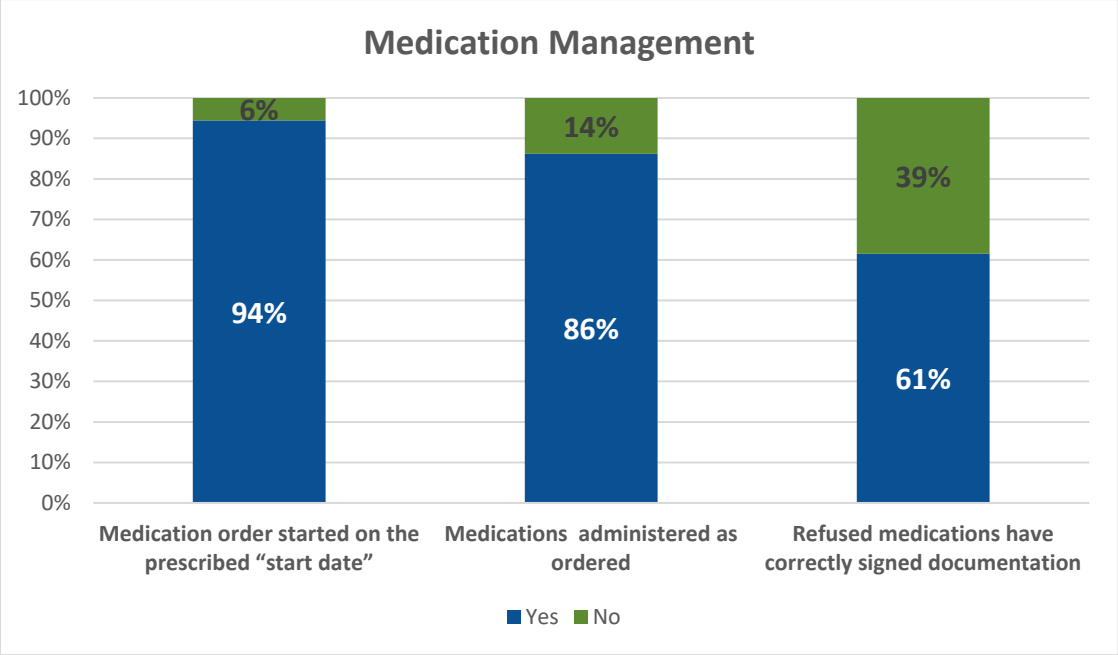
1. Medications are provided in a timely, safe, and sufficient manner.
2. Prescription medications are given only by order of a physician, dentist, or other legally authorized individual.
3. Policy should define expected timeframes from ordering to administration or delivery to the patient.
4. Patients are permitted to carry medications necessary for emergency management of a condition when ordered by a prescriber.
5. A process should be in place to notify ordering prescribers of the impending expiration of an order so the prescriber can determine whether the medication is to be continued or altered.

Key Findings

1. The review team focused on the timeliness of medications being initially administered at the time stated in the prescriber order, whether medications were administered as ordered, and if refused medications had signed patient documentation of the refusal.
2. The process for obtaining medications appears to function well. The pharmacy vendor does an excellent job with the timely provision of medications. It was found that medications were administered on the start date 94% of the time. The pharmacy system also notifies prescribers regarding expiring medications so they can be addressed in appropriate timeframes.
3. We noted that inmates can carry medications for emergency management of a condition. Although not measured, the facilities also had keep-on-person medication programs, which allow responsible inmates to carry and administer their own medications. The types of medications that fall into this category are determined by medical leadership. This program can decrease the volume of inmates requiring direct observation administration, which reduces the workload of the nurses. Typically, in a keep-on-person program, the patient is required to request refills for their medications monthly. Reviewers reported that some patients did not consistently request their monthly refills. The nursing team can monitor this as a part of the reorder process. Patients who do not request their refills should be spoken with to determine their compliance and continued participation in the program.
4. We reviewed the medication administration record of selected patients. The eFusion record provided highly valuable information in an easy-to-use manner. The nurses can document doses administered and not administered, and eFusion provides a quick view of compliance for each

medication for a given patient. Some records lacked a notation of why a missed dose was not administered, and this needs to be addressed. We found that medications were administered as prescribed 86% of the time.

5. Proper documentation of noncompliance occurred approximately 61% of the time. Noncompliance documentation should include patient education provided regarding the impact of not taking the prescribed medication as well as the signature of a medical team member and the patient. If the patient will not sign the refusal, it should be signed by an additional team member. This was not always present in the noncompliance records reviewed.



Recommendations

1. Monitor the processes for ordering and obtaining medications, which are working well, through the CT DOC continuous quality improvement program to ensure that they continue to perform well over time.
2. Examine the keep-on-person process to ensure that all inmates enrolled in the program are requesting and receiving their medications each month. The nursing staff responsible for oversight of this program should monitor all participants to determine if they have requested their monthly medications as required. Those found not to be in compliance should be given documented education, and it should be determined whether they remain enrolled in the program or be moved to direct observation pill line administration.

3. Review the refusal process, with examination of the number of refusals and the reasons for refusals at each facility. This will help to identify potential barriers that may contribute to patient noncompliance.
4. Review the process for addressing noncompliance to identify deficiencies. Nursing team members should receive guidance regarding the degree of noncompliance and when it should be addressed. For instance, the refusal of a noncritical medication might be addressed in a different timeframe than for a critical medication. Those definitions and timeframes should be determined by CT DOC medical leadership and direction provided to the facilities. This may already be in place and simply requires refresher training.

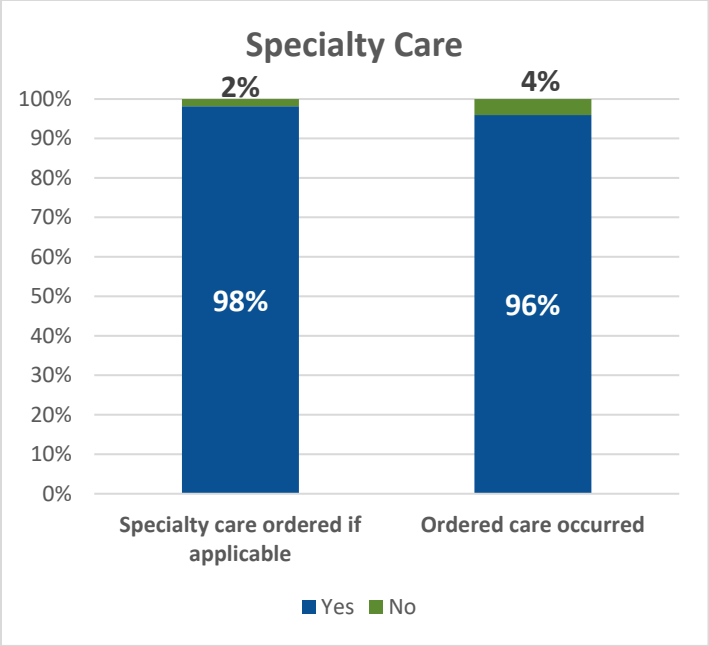
Specialty Care

Process Performance Measures

1. Specialty care is ordered and provided based on patient need as determined by the treating provider.
2. Specialty care that is ordered and approved is to be completed in a timely manner.

Key Findings

1. It was not possible to measure the utilization review process because it is tracked through a different electronic system.
2. We reviewed the record to determine that care ordered seemed appropriate and was provided in a timely manner.
3. The review revealed that specialty care was appropriate and ordered when needed 98% of the time. For the specialty care ordered, there was documentation of the care occurring 96% of the time.



Recommendations

1. Implement a referral and specialty care system that both empowers the primary care team to make appropriate clinical decisions and connects them with needed expertise and a clear method for obtaining that expertise. While individual professional experience and expertise are critically important in high-quality care, the system should guide the process that determines which diagnostics and treatments are appropriate to be done in-house. If specialty care is to be done in-house, a specialist should be hired for that purpose.
2. Document provider decisions based on specialty care in the health record whether action is required or there is no need for change of the patient's treatment plan.
3. Complete periodic audits of referral patterns, length of wait time, etc., in a collaborative and nonpunitive manner.

Emergency Care

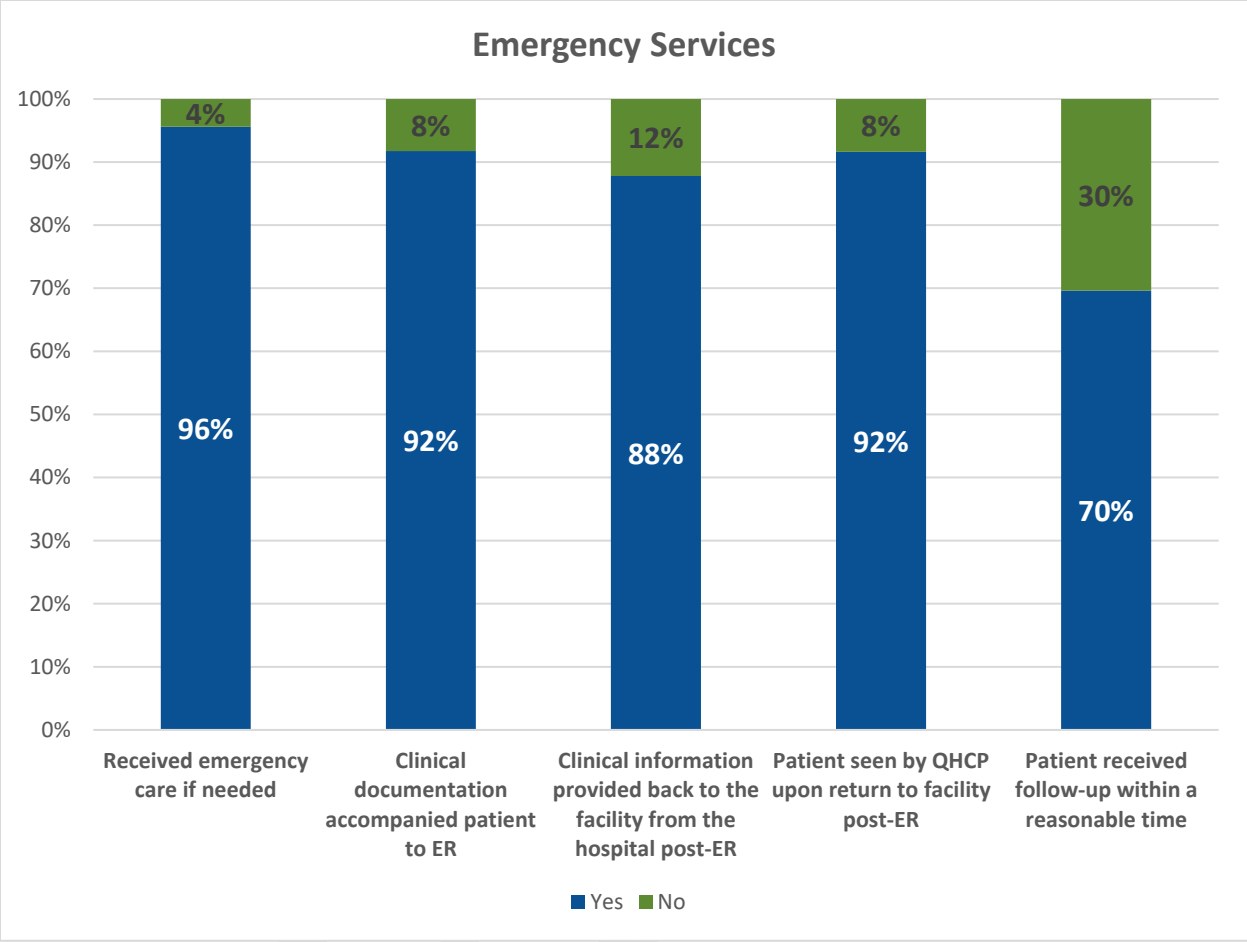
Process Performance Measures

1. Patients who require emergency care receive the care needed.
2. Proper transition of the patient requires clinical communication from the correctional facility to the receiving ED.
3. Proper transition of the patient requires clinical communication to the correctional medical team from the ED upon the patient's return.

4. Patients returning from emergency care are seen by a qualified health care provider upon their return.
5. Follow-up for the returning patient should occur in a timeframe based on clinical need.

Key Findings

1. The emergency review focused on the key issues related to the provision of emergency care. Of the 632 records reviewed, we identified 136 patients who required emergency care. Of those, 96% were transported to an outside ED. The remaining patients were either treated on-site for their urgent needs or required emergency care, but none was documented.
2. Special care is required when transitioning a patient from one health care provider to another, including transport to the ED for a higher level of care. The expectation is for the correctional facility to send accompanying paperwork that communicates the patient's history and current emergent presentation. This provides the treating clinician in the ED with information to assess and respond to the patient's needs more rapidly. Of the patients sent to the ED, accompanying clinical paperwork from the correctional facility was found 92% of the time.
3. The ED should in turn provide the correctional facility with clinical communication that specifies the care provided and patient need upon return. Of the patients sent to the ED, accompanying clinical paperwork back to the correctional facility was received 88% of the time. It was a challenge during the review to locate scanned documents in the health record. It is possible that a greater number of documents were returned but were not located.
4. Upon return to the correctional facility, a qualified health care professional should assess the patient and review returned documentation to determine current need. A provider should be contacted as needed for medication or other necessary orders and housing placement. The patient may require infirmary placement for observation or can be safely returned to their housing. Of the patients sent to the ED, 92% were seen by a qualified health care professional upon return. This was typically a member of the nursing team.
5. Upon return, patients should be scheduled for further follow-up by an appropriate health care provider based on their clinical status. Follow-up occurred for returning patients 70% of the time. Again, we had some difficulty locating documentation of the follow-ups in the health record, so the actual percentage may be greater.



Recommendations

1. Examine all aspects of communication between the facilities and their ED partners for completion. The facility can easily monitor itself for compliance with this expectation and make corrections to ensure information always accompanies the patient to the ED and that it is properly recorded in the health record.
2. Each facility should assess how well their designated ED(s) are communicating back to them. If information is not being consistently shared, medical leadership should address this with appropriate hospital leadership to correct the issue.
3. It appears that patients are seen upon return to the facility with a few exceptions. This can be due to several reasons, but health team members and custody staff should be aware that patients returning from the ED or a hospital stay must be presented to the health care team for evaluation regardless of the time of return.
4. Examine the process for the scheduling of follow-up. Again, this may be occurring with greater frequency, but follow-ups could not be consistently found in the health record. Each staff member should know and follow the process established to communicate the need for the follow-up appointments and a system should be established to track the transport to and from

the facility daily. This enables health care leadership to track and monitor those patients for a safe transition and required follow-up.

Infirmary Care

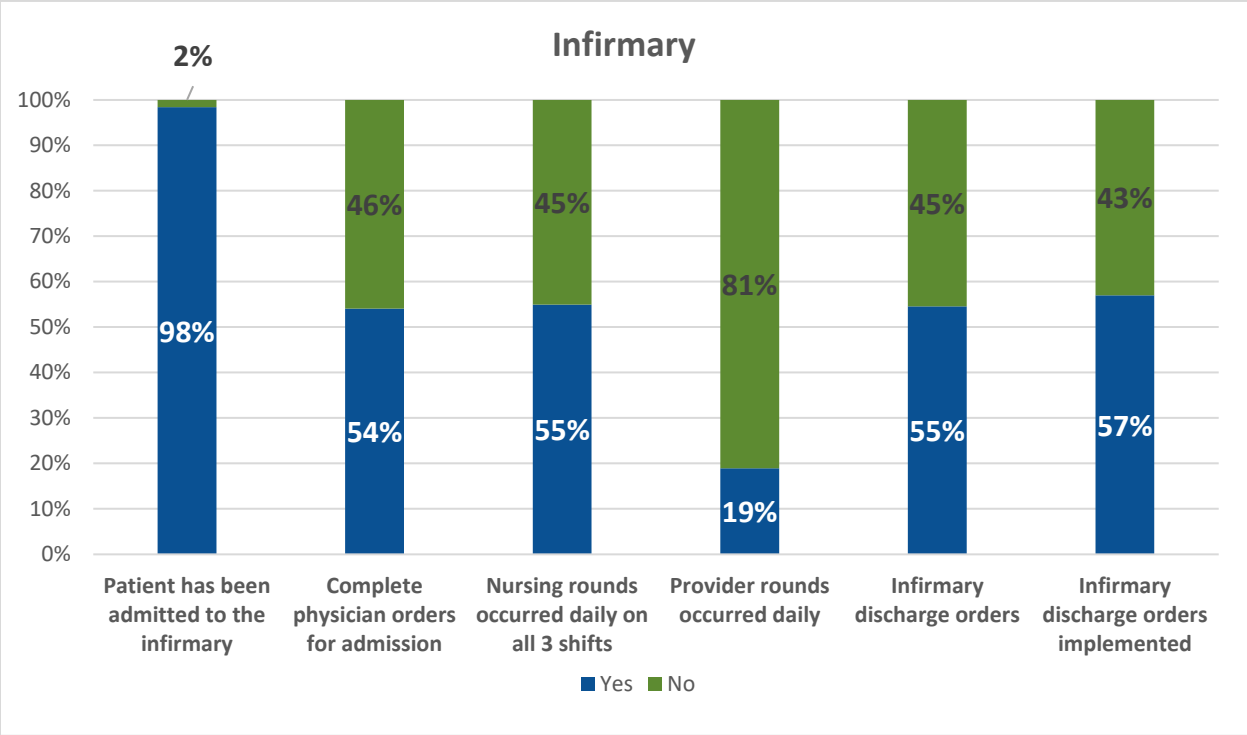
Process Performance Measures

1. Infirmary-level care, when provided, is appropriate to meet the needs of patients.
2. Initiation and discontinuation of infirmary-level care is by provider order, which has clear instruction for all aspects of care.
3. The frequency of provider and nursing rounds for patients who need infirmary-level care is specified based on clinical acuity and the categories of care provided.
4. A discharge plan is created for each patient to include medications and other actions to be taken, and discharge orders are implemented.

Key Findings

1. Infirmary-level care is provided to patients with an illness or diagnosis that requires daily monitoring, medication, and/or therapy, or assistance with activities of daily living at a level needing skilled nursing intervention. The infirmary program should have clearly defined processes for all aspects of the services delivered to those who have been admitted. Of the health records reviewed, 186 inmates had been placed in infirmary-level care.
2. The health record review focused on the admission process, the degree of provider involvement for daily patient rounds, nursing compliance with the requirement for rounds on each shift, and the discharge process including follow-up care. Our review is based on examination of the records and not actual observation of the infirmary settings.
3. Infirmary-level care begins with a provider admission for the patient. The provider order should clearly specify the care to be provided, including monitoring needs, medications, testing, treatments, diet, and activity level. The health record review revealed that among the 183 patients documented to have received infirmary-level care, 54% had a provider order for the admission. We noted incomplete admission orders in 46% of the records reviewed, which often were lacking information such as activity levels, diet, and treatment plans. This could be the result of the content for the template created in the electronic health record for this purpose.
4. It was reported that all patients placed in infirmary-level care are assigned a medical code of 5. Daily documented provider rounds are to occur once daily, and nursing rounds are to occur and be documented daily on all three shifts. The record review showed that daily provider rounds were documented 19% of the time, and nursing rounds occurred as required on all shifts 55% of the time.
5. Discharge orders should be created when a patient is transferred out of infirmary-level care. The orders should specify all required aspects of care as the patient returns to assigned housing, including follow-up care. This supports a safe transition back into the facility population. Of the infirmary admission records reviewed, 55% were found to have discharge orders; of that number, 57% had documented evidence that the orders were implemented. Again, the inability

to find admission and discharge orders could be due to improper placement in the health record.



Recommendations

1. Review the infirmary admission and discharge processes to determine the factors contributing to the lack of these orders for some patients and identify solutions. Factors could relate to training, process, or data entry issues.
2. Reconsider the blanket assignment of Medical Code 5. Typically, correctional health infirmary programs assign an acuity level for each patient based on their clinical needs. Acuity levels indicate the degree of care and monitoring required based on clinical needs. For example, a patient who is simply undergoing a test prep may be admitted at the lowest acuity and require nursing round documentation once a day, while a patient newly returned from a surgical procedure would be assigned a higher acuity that requires more nursing care and documented rounds on each shift. This approach enables the health care team to make the best determination of staff effort based on patient need.
3. Review rounding by providers and nurses to identify the factors contributing to the missed rounds, regardless of the decision made on acuity levels and rounding direction.
4. Review discharge orders and create a clearly defined process to schedule the follow-up visits and track them to completion. Follow-up care after infirmary discharge is important for patient safety and to address any patient orders that occurred at the point of discharge.

Diagnostic Services

Process Performance Measures

1. The correctional facility provides the necessary on-site diagnostic services for patient care.
2. Orders for diagnostic services are to be completed in a timely manner.
3. Results of diagnostic testing are reviewed by a provider in a timely manner.
4. Results with abnormal findings are addressed by a provider in a timely manner with documentation of clinical decision for the findings reported.

Key Findings

1. The health record review revealed that staff were doing an excellent job with completing ordered diagnostic testing, with diagnostic testing completed within appropriate timeframes 98% of the time.
2. Staff also were doing well with the review of diagnostic testing, with 98% of ordered tests reviewed in a timely manner.
3. In addition to the review of diagnostic testing, it is important that the provider address the findings of ordered testing and adjust treatment plans, as necessary. We noted that this occurred 80% of the time.

Recommendations

1. The processes for the ordering and reporting of diagnostic testing and the review of those orders appear to be effective. As with all aspects of care, it would be good to perform ongoing monitoring to ensure continued positive performance.
2. When providers review and acknowledge abnormal findings for diagnostic testing, it is essential that the treatment plan of action, or the decision that no action is required, be documented in the health record. This is not occurring on a routine basis. Provider staff should be educated on the need for this decision making and documentation of decisions made.

Durable Medical Equipment

Process Performance Measures

1. Medical and dental orthoses, prostheses, and other aids to reduce effects of impairment are supplied in a timely manner when patient health would otherwise be adversely affected, as determined by the responsible physician or dentist.

Key Findings

1. For each health record reviewed, we noted whether medical or dental devices were ordered. This include items such as canes, special shoes, braces, eyeglasses, and dental orthoses. Of the 240 records found to have an order for a device, 89% had documentation that the device was in

the possession of the inmate for whom it was ordered. We noted that, in general, many assistive devices are being ordered.

Recommendations

1. Review the criteria for ordering assistive devices. It is understood that an inmate should be provided what is needed, but the ordering of these devices can overwhelm both medical and custody staff from monitoring and safety perspectives if this is not properly controlled.
2. Review staff training on the process for assigning and documenting the devices. Although it appears that devices ordered are being provided, documentation of their assignment to the inmates is not always included in the health record.

Health Record

Process Performance Measures

1. A confidential health record is created and maintained using a standardized form.
2. The method of recording entries in the health record, to include contents and format, are approved by the appropriate authorities.
3. If electronic records are used, procedures address integration of health information in electronic and paper forms.

Key Findings

1. The use of the health record cannot be assigned a score based on record review. Rather, at the end of the review process, the team provided their insights gained from spending so much time examining the records. However, we did measure three items: whether the problem list was current and whether refusals and consents included the patient's signature (see items 6, 7, & 8).
2. We acknowledge the tremendous effort required to transition from a paper record to an electronic record. It requires hours of well-planned training for every individual who will enter data. It is also understood that despite well-planned training, staff often forget or stray from the training to a method they believe may be easier to use.
3. Much of the historic health documentation is kept in paper records, which are available upon request.
4. We noted that information is not entered into the record in a consistent manner. For example, a chronic care visit may be documented in the maintenance section, under orders, or attached to what is designated as a general sick call encounter.
5. Proper data entry is critical if the record is to provide clear care plans and the provision of the care stated in those plans. Anyone assessing a health record should be able to see the patient's identified needs quickly and easily, to include their plan of care, their status in their plan of care, and their future care needs. That happens more easily when everyone is documenting in a consistent manner.

6. Proper documentation also allows for more meaningful data collection for the electronic health care system. Being able to query the record for care information provides a clear understanding of the care being delivered in general.
7. The problem list is a section where a provider notes chronic and resolved conditions or issues. It is important that the list be kept current as it provides an "at a glance" view of the patient's current important issues. We found that 94% of the health records contained problem lists that captured current diseases and/or conditions. This can be a subjective decision for the provider, so this is an acceptable performance score.
8. It is essential to have a clearly defined process to address consents and refusals. All examinations, treatments, and procedures are to be governed by informed consent practices applicable in the state. Informed consent should apply to procedures and medications that would require written consent in the community setting.
9. Any health evaluation or treatment refused by an inmate should be documented to include a description of the service being refused, evidence that the inmate was informed of the adverse health consequences that may occur because of the refusal, the inmate's signature, and the signature of the health care witness. Inmate signatures on refusals were present 78% of the time. However, even when a refusal was present and signed, it did not document any patient education regarding their decision.

Recommendations

1. Review the use of the health record to determine how it is actually being used versus the use as defined by training. Training to address issues and to move to a more consistent approach will benefit patient care and enable leadership to obtain more meaningful data from the record. A system for ongoing monitoring and addressing individuals who require remediation is recommended.
2. Review the consent and refusal processes and provide training to staff regarding the need to obtain inmate signatures on consents and refusals. Health staff should also understand the need to provide and document patient education for consents and refusals.
3. Train providers on the appropriate use of templates for note taking and encourage their use. Avoid placing an entire note in free text. This is a problem for several reasons: (1) Identifying and retrieving data is difficult, (2) notes may lack the documentation of key information, and (3) orders and other interventions were frequently found in other notes and not directly tied to documented clinical reasoning.
4. Avoid the use of "chart maintenance" notes and "sick call" call notes as default templates. This practice essentially negates many of the positives of an electronic record and instead replaces it with an electronic version of a paper record whereby care is documented in a chronological but broken and disjointed way, making information retrieval difficult.