



Correctional Health Care  
Self-Operation Analysis

MILWAUKEE COUNTY JAIL  
AND HOUSE OF  
CORRECTION

**AUGUST 2019**

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## Milwaukee County Jail and HOC

### Correctional Health Care Self-Operation Analysis

#### Table of Contents

Executive Summary.....	1
Introductory Comments.....	1
Definitions.....	2
Methods.....	2
Conclusions.....	3
Identified Risks.....	5
Introduction.....	7
Methodology.....	7
Guiding Assumptions.....	10
Self-Operation Definition.....	10
Responsible Health Authority.....	11
Personnel.....	12
Summary.....	12
Recommendation and Methodology.....	12
Organizational Model.....	13
Hiring Plan.....	17
Costs.....	20
Cost Concerns.....	21
Assumptions.....	23
Technology.....	27
Summary.....	27
Recommendations.....	27
Costs.....	30
Assumptions.....	31
Methodology.....	33
Procurement.....	38

Summary .....	38
Recommendation and Methodology .....	39
Costs .....	47
Assumptions.....	48
Facilities .....	50
Risk .....	53
Summary .....	53
Recommendation and Cost.....	57
Assumptions.....	57
Methodology.....	58
Additional Risks.....	62
Appendix A – Recommended CHCD Organization Chart .....	64
Appendix B – Clinical Required Positions.....	69
Appendix C – Vendor Corporate Office Functions .....	70
Appendix D – Estimated Cost Details.....	73
Appendix E – Increased Fragmentation of Health Care Results in Worse Outcomes and Increased Costs	76
Appendix F – EHR Proposals .....	78
Appendix G – Standard Medical Equipment List .....	156
Appendix H – Self-Operation Medical Equipment Requirements .....	158
Appendix I – Supply Management Needs.....	160
Appendix J – Wellpath 3-Month Consumable Refill List.....	162
Appendix K – Health Services Subcontracts.....	166
Appendix L – Self-Operation Clinic Space Analysis .....	168

## Executive Summary

On December 6, 2018, the Milwaukee County Board of Supervisors passed Resolution 18-898, “reaffirm[ing] and recommend[ing] that ... medical services be directly provided by Milwaukee County, rather than a private vendor” for incarcerated patients housed in the Milwaukee County Jail (MCJ) and the House of Correction (HOC). Shortly thereafter, the County created the Correctional Health Care Self-Operation (CHCSO) special project team to perform the technical analysis for implementing this resolution. This report details the work of the project team.

### Introductory Comments

Provision of health care in correctional settings became a constitutional mandate in 1976 and since then, correctional facilities have increasingly focused on quality. To meet this need for quality care in a fiscally responsible way, a variety of models have emerged, with health services operated by government agencies, the private sector, academic institutions, and mixes of all of these.

As the complexity and expense of health services continue to rise, it is imperative that government leadership deploy models that work best in their particular environments. It cannot be assumed that one approach—self-operation or contract services—is superior, yielding greater cost savings or better patient outcomes. As hypothetical examples, a new self-operation program that depends entirely on available local systems and staff would be challenged to be superior to a contractor operating program that was able to leverage national scale and capabilities. In contrast, a national contractor would struggle to be superior to a well-run, efficient, self-operated program that has been in existence for many years.

Correctional health care is a unique endeavor with few parallels and scant research literature comparing or evaluating health care models on a large scale. As a result, decisions to self-operate or contract for services are not generally evidence-based. In our experience, superior outcomes are achieved when the organizational culture embraces quality health care as intrinsic to its mission; the health care operation aligns with the NCCHC *Standards for Health Services*; policies, procedures, and practices are evidence-based to the extent possible; and a proactive and rigorous continuous quality improvement program is in place.

NCCHC considers accredited facilities to have successfully demonstrated high performance and best in class characteristics. In general, high-performing (or best in class) programs will focus on all areas that directly affect patient care. The aptly named NCCHC essential Standards include, but are certainly not limited to, those that address prompt and thorough receiving screenings and initial health assessments, readily available emergency and routine health care services, appropriate and contemporary care for chronic disease, access to advanced treatments and services when needed, appropriate and comprehensive drug formularies, and all necessary personnel, systems, policies, procedures, and protocols needed to facilitate and support this. NCCHC essential Standards are indicated as such.

NCCHC has a long history of recognizing what we feel are clearly best in class facilities and programs. We refer to these as Program of the Year and Facility of the Year. One of each is identified and recognized annually. A list of awardees is available upon request and examples of self-operation and contract operation may be found among them.

Our hope is that this document will provide useful information that enables Milwaukee County to make a decision that is best for the local community.

### Definitions

Self-operation is defined as the provision of inmate medical care, including dental and mental health care, by Milwaukee County through the conversion of the existing 128.8 full- and part-time roles from vendor staff to County staff, as well as the addition of operations and administrative staff required to provide support currently received through the vendor's corporate offices. County employees are not expected to provide any services currently provided by subcontractors or third-party entities otherwise engaged in a business relationship with the medical services vendor. The Board of Supervisors identified April 1, 2021 as the start date for self-operation to begin.

### Methods

The County established the CHCSO special project in January 2019, and appointed a County employee as a temporary full-time special project manager. Outside experts and County project teams provided technical support. The project included interviews and periodic meetings with key stakeholders for input and review, including the following County organizations:

- Comptroller's Office
- Department of Administrative Services, Facilities Management (FMD)
- House of Correction
- Human Resources (HR)
- Department of Administrative Services, Information Management Services Division (IMSD)
- Department of Health and Human Services, Behavioral Health Division (DHHS-BHD)
- Sheriff's Office (MCSO)
- Office of Corporation Counsel (OCC)
- Department of Administrative Services, Procurement Division (Procurement)
- Department of Administrative Services, Performance, Strategy and Budget Office (PSB)
- Department of Administrative Services, Risk Management Division (Risk)
- Office of Emergency Management (OEM)
- Wellpath (current correctional health care services provider)

For the purposes of this report, the above stakeholders are referred to herein as the "strategic team."

Each of these areas had periodic meetings to discuss progress on assigned tasks, pose questions, and address obstacles. The goal for this team was to evaluate the costs and requirements for self-operation and develop a high-level timeline for the implementation. Core areas of consideration were HR

(personnel), risk management, procurement of services and supplies, facilities concerns and space planning, and information technology. In addition, the project team provided frequent updates to senior County leaders.

Not surprisingly, personnel costs are a significant cost driver for self-operation. To estimate these costs, the team gathered job evaluation questionnaires (JEQs) for existing County positions and created JEQs for new positions. Costs for all JEQs were determined by the Compensation area of HR. In addition to personnel, the team identified other key services and products that will be needed to support self-operation. These include insurances, space, equipment, medical supplies, medical services, software, and other technology. The team also considered the time frame in which each person would need to be hired and when each contract or purchase would occur.

### Conclusions

Our work has led to several key conclusions. First, in order to successfully provide health care to inmates, the old County self-operation organizational model cannot simply be rebooted. Because the previous model for self-operation was not successful, the County will need to implement a new model. The new organizational model recommended by the team creates a Correctional Health Care Department (CHCD) that reports to the County Executive. This department includes the 128.8 (expected to change to 127.2 in 2021) FTEs (full time equivalents) required by the Christensen Consent Decree (“Consent Decree”) as defined by the assigned Court Monitor (“Court Monitor”) pool staff, and administrative and operations staff providing fiscal, procurement, HR, information technology, risk, and legal support to the new Department. Support staff hired to provide HR, IMSD, Procurement, Corporation Counsel, and Risk Management functions for CHCD would report to their respective functional leaders. This hybrid model aligns with the structure currently used within the County for other functions. The team estimated it will be necessary to hire a total of 170.3 FTEs across all departments to provide self-operated health care. Additional details regarding the 170.3 FTEs are contained within the Personnel section of this report.

In addition to the permanent personnel required for successful self-operation, the County will also require temporary staff to handle the large increase in hiring, purchasing, and contracting during the transition period. Costs for temporary staff were estimated according to applicable JEQs, where available, or were estimated from the pay grades of existing County positions.

The total costs for self-operation are below. Our calculations suggest that self-operation will result in a net increase in costs to the County. This increase is approximately 21% for 2020. The net increase appears to reduce over time as start-up costs are eliminated, but it is unclear whether annual cost increases for care or personnel may impact the net reduction. We have provided detailed cost breakdowns throughout the sections of this report.

It is important to note a few specifics regarding costs:

- **Self-operation 2020** includes the outsourcing costs for the year plus the start-up staff and equipment costs required to support an April 1, 2021 transition.

- **Self-operation 2021** includes 3 months of outsourcing costs, 3 months of start-up costs, and 9 months of self-operation costs.
- **Self-operation 2022** is 12 months of self-operation costs.
- **Outsourcing costs** are Wellpath’s costs, the County portion of off-site medical and pharmacy costs, and NCCHC Resources, Inc.’s monitoring cost.
- **Difference** is outsourcing minus self-operation.

	2020	2021	2022
<b>Self-operation</b>	\$26,632,329* To \$27,142,243	\$28,796,467.62 To \$30,661,590.23	\$25,974,587.48 To \$28,051,592.07
<b>Outsourcing</b>	\$22,034,139.90	\$22,764,895.18	\$23,348,355.35
<b>Difference</b>	<b>\$(4,598,190.05)</b> To <b>\$(5,108,104.03)</b>	<b>\$(6,031,572.44)</b> To <b>\$(7,896,695.05)</b>	<b>\$(2,626,232.13)</b> To <b>\$(4,703,236.72)</b>

*\*In 2020, self-operation costs include the Wellpath contract and NCCHC Resources contract, due to the nature of the transition period.*

Costs are supplied in a range which represents the potential staffing risks identified later in this document. The low number represents hiring at the midpoint of each salary range for medical personnel, and does not include overtime costs or any premiums required to recruit individuals other than nurses and LPN’s to work in a jail or correctional environment. The higher number represents hiring at the top of each pay range for medical personnel. This range methodology was used in lieu of attempting to make overtime or premium recruitment estimates. Data could not be obtained to support such estimates.

Our work suggests that the implementation timeline for self-operation is approximately 15 months, assuming that the effort begins January 1, 2020 and the transition date is April 1, 2021. There is a significant amount of hiring and contracting that needs to occur in this time frame. Due to the short timeline, hiring and contracting processes must occur at a rapid pace while remaining in compliance with County regulations. Any failure to meet the timeline could result in substantial impacts to patient care.

The implementation timeline also assumes that staff can be hired within the time frames identified in the hiring plan (for additional detail, please see the Personnel section). This may prove challenging given the current labor market, especially for nurses and psychiatrists. Both recent health services vendors experienced repeated difficulties in hiring and relied on temporary agencies to meet required staffing levels. There may be further reductions in the pool of available candidates interested in working at the MCJ and HOC due to the opening of the psychiatric hospital in West Allis in 2021, should that plan proceed as expected.

In addition, there is a wage parity issue that must be addressed over the next year. County registered nurse (RN) wages are substantially lower than current contractor wages for the same RN category. The annual wage range midpoint of County RNs is approximately \$5,000.00 lower than the contractor’s annual wage range midpoint. The staffing matrix requires 31 full-time equivalent RNs. Such a

discrepancy will result is significant recruitment issues for the County when attempting to hire qualified RNs. A similar problem exists regarding nurse practitioners (NPs) (10.0 FTEs), licensed practical nurses (LPNs) (26.0 FTEs), certified medical assistants (CMAs) (6.0 FTEs) and the dental assistant (1.0 FTE).

### Identified Risks

This report outlines a proposed structure for self-operation and reflects the work of multiple stakeholders that were part of the strategic team. This proposed structure, however, includes several risks that the County would be taking on should it implement a self-operation model.

- **Staffing Risk** - Self-operation requires that the organization be staffed appropriately. There are several risks that will impact the County's ability to staff self-operation. The County may not have the appropriate recruitment and retention tools to compete for talent in correctional health care. Civil service rules may slow down the ability to make timely job offers in a competitive market. The County's outdated compensation system and stagnant wages may limit the pool of applicants interested in working for the County. The County's non-portable retirement benefits may also limit the pool of interested applicants.
- **Training Risk** - The County may not have the appropriate health care training in place. The county would need a comprehensive set of policies and procedures, and to train staff in the appropriate procedures. It is unclear whether the County has this capacity in the correctional health care field.
- **Support Risk** - With limited financial resources, it is unclear whether the County can adequately invest in and maintain the operational infrastructure necessary for self-operation, which would include separately acquiring and maintaining the IT systems and equipment that are currently provided by an outside vendor.
- **Insurance Risk** - Currently, a significant amount of liability is covered by the vendor's insurance. If no vendor is in place, those liabilities belong to the County and may impact future premiums and insurance ratings.
- **Execution Risk** - Because the County does not currently provide correctional health care, it does not have the experience of successes and failures that inform quality improvement. Also, if the County is only operating its own two facilities, it will not have the learning experience that someone operating multiple facilities would have. This lack of experience may hamper the County in keeping pace with beneficial changes in the industry.
- **Economic Risk** - Currently an outside vendor takes on a substantial amount of outside risk because a fixed fee contract is in place. If no outside vendor is in place, all of the financial risk of cost increases in the industry, overtime, retention bonuses, etc. would fall on Milwaukee County.
- **Team Risk** - An outside vendor has a much larger team dedicated to correctional health. There are multiple people working in training, quality control, risk management, etc. If there is no outside vendor, the County will not be able to rely on this larger network for problem resolution.



- **Intellectual Property, Copyright, Proprietary Risk** - Many of the policies, procedures, and trainings that an outside vendor has access to are proprietary, and the County would have to create its own from scratch.
- **Regulation, Compliance and Change Management Risk** - Currently, monitoring and implementing regulatory change to meet regulatory or accreditation requirements are covered by an outside vendor. An outside vendor can spread these costs over multiple locations. If there is no outside vendor, the County would be responsible for planning and executing these regulatory changes. It is unclear whether the County has this ability.
- **Infrastructure Risk** - Currently, investments in technology or other long-term operational investments are covered by an outside vendor. An outside vendor can spread these costs over multiple locations. If there is no outside vendor, the County would be responsible for planning and executing these long-term operational investments. It is unclear whether the County has this ability in the context of correctional health care.
- **Logistics Risk** - Currently, the logistics for implementing correctional health care (e.g. hiring/firing, operating, training, procuring other goods and services) rests with an outside vendor. It is unclear whether the County has this ability in the context of correctional health care.
- **IT Architectural, Data Quality and Platform Risk** - Currently, the risk related to choosing the right architecture and platform for IT decisions, and ensuring data quality and security, rests with an outside vendor. It is unclear whether the County has this ability in the context of correctional health care.

In summary, complete self-operation of inmate health services by Milwaukee County is a feasible but complex undertaking. It is possible that the timelines for conversion to self-operation are not immediately compatible with the current administrative infrastructure of the County. In addition, the relative lack of County public health systems and structures makes integration into existing services challenging and the project implementation costly and time consuming.

## Introduction

On December 6, 2018, the Milwaukee County Board of Supervisors passed Resolution 18-898, “reaffirm[ing] and recommend[ing] that ... medical services be directly provided by Milwaukee County, rather than a private vendor” for incarcerated patients housed in the MCJ and HOC. The evaluation of requirements for, and a plan for implementation of, self-operation of correctional medical care is identified in Resolution 18-898 as the responsibility of the following Departments and Divisions:

- The House of Correction;
- The Office of the Sheriff;
- The Office of Corporation Counsel;
- The Office of the Comptroller; and
- The Department of Administrative Services.

This analysis details the organizational structure, personnel, facilities, equipment, technologies, supplies, and services required to self-operate correctional health care. It also identifies the start-up costs, first year costs, and ongoing costs needed to support the transition to self-operation and the ongoing provision of correctional health care by Milwaukee County.

### Methodology

Milwaukee County contracted with NCCHC Resources, Inc. to provide assistance with this project. Following the due diligence work of NCCHC Resources, it became evident that the scope of the Board’s policy was substantial and that it would be necessary to develop a special project team to enact the policy. The County established the Correctional Health Care Self-Operation (CHCSO) special project in January of 2019, and appointed Erin Schaffer as the special project manager. In addition to NCCHC Resources and Erin Schaffer, the project team consisted of representatives from the following organizations:

- Comptroller’s Office
- Facilities Management (FMD)
- House of Correction (HOC)
- Human Resources
- Department of Administrative Services, Information Management Services Division (IMSD)
- Department of Health and Human Services, Behavioral Health Division (DHHS-BHD)
- Sheriff’s Office (MCSO)
- Office of Corporate Counsel (OCC)
- Department of Administrative Services, Procurement Division (Procurement)
- Department of Administrative Services, Performance, Strategy and Budget Office (PSB)
- Department of Administrative Services, Risk Management Division (Risk Management)
- Office of Emergency Management (OEM)
- Wellpath (current correctional health care services provider)

Each of these areas had a weekly meeting with Erin to discuss progress on assigned tasks, pose questions, and address obstacles. On a bi-weekly basis, project leads from each area met as a group to discuss the findings in all areas and to share insights. Project leads were assigned to this project by department heads or other authorities within their respective areas, and were given authority to speak on behalf of their area.

Monthly, County leadership met to review the progress of the project, discuss items raised by the team which required their input, and review and approve decision documents. This team was referred to in the project as the Strategic Group, and included the following individuals\* (and/or their designees):

- Milwaukee County Board of Supervisors
- County Executive
- Comptroller
- Sheriff
- Director – DHHS
- Director – Department of Administrative Services (DAS)
- Director – Office on African American Affairs
- Director – HR
- Representative – PSB
- Representative – Office of Corporation Counsel

*\*Not all representatives or individuals attended all meetings.*

The project team presented informational updates and action requests to the Judiciary, Safety, and General Services Committee of the Milwaukee County Board of Supervisors at the following meetings:

- January 24, 2019 (Item 19-14)
- March 7, 2019 (Item 19-14, referred to Special Session on March 19 for further action);
- March 19, 2019 Special Session (Item 19-14)
- April 11, 2019 (Item 19-14)
- May 9, 2019 (Items 19-454 and 19-14)
- June 6, 2019 (Item 19-14)
- July 11, 2019 (Item 19-14)

The project team also presented informational items related to this project to the Finance and Audit Committee of the Milwaukee County Board of Supervisors at the following meetings:

- February 1, 2019 (Item 19-14)
- March 14, 2019 (Item 19-14)
- May 16, 2019 (Item 19-14)
- July 18, 2019 (Item 19-14)

The reports referenced above are not provided in this report. However, information and documentation presented in those reports may be included in this report. Some information or documentation may

appear in this report in a modified form. We detail the findings and costs associated with each piece of the analysis in the following sections of this report.

## Guiding Assumptions

Guiding assumptions are factors in a planning process that are assumed to be true and that will influence the direction and analyses throughout the project. These assumptions form the base for all project team members as they perform their tasks and consider options. Two key assumptions that needed to be established in order to proceed effectively with the project were the definition of self-operation and the identification of the Responsible Health Authority (“RHA”).

### Self-Operation Definition

The project team proposed, and the County Board accepted,\* the following definition of self-operation, for purposes of this project:

The provision of inmate medical care, including dental and mental health care, by Milwaukee County through the conversion of the existing 128.8 full- and part-time roles, currently identified as required positions under the Christensen Consent Decree, from contract staff positions provided through the County’s medical services vendor to permanent County employee roles overseen by County authority. This shall include all contracted staff required in the 128.8 roles and through the County’s medical services contract with its medical services vendor, regardless of whether those staff persons are provided directly by the medical services vendor or through third-party agencies or locum tenens arrangements.

Under this working definition, County employees are not expected to provide any services currently provided by subcontractors or third-party entities otherwise engaged in a business relationship with the medical services vendor; however, oversight of any such needed contracts will become a County responsibility under the self-operation model. Additionally, the County anticipates a change in staffing to 127.2 FTEs in 2021.

This definition eliminates the following items from the definition of self-operation:

- Specialty care providers, such as surgeons, cardiologists, endocrinologists, dermatologists, anesthesiologists, obstetrician/gynecologists, nephrologists, orthopedists, oncologists, optometrists and ophthalmologists, pathologists, physical therapists, radiologists, urologists, etc.
- Emergency care and transport, such as emergency room services, surgery, trauma care, ambulance or life flight services, etc.
- Pharmacy services, including filling and delivery of prescriptions (County will be responsible for dispensing medications to inmate-patients and management of on-site pharmacy)
- Other third-party contracts, including, but not limited to, provision of biohazardous waste disposal services; service and maintenance of medical equipment; provision of forensic laboratory services; provision of specialty programs and services (equine therapy, substance abuse programs, etc.)

To support this definition of self-operation, the project team proposed, and the County Board accepted\* that a new Correctional Health Care Department (CHCD) will be created to manage the provision of health care. This department's director will report to the County Executive.

*\* By resolution adopted by the Judiciary, Safety, and General Services Committee of the Milwaukee County Board of Supervisors on March 19, 2019 (File 19-14). The resolution and related information may be found in Legistar.*

### Responsible Health Authority

The Responsible Health Authority (RHA) is a term defined by the National Commission on Correctional Health Care in essential standard *J-A-02 (Responsible Health Authority)*. According to *Standard J-A-02*, the RHA:

- Ensures that the facility maintains a coordinated system for health care delivery
- Arranges for all levels of health care and ensures quality, accessible, and timely health services for patients
- Is a designated individual or entity tasked with ensuring the organization and delivery of all health care in the facility
- May be an individual, physician, health services administrator, or agency
- When the RHA is a state, regional, national, or corporate entity, there is also a designated individual at the local level who is on-site at least weekly to ensure policies are carried out
- Is supported by the responsible physician who has final clinical judgment
- Is supported by the designated mental health clinician when there is a separate organizational structure for mental health services
- Is supported by the designated dental clinician when there is a separate organizational structure for dental services

The standard states that the "...RHA functions to ensure that health services are organized, adequate, and efficient. If this designated authority is not a physician, the responsible physician supervises the clinical aspects of health care."

The RHA assignment will provide accountability to the County Board and a method to ensure Board policies pertaining to the correctional health care mission will be appropriately carried out. The project team proposed and the County Board accepted\*\* that the CHCD (Department) will be the Responsible Health Authority.

*\*\*By resolution adopted by the Judiciary, Safety, and General Services Committee of the Milwaukee County Board of Supervisors on May 9, 2019 (File 19-454) and was adopted by the Committee of the Whole on May 23, 2019 (Item 24, File 19-454). The resolution(s) and related information may be found in Legistar.*

## Personnel

### Summary

Personnel expense is the largest single cost in providing correctional health care services to patients in the MCJ and HOC. This expense represents about 77% of the projected total annual budget for the CHCD. In developing the organizational chart for the CHCD, the project team determined that five categories of employees would be required to successfully transition from a vendor-operated model to a self-operation model and provide constitutionally appropriate care to inmates at MCJ and HOC. These categories are:

- **Clinical CHCD Employees** – These are the 128.8 full-time equivalent (FTE) employees (127.2 in 2021) required by the Court Monitor under the Christensen Consent Decree. These positions may not be modified without discussion and agreement among the OCC, the CHCD, and the Court Monitor. All these positions are clinical or clinical-adjacent, meaning that these employees either provide direct care to patients or directly support the provision of care (for example, medical records clerks).
- **Pool CHCD Employees** – pool employees represent back-fill coverage for Consent Decree staff during their time off. For more information regarding pool staff, please see the Recommendation and Methodology section of this report.
- **Administrative CHCD Employees** – These are the employees who will staff the non-medical operational and administrative functions within the new department.
- **Support Department Employees** – These employees are permanent hires required by support departments such as IMSD, Risk Management, OCC, and HR to provide standard County services to the new department. For more information about these employees, please see the Recommendation and Methodology section below.
- **Temporary Employees** - These employees will be necessary on a temporary basis during the transition period to support the large volume of start-up tasks. Temporary positions will be needed for approximately 6 to 18 months. Departments requesting temporary staff are HR, IMSD, OCC, and OEM.

In order to establish basic guidelines for the construction of the CHCD's organization chart (See Appendix A: Recommended Organization Chart) and related budgeting tasks, the project team made a number of assumptions that have critical impact on this report. Please see the Assumptions section for a list of these assumptions. Any change to these assumptions could have substantial fiscal impacts on the cost of personnel under a self-operation model.

### Recommendation and Methodology

The CHCSO project team, along with experts from NCCHC Resources, assessed the Christensen Consent Decree, recent Request for Proposal (RFP) for Correctional Medical Services (RFP #98180020, issued July 20, 2018) and other similar correctional health care operations to determine the types and number of roles that would be required to support the County's self-operation efforts.

The project team's recommended organization chart is provided as Appendix A: Recommended Organization Chart. This organization chart includes 170.29 roles, broken down as follows:

- 131.2 clinical roles, from the Director of Clinical Services to RNs and social workers
- 26 administrative and support roles, including fiscal, IT, HR, Procurement, Policy and Compliance, and Corporation Counsel
- 13.09 pool staff, also clinical

In addition to the 170.29 roles represented in the organization chart, nine temporary positions are included in this report's cost. These roles are requested for transition support, and include IT, HR, Corporation Counsel, and OEM support staff.

Positions in **blue** are clinical roles. Positions in **light blue** are pool staff roles. Positions in **green** are administrative roles reporting to the CHCD director. Positions in **gray** are support roles required in other divisions and departments to manage the additional workload in those areas represented by the addition of approximately 130 clinical staff and other health care related operations.

**Not included** in the organization chart are any temporary staff required during the start-up period. The organization chart includes permanent roles only. Information regarding the temporary staff may be found in this section under the Staffing Recommendations heading.

### Organizational Model

In order to determine how many new staff members would be required to provide correctional health care and ancillary services, the project team first needed to establish the organizational model and reporting structure for the new Department. The following three organizational models for CHCD were considered:

- **Self-contained** - All positions necessary to provide correctional health care services and support the operation report to the CHCD director.
- **Matrixed** - Only medical personnel report to the department director. All other functions report to the Director or Department Head of their subject area.
- **Hybrid** - A mix of self-contained and matrixed models. Some support staff report to the CHCD director and other staff report to their subject area's Director or Department Head.

The project team weighed the pros and cons of each model for each area, focusing on function, adherence to current County strategy, and overall ease of use for the model in a particular subject area. After careful deliberation, the team recommended to the strategic team that the hybrid model be accepted. The hybrid model most closely aligns with the current support model used by the County, allowing for matrixed IT (IMSD) and HR functions with strategic enterprise standards, objectives, and goals, while also allowing the flexibility for other areas to continue with semi-contained models (for example, FMD, Risk Management, and Procurement) and for some areas to remain self-contained (for example, fiscal). This will allow the County to adapt and change as needed to follow industry standards



and best practices and to provide an overall structure that can stand the test of time. The strategic team accepted the recommendation.

Based on this recommendation, each matrixed or semi-matrixed subject area provided position titles and employee headcounts necessary for their subject area to provide appropriate support for the CHCD function. Those positions are represented in the Administrative CHCD Employees and Support Department Employees section below.

### **Clinical CHCD Employees**

Because 128.8 (127.2 in 2021) clinical positions are required by the Court Monitor under the Christensen Consent Decree, these clinical positions were not modified and none were deleted. Three Wellness Coordinator positions were added at the request of the project team.

For purposes of this document, the required 128.8 clinical positions listed by RFP 98180020 were used as the basis for the requested clinical roles in the CHCD organization chart. Please see Appendix B: Clinical Required Positions for additional detail regarding the eventual 127.2 clinical positions.

Because the County's current correctional health care provider, Wellpath, operates under an "hours of care" model and not an FTE model, the CHCSO project team also needed to assess the needs for additional pool staff. These pool staff would supplement the 128.8 (127.2 in 2021) FTEs required to ensure that 100% of clinical hours are covered, as required by Wellpath's contract and RFP #98180020. Almost all of the 128.8 (127.2 in 2021) positions have a clinical hours requirement. For some positions, such as the Medical Director or HSA, only one full-time staff member is hired for the role.

The County will need to utilize a substitution card and an appropriate succession plan to ensure 100% coverage of certain roles' clinical hours. The substitution card indicates which roles are permitted to substitute for a particular role, based on each role's licensure requirements. All substitutions must be licensed to provide the type of care typically provided by the role filled. A succession plan will be created based upon the substitution card, and higher level roles will be backfilled by the most experienced, appropriately credentialed staff. Pool staff will then be used to backfill roles currently substituting for higher level roles. For example, if the Director of Nursing role is backfilled by the Nurse Supervisor, the most senior RN will backfill the Nurse Supervisor role and a pool nurse will fill the RN's role. This method ensures that pool staff are filling roles which are appropriately supervised by County staff familiar with County policies and procedures, and eliminates the risks inherent in using a temporary staff member to cover for a high-level, decision-making position.

Following assessment by the Comptroller's Office and the Office of Performance, Strategy, and Budget, a total pool of 13.09 additional clinical positions, including RNs, LPNs, ARNPs, and Psychiatric Social Workers was established to enable the County to ensure 100% coverage of clinical roles.

### **Administrative CHCD Employees and Support Department Employees**

In addition to the required clinical roles, administrative and operational staff are needed for the successful self-operation of correctional health care by the County. Presently, Wellpath provides

corporate office support functions to Milwaukee County through its contract. These functions, such as billing, IT management, risk management, licensure and training, and procedural and compliance management, represent additional positions hired by Wellpath as a corporation. These positions and their related costs are not represented in Wellpath's proposal or price proposal as separate budget items because Wellpath is able to leverage [economies of scale](#) and split the cost for these centralized roles across many clients, thereby reducing the cost to each client for the service provided.

For example, a company like Wellpath might leverage a single in-house IT department to manage its electronic health record (EHR), telemedicine solution, medical training system and learning management system (LMS), employee time clock system, infrastructure, cybersecurity, and other IT functions for all clients. The entity then breaks down the cost across its entire client base, and includes a portion of that cost in the contract for each client. This ability to leverage economies of scale is a cost benefit to Milwaukee County derived from our contractual relationship with Wellpath. When the County moves to self-operation, the benefit of these economies of scale will be lost, and the County will need to self-perform the same functions in order to successfully operate the CHCD.

Because these roles and costs are not typically identified in a vendor's proposal, the County did not have any insight into the types of functions performed by Wellpath's corporate office staff. The CHCSO project team requested that NCCHC Resources identify all functions traditionally performed by a correctional health care vendor's corporate office staff. Appendix C: Vendor Corporate Office Functions is the report which identifies services provided for Milwaukee County by the vendor's corporate office.

Appendix C's report was then provided to each subject area expert on the project team. Subject area experts were asked to review the functions, discuss with their team(s), and advise the project manager how many new roles would be required in their subject areas to support these added functions, should the County perform them.

**All administrative positions requested in this report are based upon Appendix C and each Division or Department's expert recommendations for their area(s).**

Some administrative and operational roles are distinct to the correctional health care function and will report only to the Director of the CHCD. Those roles are represented in the Recommended Organization Chart (Appendix A) in green boxes. Other roles provide additional support to pre-existing functions in the County, such as IT, HR, and legal functions. These new roles are referred to as support department employees, and will report to the Director of their area (CIO [chief information officer], HR Director, Corporation Counsel) and will liaise with the CHCD Director. Support department employees are represented in the organization chart in gray boxes.

### **Staffing Recommendations**

The CHCSO project team and expert consultant NCCHC Resources have identified a total of **170.29 permanent positions** and approximately **nine temporary positions** necessary to provide correctional health care and related services. Those positions are broken down into the following categories:

- 128.8 (127.2 in 2021) positions are clinical roles required by the Court Monitor;

- 1 position is a clinical role necessary to provide utilization management support
- 3 positions are the Wellness Coordinators, who act as patient ombudsmen and are quasi-custody (previously this function was performed by Sheriff's Deputies, and the function is now performed by Wellpath under their contract)
- 13.09 positions represent projections for needed pool staff, including:
  - An RN/LPN pool of 9.82 positions
  - A Psychiatric Social Worker pool of 1.42 positions
  - An ARNP pool of 1.85 positions
- 26 positions are administrative, following the breakdown below:
  - 2 in the Director's Office, including the CHCD Director and their Executive Assistant
  - 24 in the operations area, including:
    - 1 Director of Operations
    - 1 Administrative Assistant
    - 1 Finance and Administration Manager reporting to the Director of Operations
    - 4 Fiscal positions reporting to the Finance and Administration Manager
    - 1 Compliance position reporting to the Finance and Administration Manager
    - 1 User Experience Coordinator (technical trainer) reporting to the Finance and Administration Manager
    - 2 Risk positions reporting to the Director of Risk Management
    - 3 legal positions reporting to the OCC
    - 2 positions reporting to the Director of Procurement
    - 4 positions reporting to the HR Director
    - 4 IMSD positions reporting to the CIO
- 9 temporary positions required for start-up activities, including:
  - 0.5 Assistant Corporation Counsel and 0.5 Paralegal, reporting to the OCC and required for a minimum of 12 months from start-up
  - 1 HR Business Partner, 1 HR Recruiter, and 1 HR Management Assistant, reporting to the Director of HR and required for 6-8 months prior to start-up
  - 1 OEM Correctional Emergency Planner, reporting to the Director of OEM and required for 12 months prior to and through start-up
  - 1 Project Manager, 1 Business Analyst, and 1 Data Conversion Analyst, reporting to IMSD's CIO and required for 8-12 months prior to and through start-up, depending upon IT decisions made by the CHCD Director
  - 1 Special Project Manager in DAS to support the self-operation project

Roles which report to Directors other than the CHCD Director (Risk Management, OCC, Procurement, HR, and IMSD) were selected and recommended to the CHCSO project team by the reporting area's director. Each subject area then met with NCCHC Resources' expert medical executive and the project manager during the week of June 10th to discuss the need for the requested positions. Based upon NCCHC Resources' expert advice, modifications were made to each category to more accurately represent need. **Positions included in this report should be considered absolute requirements.**

Temporary staff roles for start-up activities were added due to the substantial workload expected following the creation of the CHCD.

### Hiring Plan

Once the project team established the total number of positions required, members assessed the hiring requirements and timeline to establish a basic hiring plan for all roles. The hiring plan is broken down into five waves and is spread out across 5 quarters from January 2020 to April 2021.

Expert medical executive Peter Heffernan consulted with the project team regarding the appropriate hiring plan for start-up of a new CHCD. Mr. Heffernan advised hiring executive and support staff early in the process, permitting these individuals to appropriately guide and construct the department. This plan allows the County to strategically onboard staff in a manner that will help build institutional knowledge and ensure that director level positions have time to establish appropriate policies and procedures prior to go-live of the self-operation function. It also provides as much time as possible to account for potential hiring difficulties for hard-to-fill roles. The recommended hiring plan is as follows:

Quarter Hired	Position Title	# of FTEs
<b>1 (January - March)</b>	Administrative Assistant, Executive	1.0
	Chief Psychiatrist	1.0
	Compliance and Policy Analyst	1.0
	Correctional Health Care Director	1.0
	Director of Clinical Services	1.0
	Director of Mental Health Services	1.0
	Director of Nursing	2.0
	Director of Operations	1.0
	Health Services Administrator	1.0
	Contract Manager (Procurement)	1.0
	Special Project Manager (TEMP)	1.0
	<b>TOTAL QUARTER 1:</b>	<b>12.0</b>

Quarter Hired	Position Title	# of FTEs
<b>2 (April – June)</b>	Administrative Assistant, Operations	1.0
	Finance and Administration Manager	1.0
	HR Business Partner	1.0
	HR Business Partner (TEMP)	1.0
	HR Manager	1.0
	HR Management Assistant	1.0
	HR Management Assistant (TEMP)	1.0
	HR Recruiter	1.0
	HR Recruiter (TEMP)	1.0
	<b>TOTAL QUARTER 2:</b>	<b>9.0</b>
<b>3 (July – September)</b>	IMSD Business Intelligence Analyst/Report Writer	1.0
	IMSD Business Analyst	1.0
	IMSD Business Analyst (TEMP)	1.0
	IMSD Data Conversion Analyst (TEMP)	1.0
	IMSD Desktop Support	1.0
	IMSD Project Manager (TEMP)	1.0
	IMSD Technical Analyst	1.0
	<b>TOTAL QUARTER 3:</b>	<b>7.0</b>

<b>4 (October – December)</b>	Accountant	1.0
	Administrative Assistant	2.0
	Billing Specialist	2.0
	OCC Assistant Corporation Counsel	2.0
	OCC Assistant Corporation Counsel (TEMP)	0.5
	OCC Paralegal	1.0
	OCC Paralegal (TEMP)	0.5
	OEM Correctional Emergency Planner (TEMP)	1.0
	Policy and Budget Analyst	1.0
	Buyer II (Procurement)	1.0
	Claims Specialist (Risk)	1.0
	Safety Specialist (Risk)	1.0
	User Experience Coordinator	1.0
	<b>TOTAL QUARTER 4:</b>	<b>15.0</b>
<b>TOTAL 2020 Position Requests:</b>		<b>43.0</b>

Quarter Hired	Position Title	# of FTEs
1 – 2021 (January – March)	ARNP	10.0
	Case Management	3.0
	CMA	6.0
	Dental Assistant	1.0
	Dentist	1.0
	LPN	26.0
	Medical Records Clerk*	3.0
	Medical Records Supervisor	1.0
	Nurse Supervisors	6.5
	Physicians	1.5
	Pool staff – ARNP	1.9
	Pool staff - Psychiatric Social Worker	1.4
	Pool staff - RN/LPN	9.8
	Psychiatric ARNP	4.0
	Psychiatric Social Worker	10.0
	Psychiatric Social Worker Supervisor	2.0
	Psychiatrist	0.2
	Psychologist	1.0
	RN*	32.0
	RN Infection Control	1.0
	RN Mental Health	2.0
	RN Quality Assurance	1.0
	RN Staff Development	2.0
	RN Utilization Management	1.0
Unit Clerk	5.0	
Wellness Coordinator	3.0	
	<b>TOTAL 2021 QUARTER 1:</b>	<b>136.3</b>

*\*To increase the level of service and efficiency, the County anticipates decreasing the current number of medical records clerks and increasing the number of RNs from the current numbers.*

### Costs

The overall cost to provide 170.29 permanent employees and nine temporary employees to establish and run the CHCD is broken down in the table below. The table includes a cost for 2020, 2021, and 2022. The 2020 cost is pro-rated based upon the quarter hired for each position title and does not include the 136.3 clinical roles first hired in 2021. The 2021 cost includes the full 179.3 employees, both permanent and temporary, at an annual rate. The 2022 cost includes the permanent 170.29 employee costs at an annual rate.

The table also includes a low cost, based upon all employees receiving the lowest rate of pay for their pay grades; a midpoint cost, based upon all employees receiving the middle rate of pay for their pay grades; and a high cost, based upon all employees receiving the highest rate of pay for their pay grades.

Costs include signing bonuses for RNs and LPNs.

Year Incurred	Low Cost	Midpoint Cost	High Cost
<b>2020</b>	\$2,898,189	\$3,549,224	\$4,059,138
<b>2021</b>	\$14,473,196	\$17,622,345	\$19,487,468
<b>2022</b>	\$15,944,493	\$19,639,157	\$21,716,161

Using the organization chart as a basis for all required position titles, project leads from the Office of Performance, Strategy, and Budget (PSB), HR, and the Comptroller’s Office collected and reviewed JEQs for all roles required by the new department. For most roles, an existing County position with a similar title was available for comparison. These roles will be referred to as “existing roles” in this report. Expert consultants from NCCHC Resources reviewed all JEQs for existing roles to ensure that they could be used to recruit for correctional health staff and support staff. For purposes of this report, the pay grades of existing roles were used as-is and were not modified to include additional bonuses or incentives.\* Should recruitment or retention of any position prove difficult, it may be necessary to increase pay or incentives for these roles in the future.

*\*Registered Nurses are an Existing Role within the County and receive a \$7,500.00 signing bonus. This bonus was included in calculating the overall cost to the County.*

Some roles do not currently exist at Milwaukee County. For these new roles, the CHCSO project team wrote, and NCCHC Resources reviewed, new JEQs for each role. These JEQs were then provided to Compensation for salary determinations and pay grade assignments. However, without historical data regarding hiring specific to Milwaukee County, it is possible that these roles may require modifications in salary or benefits to recruit and retain qualified individuals. Costs may change based upon any necessary modifications.

Costs for hiring each role are pro-rated for the year of hire based on the quarter in which the role is to be onboarded. Roles onboarded later in the year will represent a lower cost than roles onboarded earlier in the year. For 2022, the full cost of each role is presented. A complete version of the hiring plan, including position title, number of FTEs, pay grade, low, midpoint, and high salary, Wellpath midpoint salary, salary difference (County vs. Wellpath), total annual salary (low, mid, and high), benefits values, total cost, and 2020 cost from quarter hired is provided in Appendix D: Estimated Cost Details.

**Cost Concerns**

Several areas of concern arose throughout the process of identifying necessary personnel for the CHCD and the related costs for those personnel. These areas included:



1. **Chief Psychiatrist Recruitment and Retention** - Historically, Milwaukee County has not been able to recruit and retain a Chief Psychiatrist for the correctional health care function. Previous third-party vendor Armor was similarly unable to fill the role. Filling the Chief Psychiatrist role with a full-time, 40-hour-per-week employee is an area of high focus and concern for the Court Monitor. Current third-party vendor Wellpath was able to fill the Chief Psychiatrist role, but is presently paying approximately \$250.00 per hour, or \$520,000.00 per year to the individual, who is not a permanent employee. The total cost to Wellpath for this staff member, including benefits and other incentives, appears to be approximately \$600,000 per year.

The Chief Psychiatrist role for a self-operation model is listed at pay grade 904E - NR, with a low salary of **\$138,641.00**, a midpoint salary of **\$212,948.00**, and a high salary of **\$305,844.00**. The difference between the current salary provided through Wellpath and the County's proposed high salary is approximately **\$214,156.00**, not including benefits and other incentives. The project team was concerned about this disparity and requested that NCCHC Resources comment. NCCHC Resources advised that in the Spring 2019 edition of CorrectCare, a magazine published by the NCCHC, full-time psychiatrists are presently being recruited for the California Department of Corrections with a salary range of **\$261,612.00 to \$314,352.00**. NCCHC Resources further advised that California correctional provider salaries are generally considered the highest in the United States.

Based on this information, the project team does not believe that salary is the primary barrier to filling the Chief Psychiatrist role. However, it does appear that some other factor(s) in the Milwaukee market are making recruitment difficult. The County should be prepared to offer a substantial increase over the existing salary band or make other benefits concessions to fill the Chief Psychiatrist role, if needed. The County should also engage in additional research during the transition period to determine if other circumstances or issues are affecting its ability to recruit and retain a Chief Psychiatrist.

2. **Registered Nurse Recruitment and Retention** - Historically, the County also struggled with recruitment and retention of RNs. In the 2019 Audit report, a note was entered indicating that Armor was not meeting mandatory staffing levels required under its contract. The primary categories that Armor struggled with were RNs and psychiatrists. Today, the County offers a **\$7,500.00** signing bonus to new nurses, which is included in the 2021 staff costs. The County will also need to offer a \$7,500 signing bonus to LPNs. This cost is approximately **\$435,000.00** for the 2021 year. Because turnover rates are unknown, an additional amount of **\$108,750.00** is set aside for signing bonuses in the 2022 year, representing an assumed turnover of approximately 25%. In addition to the signing bonuses, there is a wage parity issue between the salary offered by the County and the salary currently offered by Wellpath. For self-operation, Milwaukee County places RNs in pay grade N001, with a midpoint salary of **\$70,346.00**. This midpoint salary is approximately **\$3,150.00** less than the Wellpath midpoint salary for RNs.

The current organization chart requires 32.0 FTE RNs. This wage discrepancy will result in significant recruitment issues for the County when attempting to hire RNs. A similar problem

exists, although not to the same magnitude, for NPs (10.0 FTEs), LPNs (26.0 FTEs), CMAs (6.0 FTEs) and the Dental Assistant (1.0 FTE). Using the midpoint salary and signing bonus may not represent the true cost of recruitment and retention of nurses in the self-operation model. This area is also an area of specific focus and concern for the Court Monitor. Therefore, the County should be prepared to offer a substantial increase over the existing salary band or make other benefits concessions to fill the nursing roles, if needed. The County should also engage in additional research during the transition period to determine if other circumstances or issues, such as parking or shift differentials, are affecting its ability to recruit and retain qualified nurses.

3. **Physician Recruitment and Retention** - Historically, the County struggled with recruitment and retention of prescribing physicians. One of the root causes of outsourcing in 2013 involved the unavailability of prescribing physicians, which resulted in reduced care to the County's patient population. A wage parity issue also exists between the salary offered by the County and the salary currently offered by Wellpath for physicians. For self-operation, the County places physicians in pay grade P025, with a midpoint salary of **\$211,572.00**. The midpoint salary is approximately **\$38,000.00** less than Wellpath's midpoint salary for physicians. Therefore, the County should be prepared to offer a substantial increase over the existing salary band or make other benefits concessions to fill the physician roles, if needed. The County should also engage in additional research during the transition period to determine if other circumstances or issues are affecting its ability to recruit and retain qualified physicians.
4. **Softs** - Another area of cost concern for the County is "soft" benefit costs. For example, during the project team's research regarding recruitment and retention of nursing staff, the team became aware that availability of paid parking within safe walking distance of the facility was impacting Wellpath's recruitment and retention efforts, particularly for staff working second and third shifts. The County presently does not pay for parking for Courthouse or Criminal Justice Facility (CJF) staff. Wellpath not only pays for parking, but found it necessary to provide that parking much closer to the facilities than it originally intended to, representing a net cost increase for personnel. Other softs may play a role in recruitment and retention of staff. The County should be prepared to offer these kinds of soft benefits, if needed, and should engage in additional research during the transition period to determine which softs are affecting its ability to recruit and retain health care providers.

### Assumptions

The following assumptions were made in providing the recommendation in this document:

1. **It is assumed that the County must transition to a self-operated model of correctional health care on or before April 1, 2021.**

This assumption is based upon Resolution 18-898 and the current Wellpath contract, as the project team understands those documents and their related timelines. The project team is comfortable with delaying time frames, but believes guidance and direction from the Board is

necessary to ensure any delay is agreed on by all parties and is in the best interests of the County. Any delay of start-up would change the proposed 2020 position requests.

- 2. It is assumed that the Christensen Consent Decree will remain in force in 2020 and 2021. It is further assumed that the Court Monitor's matrix (Appendix B: Clinical Required Positions) governs position titles and number of FTEs required for medical roles.**

This assumption is based upon the team's understanding of the position of the County, information provided by Corporation Counsel, and conversations with NCCHC Resources and Wellpath. The Court Monitor's first 2019 report became available in late May, and was not taken into consideration when making the recommendations in this report. Any change to the Consent Decree status or modification to the 128.8 (127.2 in 2021) positions in Appendix B would impact the proposed position request and materially modify the parameters of this project.

- 3. It is assumed that once hired, the new CHCD's director will not change or modify positions in the organization chart.**

This assumption was used only to allow the County to provide a basic number of employees and to establish a baseline cost to be supplied to the County Board in September. Should the new director add, abolish, or modify positions, those changes may have a material impact on this report and the overall project costs.

- 4. It is assumed that once hired, individuals will require additional on-site County space and access to equipment and office supplies.**

This assumption is based on the fact that Wellpath presently occupies all clinical space, as well as on the fact that certain roles will be dual-filled (Wellpath and County will each have a medical director in Q2 of 2020, for example) during start-up. Costs of on-site County space will be included in the September report. If staff are not hired, work remotely, or share existing clinic space, those changes would impact budget requirements.

- 5. It is assumed that all positions requested by non-CHC (correctional health care) departments (IT, finance, Risk Management, OEM, HR, etc.) are required as requested and are vital roles. It is further assumed that any reduction in these requested roles will have material impact on the County's ability to perform the correctional health care function.**

This assumption is based on a project-wide acknowledgement of each departmental area as its own subject matter expert, and meetings among each departmental area's team leader, NCCHC Resources experts, and the project manager to discuss position needs and ensure appropriate scaling of requests. Additional third-party assessment of these needs was not performed.

- 6. It is assumed that all roles which report to a Director or Department other than the CHCD (IT, HR, Risk Management, OCC, and Procurement) will be funded through that Department's budget and any questions regarding the necessity of other Departmental positions will be answered by the requesting Department.**

This assumption is based on the acknowledgment by the CHCSO project team that we are not experts in any divisional or departmental area's functions. While the CHCD cost provided to the Board in September will include these roles, the team's understanding is that roles not reporting to the CHCD director will not be paid for through the CHCD's budget. These costs should still be considered. The CHCSO project team will rely on the Department or Director to provide answers to any specific or technical questions related to position requirements for a particular area other than the CHCD.

**7. It is assumed that start-up efforts will require additional staff time and may require temporary staff or other contracted roles to complete successfully.**

This assumption is reflected in the additional requested positions from HR, OEM, and OCC, which account for the increased workload of start-up efforts.

**8. It is assumed that the County will purchase an "out of the box" corrections-based EHR system that does not require advanced technical configuration, integrations, or ongoing support. It is further assumed that should the County opt to purchase an EHR solution requiring these kinds of configuration and support, an increase in IMSD staff will be required.**

This assumption is based upon research performed by Procurement with input from NCCHC Resources, BHD, and IMSD regarding the type of EHR system required to appropriately serve Milwaukee's incarcerated population. It is further based upon the understanding that highly configurable systems require substantial staff time and may not produce operational efficiencies in the area of correctional health care. Additional information will be provided in future reports regarding technology planning and purchases. This report focuses on a limited number of IMSD staff required to support existing County systems and processes as well as to support approximately 130 new medical professionals. More IMSD staff may be required if the County adopts a highly customizable EHR system, such as those used in a hospital setting.

**9. It is assumed that the County will self-perform third party administration, utilization management, and billing functions.**

This assumption is based upon the current capabilities of our correctional health care provider's EHR system. Should the County opt to purchase an EHR system that provides third party administration, utilization management, and/or billing services, or should the County contract with an entity that provides these services, one or both of the Billing Specialists may no longer be required.

**10. It is assumed that the self-operation model utilized by Milwaukee County prior to outsourcing care was not adequate, and that changes are necessary to that model to ensure appropriate provision of care.**

This assumption is based upon reports from staff and the Court Monitor regarding struggles the County faced pre-2013. As a result of this assumption, the project team has not materially relied upon any model, process, or procedure when building the new CHCD. Instead, the project team focused on current state needs and requirements to establish the necessary number of

positions required to successfully provide an appropriate level of patient care and perform other health care related operations.

- 11. It is assumed that technology systems, continuous quality improvement (CQI), and other data-driven metrics will be gathered once the County self-operates the correctional health care function. It is further assumed that the positions in this request are not static, and may change in response to improved technology, CQI measures, and other metrics.**

This assumption is based upon the knowledge that well-functioning technology systems and processes can create operational efficiencies which may, over time, reduce operational costs and staff requirements. However, in this proposal, it was not assumed that these systems would exist immediately upon go-live. Therefore, the number and title of positions within the department may change as the department grows, improves, and establishes a mission, vision, and goals through its director that impact its function and focus.

Citations:

Kenton, W. (2019, May 20). What You Need to Know About Economies of Scale. Retrieved from <https://www.investopedia.com/terms/e/economiesofscale.asp>

## Technology

### Summary

Information technology is a critical component of modern-day health care service delivery. In a corrections health care environment, information technology is used to manage health care records through a system called an electronic health record system, or EHR. In addition to the EHR, information technology may be used to provide telemedicine services, manage jail populations through a system called a jail management system, or JMS, and to assist in business improvement and cost containment through business intelligence and business analytics.

In our usage, business analytics “refers to the skills, technologies, [and] practices for continuous iterative exploration and investigation of past business performance to gain insight and drive business planning.” (Beller, 2009)

Business analytics are used to perform or support several critical functions for the health care operation, including utilization management and claims analysis, clinical and administrative training, continuous quality improvement, grievance management, and other statistical reporting functions. Many of these critical functions are required under the 2018 NCCHC *Standards for Health Services in Jails*. Technology systems may either be required to perform a function, or may represent a method the County can use to automate or streamline processes and either improve outcomes or reduce staff time spent on a particular function.

In our current environment, many of these technology systems and their related technical infrastructure (such as hardware and equipment) are provided by our medical services vendor, Wellpath. Most of the technology is not the property of Milwaukee County and will not become our property at the end of the contract. As a result, the CHCSO project team and NCCHC Resources performed a technology needs assessment to understand what systems we presently use and to determine how we will provide similar functions in the future under a self-operation model. More information regarding the methodology for the technology assessment is included in the Methodology section, below.

### Recommendations

The CHCSO project team makes the following recommendations:

#### **Electronic Health Record**

For at least the first year of full self-operation (April 2021 – April 2022), the CHCD should continue to utilize Wellpath’s EHR, ERMA. The project team recommends the CHCD wait until 2022 to RFP for and implement a new EHR tool, if such an action is warranted and requested by the new CHCD director.

Milwaukee County’s contract with Wellpath permits the County to purchase ERMA at the expiration of the contract’s term. In addition, the RFP required Wellpath to provide the County with a detailed plan to

ensure the successful transfer of ownership of ERMA-related equipment to the County upon contract termination. Purchase of ERMA involves the transfer of ERMA software rights to the County at a cost of \$0.075 per patient per day. For the County's ADP (average daily population) of 2,300, that cost is approximately **\$62,963.00 per year**.

Continued use of ERMA will result in short-term cost savings and reduced complication during the transition period, which is expected to occur between 2020 and 2022. Cost savings and business efficiencies are recognized in the following ways:

- **EHR RFP creation and vendor selection** - To select a new EHR vendor, a formal bid or RFP process is required due to the dollar value of the procurement. All EHR systems will be over the \$50,000 threshold set for formal bids in the Milwaukee County Code of General Ordinances (MCGO). Drafting an RFP for a new EHR is a complex and expensive task. A comparable RFP example is the RFP crafted for the County's ERP (enterprise resource planning) system, which required hiring outside consultants and substantial existing staff time to complete. Costs for RFP creation and implementation are unknown, but could range from \$50,000 to \$500,000. In addition to the cost, writing an RFP requires the support of the CHCD to ensure that an appropriate and effective product is procured. During the transition period, the CHCD's executive office is likely to be heavily burdened and most members of staff will be new to the County. Adding the procurement of a new EHR system to the already heavy workload of these staff is not an efficient use of their time in the early stages of the transition, and may result in diminished quality of the RFP or other work tasks performed by the executive office. It is advisable to maintain ERMA for the first two years of self-operation to permit the CHCD executive office to learn the health care operation, identify areas of need, and establish stability before transitioning to a new EHR
- **EHR implementation and transition fees** - The purchase of a new EHR system includes transition and implementation fees in the first year of the EHR's contract. The County received approximately \$225,000 - \$250,000 in value from Wellpath through the transition between CorEMR (Armor Correctional's EHR system) to ERMA. The County did not pay any additional fee to Wellpath for this transition. Should the County opt to move to a new EHR, we would need to pay the new provider for implementation and transition support, which varies in price depending on the complexity of the EHR and the environment in which it is implemented. This cost would not be incurred if the County continued with ERMA.
- **Transition Complications and Data Conversion** - Conversion of data between two EHRs can be a complex and costly process. Wellpath experienced issues with transition of data between CorEMR and ERMA that necessitated temporary, but costly and inefficient, work-arounds. Transition complications are difficult to predict. These complications would require additional staff time from IMSD and the CHCD to ensure appropriate delivery of health care. Transition complications should not discourage the County from seeking the best quality and

most appropriate EHR system. However, it is wise to approach any transition with a plan for complications and at a time in the health care function's operational maturity that will limit potential disruption of service delivery. Based on this knowledge, it is the project team's advisory opinion that a data conversion and EHR transition should not occur during the self-operation transition period (2020-2022).

- **EHR Integrations** - Presently, ERMA is integrated with Milwaukee County's JMS, ProPhoenix; Clinical Solutions, the County's pharmacy provider; and the Wisconsin Statewide Health Information Network (WISHIN), as required by the contract. Similar to the data conversion process, should the County transition to a new EHR provider, new integrations would need to be developed. This development will come at a cost to the County that cannot be estimated at this time, and will add a layer of complexity to the transition period that may result in reduced efficiency and patient care outcomes. ERMA's integration with our systems represents material value to the County, and the project team recommends we continue to leverage that value until 2022.

### **WISHIN**

The CHCSO project team recommends that Milwaukee County continue to utilize WISHIN, the Wisconsin Statewide Health Information Network, to access Wisconsin's statewide electronic health information exchange (HIE). The project team recommends maintaining our current level of service by participating in WISHIN Pulse with an EHR integration.

The anticipated cost to the County of participation in WISHIN is approximately **\$47,336.90** for the first year of service (2021). That cost includes an estimated **\$37,874.50** from IMSD for one-time implementation costs, **\$4,462.00** for the annual WISHIN Pulse subscription, and approximately **\$5,000.00** in costs for integration with the EHR vendor, which are likely to be passed on to the County. Future year costs for WISHIN participation will be approximately **\$9,462.00**, representing only the subscription fee and vendor cost.

WISHIN is "an independent not-for-profit organization dedicated to bringing the benefits of widespread, secure, interoperable health information technology to patients and caregivers throughout Wisconsin." ("About WISHIN") Additional information about WISHIN is available through the WISHIN website at [www.wishin.org](http://www.wishin.org).

Because WISHIN is the state-designated entity responsible for governing the statewide HIE and implementing Wisconsin's Strategic and Operational Plan (SOP) written by the Wisconsin Relay of Electronic Data (WIRED) for the Health Board and Department of Health Services, participation in WISHIN by municipal entities such as Milwaukee County is logical and represents alignment with state policies and procedures. WISHIN will permit the County to access patients' health care records at an array of health care providers throughout the state without requiring the County to establish costly interfaces with each of those providers' EHR systems. Milwaukee area WISHIN participating providers include Aurora, Froedtert, Lakeshore, and Wheaton Franciscan, among others.



### Telehealth Services

The CHCSO project team recommends that Milwaukee County contract with Wellpath to continue the use of Wellpath’s telehealth services for as long as the County uses ERMA as its EHR provider. This recommendation is based upon ease of implementation during the transition period (2020-2022) and recommendations from BHD’s Dr. John Schneider, MD, FAPA, regarding the design of our new system and the impact fragmentation of health care can have on patient outcomes (Appendix E: Increased Fragmentation of Health Care Results in Worse Outcomes and Increased Cost).

Today, Milwaukee County receives telehealth services through Wellpath. The anticipated cost to the County of continuing these telehealth services through a contract with Wellpath is approximately **\$4,000.00** annually for equipment and connectivity. In addition to the annual equipment cost, provider costs will be incurred. Milwaukee County may need to contract with individual providers to provide telehealth services through Wellpath’s system. The current cost for psychiatry services is **\$265 per hour**, and the cost for other sub-specialties can range from **\$800 to \$1,000 per four hour block**. Because telehealth services are often utilized on an as-needed basis, the annual cost of telehealth will vary dependent upon use.

This recommendation relies on best practice information provided by Dr. Schneider of BHD. Dr. Schneider’s advice indicates that integration of care and care systems produces better outcomes. An example of integration of care is utilizing Wellpath’s EHR, ERMA, in combination with Wellpath’s telehealth services. The alternative would be to continue to use ERMA, but find and contract with another telehealth provider. This is what is referred to as “fragmentation of care.” In Appendix E, Dr. Schneider provides further explanation of the issues related to fragmentation of care and the impact of un-linked, un-coordinated care systems on patient outcomes and utilization management. Because the correctional health area is prone to coordination concerns as a result of an ever-changing patient base and varying care requests as well as the need to refer patients out to many different types of specialists, adding another area of fragmentation is not considered best practice. Therefore, it is recommended that the County make every effort to decrease fragmentation by opting for integrated systems wherever possible.

### Hardware and Standard Software

The CHCSO project team recommends that IMSD’s standard process and procedure be followed in the procurement and implementation of hardware and standard software for the new CHCD. In partnership with the CHCD, IMSD will procure and implement necessary hardware and software in a manner appropriate to maintain the County’s overall technological posture and to ensure IT security and operability. These hardware and software costs include common workplace tools such as laptops, desktops, phones, cell phones, Windows operating systems, and Microsoft Office software.

IMSD provided a cost quote for hardware and standard software for the CHCD. The total expected cost for 2020 is **\$117,467.00**. The total expected cost for 2021 is **\$450,760.00**. The total expected cost on an annualized basis thereafter (2022 and beyond) is **\$203,959.00**.

### **Costs**

Costs for the provision of technological support to the new CHCD for self-operation of the correctional health care function is broken down into the following areas:

- Electronic health record
- Telehealth/telemedicine services
- WISHIN/HIE
- Standard hardware and software (computers, printers, phones, Microsoft products)

The costs listed include one-time costs and ongoing, annualized support costs. The table below breaks out each cost by cost type and year incurred.

Cost Type	Year Incurred	Total Cost
Electronic health record	2021 - Annualized	\$62,693.00
Telehealth services – equipment only	2021 - Annualized	\$4,000.00
WISHIN implementation	2021	\$37,874.50
WISHIN subscription cost	2021 - Annualized	\$4,462.50
WISHIN EHR vendor cost	2021 - Annualized	\$5,000.00
IT equipment	2020	\$51,388.00
IT equipment	2021	\$148,800.00
Network equipment and Professional Services	2021	\$98,000.00
Software (CHCD personnel)	2020	\$17,568.00
Software (CHCD personnel)	2021	\$158,940.00
Software (other new personnel)	2020	\$12,960.00
Software (other new personnel)	2021	\$45,019.00
Annual IT support cost (CHCD personnel)	Annualized	\$158,940.00
Annual IT support cost (other personnel)	Annualized	\$45,019.00

The total IT cost for 2020 is estimated at **\$81,916.00**. The total IT cost for 2021 is estimated at **\$564,789.00**. The total IT cost on an ongoing, annualized basis (2022 and after) is **\$280,115.00**, not including hardware replacement costs.

### Assumptions

The following assumptions were made in providing the recommendations in this document:

- 1. The IT section of this Self-Operation Analysis does not include the costs of IMSD staff. These staff costs are included in the Personnel section.**
- 2. Milwaukee County will not attempt to undertake any major systems changes (EHR, network, equipment) in the clinic areas during the transition period (2020-2022).**

This assumption is based on concerns surrounding the complications of transition and the need for uninterrupted service delivery. A transition from a vendor-managed to a self-operated model of care will be inherently complex. Many failure points will already exist. Because the County's current systems, including the ERMA EHR, will be available to the County in the transition period and do not need immediate overhaul, it is strongly recommended that these systems remain in place until the transition is finished.

Further, the new CHCD Director, Clinical Services Director, Mental Health Services Director, Chief Psychiatrist, Health Services Administrator, Operations Director, and Directors of Nursing should be included in any decisions related to the long-term operations of the health care function. System design and software choices, especially those as critical as the EHR, should not be made without the input of these executives. To allow for the best possible decision making, these executives should be permitted 1-2 years operating in the current environment before making major system design changes. This will permit the executive office staff to fully understand the County's needs and make a reasonable and business-oriented decision. Therefore, should the County opt to issue an RFP for a new EHR or make other major systems changes, that action should be taken in 2022 or later.

**3. IMSD's recommendations are considered best practice and most appropriate for the County's needs.**

Many recommendations in this section of the report, including number of IMSD staff required to perform certain functions, costs of technology and annual support, etc. were provided to the project team by IMSD. While conversations were held regarding costs, recommendations of IMSD were not separately challenged or debated among the project team. IMSD is considered the technical expert and responsible authority best positioned to deliver high quality information technology services and to ensure the County follows best practices in the industry.

**4. HOC and MCJ clinical technology equipment, such as printers, multi-function devices, phones, laptops, desktops, tablets, etc. will be purchased in 2021 and will not need replacement for at least 3-5 years.**

This assumption is based on the project team's understanding of the technology lifespan of the items above. In creating the budget for this project, the project team did not estimate annualized replacement costs for IT equipment. This cost may range anywhere from \$0.00 to \$200,000.00 per year or more, based upon changes in information technology and the type of equipment required to support the health care function.

**5. Telehealth services costs are represented in this section of the report as costs for equipment only.**

Telehealth services are split into two cost areas: the cost of equipment necessary to provide the service (computers, monitors, cameras, internet connection) and the hourly cost of clinicians providing the actual care. In this section of the report, only the cost of equipment is included. It is difficult to estimate the total annual cost of provider hourly rates, as these rates may vary based on the utilization of services. More hours will result in higher provider costs.

**6. Telehealth services will not be substantially expanded within the first 3 years of self-operation implementation.**

Presently, telehealth services equipment is estimated at \$4,000.00 per year. This cost represents the current equipment needed to provide telehealth services on a limited basis at the Milwaukee County Jail. Expansion of the telehealth services program could result in unknown increased costs.

### Methodology

#### Electronic Health Record

To arrive at the recommendation for the electronic health record provided in this report, the project team and representatives from NCCHC Resources worked together to review the following:

- The cost to the County of purchasing the current EHR (ERMA) from Wellpath at the termination of Wellpath's contract
- The cost of other comparable corrections-based EHR products available to the County
- The cost of other non-corrections-based EHR products available to the County
- The cost and staff time required to issue a robust RFP for a new EHR system
- Any risks of transitioning to a new EHR system, such as data conversion, time, and expense

To determine the cost to the County of purchasing ERMA, the project team consulted Wellpath's contract and requested that Wellpath provide an all-in, 5-year cost estimate for the use of ERMA following the contract's termination. Wellpath responded by providing a single cost for ERMA based on Milwaukee County's ADP. Wellpath advised that the cost of ERMA is represented as **\$0.075 per patient per day**. With an ADP of approximately 2,300, that means our annual cost for ERMA will be approximately **\$62,963.00**. Please see Appendix F: Electronic Health Record Proposals for more information.

To determine the cost to the County of procuring a comparable corrections-based EHR product, and to determine if a competitive solicitation method would be required, Procurement's project lead contacted a number of organizations offering corrections-based EHR products and requested all-in, 5-year cost estimates for the implementation, licensing, and ongoing maintenance of their product. Of the entities contacted, four responded: NaphCare, CorEMR, Fusion Health, and CorrecTek. Solutions ranged from approximately \$65,000 to \$350,000 annually. Implementation costs ranged from \$200,000 to almost \$2,000,000. The average annual cost of an EHR solution (determined by averaging cost estimates provided by responding vendors) is **\$160,500.00**. The average implementation cost (determined by averaging implementation cost estimates provided by responding vendors) is **\$648,978.75**. The average Year 1 cost, including the annual license cost, support and maintenance, and implementation fees is **\$717,579.60**.

To determine the cost to the County of procuring a non-corrections-based EHR product, and to determine if a competitive solicitation method would be required, Procurement's project lead and IMSD's project lead contacted three major organizations offering community health based EHR products

and requested all-in, 5-year cost estimates for implementation, licensing, and ongoing maintenance of their product. The entities contacted were EPIC, Cerner, and GE Centricity. Of the entities contacted, Cerner and GE Centricity did not respond to contact requests via phone or email. EPIC responded to contact requests, but was unwilling to provide a written estimate. EPIC advised IMSD contacts that an estimated cost for the County's use would be a minimum of \$10,000,000.00. EPIC was unwilling to provide further data to our team at this stage in the project.

Based on the above, the project team came to the following conclusions:

- Any purchase of a new EHR system would require competitive award
- Purchase of a community health EHR system is unlikely based on extremely high cost and general disinterest of vendors
- Purchase of a new EHR is likely to represent a substantial cost increase from the current system (ERMA)

In addition, the project team discussed with Wellpath, the HOC and MCJ staff, NCCHC Resources, BHD, and IMSD, concerns related to the transition from one EHR to another. Concerns included data conversion, training, and the expense of such a transition. Wellpath was asked to provide a document indicating the struggles they faced transitioning to ERMA from CorEMR. This report has not yet been received. However, the project team understands that these kinds of transitions are both complex and costly, and can result in reduced service delivery to patients during the transition. Based on the expert advice of BHD, NCCHC Resources, and Wellpath, the project team determined that it would be unwise to perform the transition to a new EHR concurrently with the transition from vendor-managed patient care to self-operated care.

Therefore, the project team sought to determine whether the County could continue with ERMA during the transition period. Based on a review of County ordinances and guidance related to sole source procurements, the project team determined it is legally possible to purchase ERMA following the termination of Wellpath's contract. The project team recommends this course based on the cost and complexity of procuring a new EHR and transitioning to that EHR. The project team further recommends that the County consider issuing an RFP for a new EHR in 2022 or beyond to ensure that the EHR most appropriately suits the County's needs, but believes this decision is best made by the CHCD Director.

### **WISHIN**

The Wisconsin Statewide Health Information Network is

building a statewide health information network to connect physicians, clinics, hospitals, pharmacies, and clinical laboratories across Wisconsin. The Statewide Electronic Health Information Exchange (HIE) allows providers real-time access to a patient's records at other facilities and can lead to better clinical decisions, less duplication, more effective transitions of care, and reduced administrative costs. ("About WISHIN")

The community health record is vital to ensure continuity of care for patients upon release. The HIE also reduces the correctional medical provider's (Wellpath or the County's) need to integrate with multiple other providers' EHR systems, which can be costly and difficult.

WISHIN typically works with an EHR vendor to set up one or more automatic data feeds from the EHR to the community health record. These feeds are usually real-time, and do not require any manual intervention from the provider(s).

In RFP 98180020: Correctional Medical Services, the County required that the winning vendor become a participant in WISHIN to promote better efficiency in the delivery of health care services and to ensure continuity of care for patients upon release into the community. The winning vendor was required to pay subscription fees and comply with all necessary restrictions, staff training and usage, and federal HIPAA regulations. The winning vendor also agreed to commit and build required resources to access the web portal, including commitment of technical resources to interface the EHR with the WISHIN network. In order to continue to provide a high level of care and ensure continuity of that care to patients after their release from incarceration, the County must maintain its relationship with WISHIN. The relationship with WISHIN will also permit the exchange of patient records with other EHRs for local providers, reducing the need to develop costly interfaces or purchase a more expensive EHR product.

Because the County will assume control of ERMA upon termination of the Wellpath contract, interfaces between ERMA and WISHIN will not need to be rebuilt, saving the County money and resource time.

To determine the cost of WISHIN to the County moving forward with self-operation, IMSD and NCCHC Resources reviewed the type of subscriptions available to the WISHIN service. Subscriptions vary from simple to complex. The simplest and least expensive form only permits one-way communication. This form allows providers to visit the Pulse web portal and obtain patient records from other participating providers. It does not allow these records to be integrated into the provider's EHR, or for the provider to share records to other providers' EHRs. The more complex and more expensive form includes EHR integration, which allows the provider's EHR to pull data from WISHIN into the EHR in real time. Records are searchable through the EHR and a separate web portal is not required. Due to the nature of corrections health care and the need to continuously obtain records from third-party providers, the project team selected the more robust option.

This option will require a one-time implementation cost. This cost was provided to the project team by IMSD, and is based on IMSD's understanding of the time and resources required from IMSD to complete the implementation. It will also require ongoing subscription costs and estimated EHR vendor costs. The subscription cost was quoted to the County by WISHIN. The EHR vendor cost was estimated by IMSD.

### **Telehealth/Telemedicine Services**

To arrive at the recommendation in this report regarding telehealth/telemedicine services, NCCHC Resources and the project team worked with Wellpath to understand the scale of telehealth services presently provided at the County correctional facilities. Wellpath provided a basic cost for these services and a list of equipment necessary to perform them. IMSD reviewed the information provided to confirm

that the County would be capable of assuming control of the services. Procurement attempted to locate additional telehealth/telemedicine service providers, but was unsuccessful. Most telehealth providers are contracted or connected with an EHR system. The project team discussed this with Dr. John Schneider of BHD, who advised that this is commonly done to limit fragmentation of care and because telehealth services are a combination of technology elements and contracts with specialty providers such as psychiatrists and physicians.

Today, Milwaukee County, through Wellpath, provides mental health services via telehealth to patients in our correctional facilities. In our partnership with Wellpath, we are exploring the potential to expand telehealth services to other specialties, but we have not yet implemented those services.

Because it is unclear what course the County will take under the new CHCD's Director and Clinical Services Director, the project team determined that estimating the costs of telehealth services for specialties other than mental health would be inaccurate and likely to cause confusion.

The project team assessed the cost of telehealth services by assessing the equipment necessary to provide the services and requesting the hourly rate provided to contracted telepsychiatry providers by Wellpath. IMSD confirmed that the equipment necessary to provide the services will likely cost **\$4,000.00 per year**. Wellpath advised that it currently pays telepsychiatry providers **\$250.00 per hour** for care, and that other specialties can cost **anywhere from \$800.00-\$1,000.00 for a four hour block of care, or \$200.00-\$250.00 per hour**.

Wellpath further advised that it is willing to convert the existing telehealth services and provide these services in combination with its EHR, ERMA, as stand-alone services to the County following the termination of its contract. This course is recommended by the project team based on ease of implementation and will reduce service interruption during the transition period. The future course of telehealth services, and costs related to those services, is left to the CHCD Director and Clinical Services Director.

### **Hardware and Software**

Hardware and software cost estimates for this report were provided by IMSD following an investigation of the equipment presently on site at the HOC and MCJ clinics. IMSD discussed with NCCHC Resources and Wellpath the current technology equipment required to provide services and examined the network and hardware available at both sites. IMSD also discussed future planning with IMSD leadership staff to determine the new department's needs. In addition to examining the existing equipment, IMSD utilized its standard formula for new staff to determine additional equipment and software required for new employees in the CHCD as well as new employees in other departments required to support the CHCD. These new employees include administrative and operations staff who will be placed in the CHCD offices, and other departmental staff (HR, IMSD, Risk Management, OCC, Procurement) who will be placed in existing departmental areas.

IMSD also applied its standard formula and costs for new software to determine the overall cost for the department. Formulas are as follows:

- New employee standard software - \$350.00 per person.
- Additional software for new IT employees - \$1,100.00 per person.
- Annual IMSD support cost - \$363.00 per computer device.

Estimates on cost are not exact. Where possible, shift staff may share technology such as tablets, laptops, desktops and phones. All staff will share larger hardware and technology.

Citations:

Beller, Michael J.; Alan Barnett (2009-06-18). "Next Generation Business Analytics". Lightship Partners LLC. Retrieved 2009-06-20.

About WISHIN. (n.d.). Retrieved August 14, 2019, from <http://www.wishin.org/AboutWISHIN.aspx>



## Procurement

### Summary

To successfully self-perform a correctional health care function, Milwaukee County will need to procure Professional Services, Contractual Services, and Commodities. The procurement of these items or services will be performed by CHCD staff in partnership with Procurement. Procurement staff will be tasked with issuing bids and Requests for Qualification or Requests for Proposal, as established and dictated by the MCGO. The MCGO also establishes thresholds for procurement based upon dollar value of a particular contract or purchase.

For the purposes of this report, the items are defined as follows:

**Professional Services** are defined in [MCGO §56.30\(1\)\(a\)](#) as “services, the value of which is substantially measured by the professional competence of the person performing them and which are not susceptible to realistic competition by cost of services alone. The services provided must be materially enhanced by the specific expertise, abilities, qualifications and experience of the person that will provide the service.” For purposes of the correctional health care function, Professional Services will primarily include contracts for telehealth providers, third party medical providers, and other medical services.

**Services** are defined in [MCGO §56.30\(1\)\(b\)](#) as “the furnishing of labor, time or effort by a contractor/consultant, not involving the delivery of a specific end product other than usual reports and/or drawings which are incidental to the required performance.”

**Contractual Services** are defined in [MCGO §32.20\(2\)](#) as “all services except utilities, professional services, chapter 44 public works contracts, and repairs or alterations to buildings or structures.” For purposes of the correctional health care function, Contractual Services will primarily include disposal of hazardous wastes, laundry service (if needed), janitorial services (if needed), and other similar services.

**Commodities** are not defined in the MCGO but are generally defined as economic goods or articles of commerce. Commodities also include intangible products such as technology systems and solutions or other electronic goods. For the purposes of the correctional health care function, Commodities include all tangible goods required for performance of such function and may include things like medical equipment, medical supplies, pharmaceuticals, cleaning supplies, clothing, food products, etc.

It is expected that purchases will be made through the County’s current ERP system. Milwaukee County is presently transitioning from Advantage and MarketPlace Central to INFOR ERP. Because the system is presently not operational and transition will occur in late 2019 and 2020, it is unclear what, if any, impact the INFOR ERP transition process may have on procurement.

## Recommendation and Methodology

The project lead from Procurement was tasked with identifying any additional costs that the County would incur from self-operation of the correctional health care function. Procurement focused its efforts on identifying the largest potential costs to the County, such as service contracts, durable goods, and consumables. Most costs in this report represent best efforts in forecasting based on historical usage. Because the County previously contracted with another third-party correctional health care services provider (Armor Correctional), much historical data was not immediately available. The County also contacted Wellpath, its current third-party correctional health care services provider, to obtain information. Due to the short history with Wellpath, whose contract began on April 1, 2019, forecasting based on Wellpath data was not performed and is not recommended. More accurate forecasting may be available after a year of Wellpath services (April 1, 2020).

In addition to the areas below, Procurement is requesting a 1.0 FTE Contracts Manager for an annual cost of **\$109,067.43** and a 1.0 FTE Buyer II for an annual cost of **\$78,287.09** to support the added workload of inventory management, purchasing, and contracting which will be required under a self-operation model. These positions are discussed further in the Personnel section of this report.

### Medical Supplies and Equipment

**The CHCSO project team recommends** that medical supplies be procured through existing relationships with medical supply vendors or through the Minnesota Multistate Contracting Alliance for Pharmacy (MMCAP). These relationships may be leveraged immediately and reduce the burden on Procurement and the CHCD during the transition period by lowering the number of new RFPs and bids that must be issued between 2019 and 2022. Procurement believes that these existing relationships are positive and represent value to the County. It is not clear if costs could be reduced by issuing a new bid or RFP. Further analysis of spend data over time may indicate whether a bid or RFP for medical supplies in the future would result in savings for the County.

**The CHCSO project team further recommends** that durable medical equipment and related contracts for maintenance on such equipment be handled by Procurement staff. In discussion with FMD, the project team was advised that its staff does not presently provide support to medical equipment or other similar assets in any County buildings. FMD presently provides support only for the building's "envelope," which is defined as the walls, floor, ceiling, windows, and other electrical, water, HVAC, or mechanical systems necessary to provide inhabitable space. Therefore, adding responsibilities of oversight and control of medical equipment to FMD would require hiring additional staff with medical equipment experience. NCCHC Resources and the project team determined that this is not best practice. Most durable medical equipment is maintained through contracts with the equipment manufacturer. Therefore, the project team advises that the County enter into equipment maintenance contracts as needed and that oversight for those contracts should be provided by a skilled Contracts Manager with medical experience.

NCCHC Resources provided a report detailing all medical equipment required for the correctional health care function based upon NCCHC standards in Appendix G: Standard Medical Equipment List. NCCHC

Resources also provided a report detailing the requirements for medical equipment and supplies. This report is available in Appendix H: Self-Operation Medical Equipment Requirements.

The total expected cost for immediate conversion of existing durable goods and consumables from Wellpath to Milwaukee County is approximately **\$35,000.00 for the year 2021**. No costs for medical supplies or equipment will be incurred in 2019 and 2020. Those costs will be the responsibility of Wellpath until the transition to self-operation in 2021.

NCCHC Resources provided a projection of medical supplies cost which is illustrative-only due to the lack of data, but which may be used as the base for the first year of self-operation. This example states that including infirmary, the per-patient cost of medical supplies is approximately \$7.75 per patient per month. For a monthly ADP of 2,300, that cost is **\$213,900.00 per year**. More information regarding this analysis is available in Appendix I: Supply Management Needs.

Consumables usage costs were pulled from Wellpath's historical data. For more information, please see Appendix J: Wellpath 3-Month Consumable Refill List. However, due to the short span of historical data available and the substantial costs incurred in the start-up month (April 2019), this data is not reliable. Procurement requested that Wellpath provide the cost it would charge the County to transfer all in-stock consumables from Wellpath to County ownership for both facilities. The cost provided by Wellpath to perform this transfer is between **\$10,000.00 and \$15,000.00**. The County would then need to account for additional consumables cost on a daily, weekly, and monthly basis moving forward. Much of this cost would be as-needed until enough ordering data was available to perform a statistical analysis on inventory needs.

Durable goods and medical equipment costs were also pulled from Wellpath's historical data. However, again due to the short span of historical data available, this data is not reliable. For this report, Procurement requested that Wellpath provide its average figures for the replacement of major medical equipment and supplies. Wellpath advised that durable goods or larger items are replaced at an average cost ranging from \$0.00 - \$25,000.00 per year. Because existing County equipment is aged, most equipment is not asset tagged and no depreciation schedules are available, NCCHC Resources consultants advised most equipment appears to be at the end of any depreciable life, and because it is impossible to predict the failure rate of this equipment, this report assumes the highest possible replacement spend for years 2020, 2021 and 2022, which is **approximately \$25,000.00 per year**.

The CHCSO project team and NCCHC Resources examined the required services under RFP 981800020: Correctional Medical Services and the services provided by Armor Correctional and Wellpath in the year 2019. Based on the review of these services, NCCHC Resources drafted a list of necessary health services subcontracts to self-perform correctional health care functions.

### **Contractual Services**

This list includes both Contractual Services and Professional Services and can be found in Appendix K: Health Services Subcontracts.

This section of the report will not treat telemedicine or electronic health records contracts, as those items are treated in the Technology section of the report.

**Pharmaceutical services** - The CHCSO project team recommends that Milwaukee County continue the existing contract with Clinical Solutions Pharmacy through the MMCAP.

Clinical Solutions, a Milwaukee County Targeted Business Enterprise (“TBE”) contractor, currently provides distribution and courier services of prescription and stock medications to the County’s third-party health services vendor, Wellpath. Clinical Solutions is responsible for all cost-related packaging and materials and establishes and maintains emergency medications as ordered by prescribers. Clinical Solutions has also already established local pharmacy backup contracts. Presently, Clinical Solutions provides monthly invoice reports which can be audited against MMCAP Infuse wholesale pricing. This pricing model is estimated to save the County about 5% compared to direct market purchasing. The ability to leverage the collective bargaining power of MMCAP Infuse as well as Clinical Solutions’ wholesale acquisition costs and low dispensing fees make this contract an overall value add for the County.

In addition to the value of the Clinical Solutions contract, any modification of pharmacy services or new bid or RFP for pharmaceuticals during the transition period would create additional confusion and potential reduction in service provision to patients. The project team does not advise soliciting or moving to a new vendor during the transition period.

The Clinical Solutions contract is considered a cooperative contract and is therefore permitted under County ordinances without competitive award under [MCGO §32.25\(8\)\(a\)\(3\)](#).

For more information about Clinical Solutions, you may visit their website at <http://clinicalsolutionpharmacy.com/>.

For more information about MMCAP Infuse, you may visit their website at <https://www.infuse-mn.gov/>.

The total cost of the Clinical Solutions contract varies based upon patient use. Unfortunately, at the time of drafting of this report, only three months’ worth of Clinical Solutions cost data was available. Some of this data also represented an entire-stock refresh performed by Wellpath, which is not representative of common usage. Therefore, 2019 forecasting data is not presently available. The 2018 cost for pharmaceuticals purchased by Armor Correctional through Diamond Pharmacy was **\$1,242,198.00**. It is expected that savings from utilizing Clinical Solutions and MMCAP Infuse may offset 2019’s annual increase, but future years are likely to see a cost increase of approximately 9% each year. This percentage is based on the County’s assessment of past spend for pharmaceuticals. Under the current contract, Milwaukee County shares pharmaceutical costs with Wellpath. The County pays \$750,000.00 on a prorated basis and then pays 25% of any costs over that amount. Wellpath pays the remaining 75%.

**Biohazardous waste removal services** - The CHCSO project team recommends that the CHCD work with Procurement, the executive office, and other Departments to ensure the HOC and MCJ clinic sites are

included on the County's existing medical waste removal contract. The current vendor provides medical waste removal for the Medical Examiner's Office, DHHS-BHD, and the MCSO, and their contract expires in October 2020. Utilizing a County-wide contract creates efficiencies, allows departments to leverage the scale of the contract to reduce costs, and simplifies the contracting process.

The estimated cost for the clinic sites is based upon Wellpath's stated usage of their own medical waste contract, with one pickup per facility per month. The per-pickup charge under the County's current contract is \$170.00 per site, or \$340.00 total per month for both clinics. The estimated annual cost is **\$4,080.00**.

**Bilingual translation (interpretive services)** - The CHCSO project team recommends that the County utilize its existing translation service provider, LanguageLine, for translation and interpretive services during the transition period. LanguageLine's master contract with the County is presently used by the District Attorney's Office and has been considered by General Mitchell International Airport and DHHS. The pricing for this service is based on a **per minute charge of \$0.72** and may vary annually based on the use of the service.

The master contract is presently used for over-the-phone services only. Should the CHCD Director or executive staff wish to utilize on-site services, additional costs may apply and a contract amendment would be required.

The current contract includes four renewal terms of 1 year each. The final termination date of the LanguageLine contract is December 31, 2023.

**Nutritional services** - The CHCSO Project recommends that the County continue to utilize its existing contract with Aramark for food services and nutritional services at the MCJ and HOC. The NCCHC *Standards* require that all patient medical diets are reviewed at least annually by a registered dietitian nutritionist or other licensed, qualified, nutrition professional. Today, Aramark provides that service when diet information is received from the Wellpath prescribing physician.

This cost (for both MCJ and HOC) is presently contained in Aramark's contract with the HOC and therefore is not included in the 2020, 2021 or 2022 CHCD budget projections.

Upon transition to self-operation, the CHCD staff should closely examine the relationship with Aramark to ensure appropriate review is occurring and that all medical diets are in compliance with NCCHC *Standard J-D-05*. Should CHCD staff wish to make a change based on this examination after the transition, additional costs may apply.

**Negative air pressure rooms (testing and repair)** - The CHCSO Project team recommends that the County continue to contract with Honeywell Building Solutions for monitoring of the isolation rooms located at the MCJ. FMD presently holds and pays for this contract. The cost of this contract is therefore not included in the 2020, 2021 or 2022 CHCD budget projections.

The testing and repair of the negative air pressure rooms (isolation rooms) falls within FMD's scope as "part of the building envelope." The project team recommends that this contract and the related services remain the responsibility of FMD and that FMD ensure the appropriate function of the rooms as they see fit.

The project team further advises that FMD work with the CHCD Director and executive office staff, in particular the Clinical Services Director, to ensure that the maintenance and support of the isolation rooms is understood and is occurring appropriately and according to clinical standards.

**Laundry services** - The CHCSO project team recommends that the County continue to leverage laundry services provided by the HOC. Today, the HOC provides laundry services for County divisions and departments at no charge.

Should this model change, a charge may be assessed in the future or a vendor may need to be selected.

**Secure transport** - The CHCSO Project team recommends that the CHCD work with the HOC and MCSO to leverage the existing secured transport contract. The current contract is held by G4S and is used for all secure transports from County correctional facilities to other locations, including court appointments, transfers to city, state, or federal correctional facilities, and medical appointments.

The current secure transport contract has an annual value of approximately \$2.6 million per year and is held by the MCSO. The contract has options to extend until 2021. Once the contract expires, the CHCD Director and executive staff will need to work with MCSO staff to ensure the CHCD is permitted ongoing access to secure transports for medical appointments.

No additional cost will be incurred for self-operation based on this model.

**Health care LMS** - The CHCSO project team recommends that Milwaukee County contract with HealthStream, Inc. for use of HealthStream's Learning Center (HLC), a medical-focused LMS with medical content libraries for clinical staff training. The HLC will act as a supplement to Milwaukee County's LMS (Cornerstone), which does not include medical training modules.

The anticipated cost to the County of a contract with HealthStream is **\$9,367.00** for the initial year of service (2021). This cost includes the annual license fees of **\$6,617.00** and an additional **\$2,750.00** for one-time implementation services. Future year costs for HealthStream will be approximately **\$6,617.00** annually.

HealthStream is a health care focused organization that delivers human resource management tools including, but not limited to, workforce development, talent management, credentialing, performance assessment, and training and learning management solutions. Today, Milwaukee County's BHD utilizes HealthStream to provide health care related training that is not available through County HR and the Cornerstone LMS. The CHCD will utilize a separate contract and will not piggyback on the BHD contract, which will continue to undergo changes as BHD's service model shifts in 2019, 2020, and 2021.

This recommendation was made following substantial market research by Procurement that indicated that few, if any, alternatives exist in the market for health care-specific training, and none appear to offer reduced expense compared to the existing product utilized by the County.

### **Professional Services**

Professional Services for the correctional health care function will primarily include specialty and off-site care contracts for services such as:

- Inpatient and outpatient care
- Emergency care
- Ambulance services
- Physical therapy
- Specialists (cardiologists, surgeons, dermatologists, obstetricians, human immunodeficiency virus (HIV), hepatitis C, oral surgeons)
- Imaging services
- Laboratory services
- EKG services
- Vision care
- Dental care
- Dialysis services
- Podiatry services
- Prosthetic devices
- Medication assisted treatment for opioid addicted inmates.

All services requiring professional subcontracts will need to be negotiated directly with community providers. Today, these contracts are arranged and managed by Wellpath. Milwaukee County does not have any direct insight into the costs of these contracts to Wellpath. However, we are aware of the total cost of specialty and outside care services provided to our patient population based on historical reporting from Armor Correctional. In 2018, the total off-site medical costs paid for Milwaukee County was **\$1,499,206.88**. Milwaukee County has a cost-sharing program with Wellpath in which Wellpath pays the first \$800,000.00. The County then pays 75% of any payments over \$800,000.00

It is important to note that the cost paid is not the initial cost charged. Utilization management and billing processes often substantially reduce the total cost paid by the County or a medical provider. Appropriate billing processes can redirect medical charges to patient insurance, BadgerCare, and other sources of funds for the payment of medical bills for indigent or incarcerated persons.

Contracts for medical services are difficult to write and manage and represent a substantial impact on Milwaukee County when the correctional health care function is self-operated. Based on the volume of contracts, Procurement requires a 1.0 FTE Contracts Manager added to the Procurement staff to be dedicated to medical contracts only. The expected cost of this position is **\$109,067.43** per year.

### **Third Party Administration**

Along with payroll expense and pharmaceutical costs, off-site expenses for inmate medical, dental, and mental health care services are usually considered to be the second or third highest cost item behind wages, salaries, and benefits of the health care work force. As such, the management of these costs requires constant monitoring, timely decision-making, and knowledge of hospital and provider reimbursement systems, Medicaid payments, claims analysis, and skill in negotiating payment rates. Lack of attention to utilization review and costs associated with off-site services can result in overutilization of outside services, excessive payments, and lower quality of care.

**Utilization management in general** - Outside or off-site health care services, including inpatient stays, outpatient hospital trips, and emergency department visits, account for a significant portion of the annual MCJ and HOC health care budget. Specialty clinic appointments need to be approved in advance by the medical director, utilizing approved clinical protocols defining alternative approaches to diagnosis and treatment to be utilized prior to sending the patient off site. Care must be taken to seek specialty clinic services in a timely manner, but to also avoid unnecessary trips out if appropriate care can be rendered behind the walls in a clinic or infirmary setting. Generally, any approval to send a patient out is required in advance, with the exception of emergencies, which are sent immediately to the nearest hospital with an emergency department, or to the nearest trauma center in the event of a catastrophic event. Protocols need to be written to guide staff in determining when to send a patient out and when to seek assistance through the chain of command.

**Contractor utilization management** - Private contractors, including the current vendor, provide such services in the corporate and regional offices through trained staff, including physicians and registered nurses adept at utilization management, who are assigned to assist the MCJ and HOC facility health care providers. Since outside care is such a major driver in the management of correctional health care costs, corporate staff operate together as a utilization management team consulting with and advising local facility providers as to appropriate send-outs (see table below).

**Claims analysis, adjudication, and accounts payable** - Claims management is a subset of utilization management intended to oversee and settle all claims for outside inpatient/outpatient hospital services, specialty clinic visits, and emergency department visits. In the case of MCJ and HOC, Wellpath corporate office management personnel have negotiated agreements with off-site providers. This corporate office function is responsible for payment to all subcontractors, including off-site vendors such as hospitals and physicians.

**Milwaukee County utilization option #1** - A third-party administrator (TPA) option should be considered by the county as a way of providing external utilization management, claims and payment management, and provider networking and subcontracting, for all off-site offender health care. Such care includes hospital-based emergency and trauma services, inpatient medical and mental health care, outpatient surgical and treatment procedures, office visits with private physicians, diagnostic procedures, dialysis services and therapy for cancer and mobility issues, such as physical and occupational therapy. This option would be referred to as outsourcing.



Off-Site Services and Costs for 2018			
Service	Total Projected	Visits	Total Claims
Emergency	\$1,011,314.22	876	2,631
Inpatient	\$104,310.11	13	78
Outpatient surgery	\$249,855.76	29	106
Office visits	\$148,256.90	663	788
Diagnostic procedure	\$122,628.12	146	264
Therapy	\$5,960.73	15	8
<b>Total</b>	<b>\$1,642,325.84</b>	<b>1,742</b>	<b>3,875</b>

Source: Armor

There are many TPA organizations, some experienced in correctional health care, that could provide this service for Milwaukee County. Currently, the Wisconsin Department of Correction utilizes a Wisconsin-based TPA for claims management. The inclusion of a TPA for County management of claims and payments will require a competitive bidding process.

Illustration #1: Cost of TPA Services

Costs for a TPA will vary depending on pricing policies of individual firms and specific requirements of the client. Sources in the correctional health care field indicate that the basis of payment is usually the number of annual claims. The following example illustrates how a TPA would charge the county for the cost of paying claims only. An estimate would be \$12.00 per claim.

$$3,875 \text{ claims} \times \$12.00 = \$46,500.00 \text{ per year based on 2018 data shown in the table above}$$

Added services provided by the TPA could include remote utilization management (at the TPA) or monitoring of hospitalized patients at the rate of \$2.25 per inmate, per month based on monthly ADP. Essentially, trained and experienced registered nurses or case managers at the TPA would, on behalf of MCJ and HOC, contact the hospitals and jail health staff to be sure patient care is coordinated and patients are returned to the jail as soon as practical.

$$\$2.25 \text{ per inmate per month} \times 2,300 \text{ ADP} = \$5,175.00 \text{ per month, or } \$62,100.00 \text{ per year}$$

**In Option I, the aggregate annual cost to the County would be \$108,600.00.**

Illustration #2: Cost of County Utilization Management

The costs associated with having utilization management and claims adjudication and payment residing with county government, is another approach to this effort. The cost of this option would be primarily labor expenses and some overhead. Budget documents in this report assume the following utilization management positions with wages and benefits included as follows:

1.00 FTE registered nurse utilization manager	\$112,736.00
2.00 FTE billing specialists	\$123,924.00

**In Option II, the aggregate annual cost to the County would be \$236,660.00**

**Summary** - The illustrations demonstrate that the County approach would be more expensive. The major reason is due to the fact that the TPA can spread the costs associated with its services across a large client base and provides individual clients with the benefits of an economy of scale. However, the local approach, although more costly, offers more personalized contact and communication with Milwaukee County health care facilities and off-site providers. Once the CHCD director is hired, a detailed analysis of the two options will need to be made so that an approved utilization management and claims analysis and payment program will be in place by April 2021.

**Costs**

Costs for the procurement of Commodities, Contractual Services, and Professional Services for the CHCD for self-operation of the correctional health care function are broken down into the following categories:

- Wellpath contract
- NCCHC Resources contract monitoring services
- NCCHC Resources transition assistance
- Equipment and consumables
- Medical waste removal services
- Health care LMS
- Specialty and off-site care costs (Professional Services)
- Pharmaceutical costs
- Laundry service
- Inventory control
- Secure transportation

The costs listed include one-time costs and ongoing, annualized costs, wherever available. The chart below breaks out each cost by cost type and year incurred. All costs are estimates.

Cost Type	Year Incurred	Total Cost
Wellpath contract	2020	\$20,161,201.00
Wellpath contract	2021	\$5,191,509.25
NCCHC Resources contract monitoring services	2020	\$410,506.80
NCCHC Resources contract monitoring services	2021	\$451,557.48
NCCHC Resources contract monitoring services	2022	\$496,713.00
NCCHC Resources transition assistance	2020	\$100,000.00
Equipment and consumables	2021	\$215,000.00
Equipment and consumables	Annualized	\$238,900.00
Medical waste removal	Annualized	\$4,080.00
Health care LMS	2021	\$9,367.00
Health care LMS	Annualized	\$6,617.00
Specialty and off-site care (Professional Services)	2020	\$505,332.00
Specialty and off-site care (Professional Services)	2021	\$1,647,080.00
Specialty and off-site care (Professional Services)	Annualized	\$1,901,197.00
Pharmaceutical contract	2020	\$957,100.00
Pharmaceutical contract	2021	\$1,422,740.00
Pharmaceutical contract	Annualized	\$1,736,809.00
Laundry service	Annualized	\$0.00
Inventory control	Annualized	\$0.00
Secure transportation	Annualized	\$0.00
TPA services (if utilized)	Annualized*	\$109,452.00

\*Cost does not include annual increases.

### Assumptions

- 1. It is assumed that County leadership desires a unified contracting process and encourages the use of cooperative contracts and existing County master contracts.**

This assumption permits the project team to account for the lowest possible costs to the CHCD for shared services (laundry, biohazardous waste removal, medical diets) and services received through cooperative contracts (pharmaceuticals). Should the CHCD director request separate contracts for these Commodities or services, costs may fluctuate.

- 2. It is assumed that departments holding shared contracts for services used by or providing services to Wellpath but not charged to Wellpath will similarly make shared contracts and/or services available to the CHCD without charging the CHCD.**

These contracts or services include laundry service (provided at no cost by the HOC), medical diets and nutritionists (provided through the Aramark contract held by the HOC), and secure transportation (provided through the G4S contract held by the MCSO). Should departments charge the CHCD for these services, or should shared contracts not be available for any reason, additional charges may be incurred.

- 3. It is assumed that, due to age and unknown status of durable medical equipment, equipment failure may occur at any time. It is further assumed, based upon representation by Wellpath, that the average high cost to replace equipment in any given year is \$25,000.00. It is further assumed that this high cost will be incurred each year in 2021 and 2022.**

## Facilities

To determine costs for physical space and related services, such as water, electricity, heat, cooling, and furniture, the project team worked with the project lead of FMD and experts from NCCHC Resources to examine the current clinic areas and assess the need for additional space. Assessments by both FMD and NCCHC Resources found that there is sufficient clinical space at the MCJ and HOC to perform the self-operation function. For more information regarding NCCHC Resources' assessment of the County's clinic space, please see Appendix L: Clinic Space Analysis.

In addition to the clinic space, which will house the approximately 128.8 (127.2 in 2021) clinical FTEs and additional 13.09 pool clinical FTEs, FMD needed to locate and provide costs for additional office space to house the CHCD's executive offices. This area will be used for the CHCD Director, Operations Director, fiscal and compliance staff, consultants, and others for daily activities pertaining to the operations of the CHCD. Today, these roles do not exist within Milwaukee County or through Wellpath, and therefore no space is presently available for them. New space must be acquired or located and appropriately furnished. New support staff in existing County departments and divisions also require additional space. Several of the new roles with Risk Management, OEM, Procurement, and IMSD will be housed in the 633 Building, which is already nearing capacity. Other roles will need to be housed in the Courthouse, which has historically been close to capacity.

The facilities costs for the CHCD staff and supporting staff is estimated by FMD as shown in the table on the following page.

PLANNING ESTIMATE						
DATE OF ESTIMATE: 5/30/2019						
CATEGORY	DESCRIPTION	QUANTITY	UNITS	UNIT COST	EXTENDED COST	COMMENTS
Long-term permanent staff - minor remodel	CHCSO director's office and administration (assume at courthouse)	3,800	Square Foot	\$30.00	\$114,000	Assume 19 staff, 200 sf per
Long-term permanent staff - furniture	CHCSO director's office and administration workstation and office furniture	19	Each	\$4,000.00	\$76,000	
Long-term permanent staff - minor remodel	New HR staff embedded within HR (assume at courthouse)	1,200	Square Foot	\$30.00	\$36,000	Assume 6 staff, 200 sf per
Long-term permanent staff - furniture	New HR staff workstation and office furniture	6	Each	\$4,000.00	\$24,000	
Long-term permanent staff - minor remodel	New Risk Management staff embedded within RM (assume at 633)	400	Square Foot	\$25.00	\$10,000	Assume 2 staff, 200 sf per
Long-term permanent staff - furniture	New RM staff workstation and office furniture	2	Each	\$4,000.00	\$8,000	
Long-term permanent staff - minor remodel	New Procurement staff embedded within Procurement (assume at 633)	600	Square Foot	\$25.00	\$15,000	Assume 3 staff, 200 sf per
Long-term permanent staff - furniture	New Procurement staff workstation and office furniture	3	Each	\$4,000.00	\$12,000	
Long-term permanent staff - minor remodel	New OEM staff embedded within Procurement (assume at 633)	200	Square Foot	\$25.00	\$5,000	Assume 1 staff, 200 sf per
Long-term permanent staff - furniture	New OEM staff workstation and office furniture	1	Each	\$4,000.00	\$4,000	
Long-term permanent staff - minor remodel	New Corp Counsel staff embedded within Corp Counsel (assume at courthouse)	800	Square Foot	\$30.00	\$24,000	Assume 4 staff, 200 sf per
Long-term permanent staff - furniture	New Corp Counsel staff workstation and office furniture	4	Each	\$4,000.00	\$16,000	
Long-term permanent staff - minor	New IMSD staff embedded within IMSD (assume at 633)	1,600	Square Foot	\$25.00	\$40,000	Assume 8 staff, 200 sf per

<b>remodel</b>						
<b>Long-term permanent staff - furniture</b>	New IMSD staff workstation and office furniture	8	Each	\$4,000.00	\$32,000	
<b>Crossover permanent staff - minor remodel</b>	Crossover staff overlapping with Wellpath contract positions (assume at courthouse)	3,600	Square Foot	\$30.00	\$108,000	Assume 18 staff, 200 sf per
<b>Crossover permanent staff - furniture</b>	New crossover staff workstation and office furniture	18	Each	\$4,000.00	\$72,000	
<b>Outside vendor - furniture reconfiguration</b>	Reconfiguration in Courthouse and 633	12,000	Square Foot	\$1.25	\$15,000	
	<b>Subtotal</b>				<b>\$611,000</b>	
<b>Outside vendor - design and project management</b>	Planning and design services			15%	\$91,650	
	Contingency			40%	\$244,400	
	<b>TOTAL ESTIMATED PROJECT COST</b>				<b>\$947,050</b>	

**ADDITIONAL NOTES**

Does not include technology (network cabling, computers, phones, etc.).

Does not include additional lease costs for new leased space at 633 (currently estimated at 2,800 square feet at \$16 per sf per year, or \$44,800).

This is a planning level cost estimate. Actual improvement costs may vary significantly from this statement of probable costs due to timing of construction, changed conditions, labor rate changes or other factors beyond the control of the estimators.

Estimate prepared by Lynn Banovez and Peter Nilles

## Risk

### Summary

Members of DAS staff have been directed to create a proposal for self-operation of correctional health care services at the MCJ and HOC. Risk Management is one of the DAS participants in this project.

The contribution the Risk Management Division provides is the ability to identify and determine insurance coverage gaps, availability and costs for medical malpractice, cyber liability, workers' compensation, and additional public entity liability Insurance exposures associated with this proposal.

The first step was to contact all available resources, both internal and external, which had access to Milwaukee County historical loss history for the four main areas of concern listed above. The primary resources included:

- AON, Milwaukee County's insurance broker (<https://www.aon.com/home/index.html>)
- WCMIC, the Wisconsin County Mutual Insurance Corporation, which currently provides the county's public entity liability insurance (<http://www.wisconsincountymutual.org/>)
- Armor Correctional, the third-party correctional health care provider from 2013-2019
- Wellpath, the third-party correctional health care provider from April 2019 – present
- Waukesha and Dane Counties
- The State of Wisconsin Department of Corrections (WI DOC)
- Internal departments including, but not limited to, IMSD, the HOC, the MCSO, Corporation Counsel, and the Comptroller's Office.

### **Medical Malpractice Insurance**

Per the National Association of Insurance Commissioners, medical malpractice insurance, known as "medical professional liability insurance," is a

type of professional liability insurance which protects physicians and other licensed health care professionals (e.g., dentist, nurse) from liability associated with wrongful practices resulting in bodily injury, medical expenses and property damage, as well as the cost of defending lawsuits related to such claims. ("Medical Malpractice Insurance", 2018)

Medical malpractice claims may arise from the self-performance of correctional health care due to provider errors, negligence, or other issues that result in bodily harm. It is also important to note that many medical practitioners are required to provide proof of medical malpractice insurance through their employer(s) in order to gain and maintain employment and licensure.

Medical malpractice history was requested from Armor, specific to their years of providing the correctional medical services for the County. This request was largely unsuccessful. Research seeking



internal medical malpractice records from years when the County self-performed correctional health care services (2013 and prior) was also largely unsuccessful. Requests for information pertaining to insurance were also sent to Waukesha and Dane Counties, who were extremely helpful. The WI DOC was also a request recipient. To date, the WI DOC has not responded to the project team's request. If and when a response is provided, it will be provided to all stakeholders.

### **Cyber Liability Insurance**

Cyber liability insurance is defined by the International Risk Management Institute, Inc. as

a type of insurance designed to cover consumers of technology services or products. More specifically, the policies are intended to cover a variety of both liability and property losses that may result when a business engages in various electronic activities, such as selling on the internet or collecting data within its internal electronic network. Most notably, but not exclusively, cyber and privacy policies cover a business' liability for a data breach in which the firm's customers' personal information, such as Social Security or credit card numbers, is exposed or stolen by a hacker or other criminal who has gained access to the firm's electronic network. The policies cover a variety of expenses associated with data breaches, including: notification costs, credit monitoring, costs to defend claims by state regulators, fines and penalties, and loss resulting from identity theft. ("Cyber And Privacy Insurance")

Cyber liability is an insurance product applicable to the CHCSO project because of the large amount of personal identifiable information (PII) and personal health information (PHI) required and stored in the EHR system.

The County requires \$5 million limits from its current provider of correctional health care services (Wellpath), and this amount is used as the benchmark for this project. The County's current public entity liability insurer (WCMIC) provides \$2 million in limits with a \$1 million deductible. WCMIC has responded they will not be able to provide the additional limits. AON believes these limits are available and is waiting for the County to complete the application process to access the market. At this time, Risk Management and IMSD are continuing to explore and provide necessary data to complete the application.

### **Workers' Compensation Insurance**

Workers' compensation insurance is an insurance product providing wage replacement and medical benefits to employees injured in the course of their employment with the County, typically in exchange for mandatory relinquishment of the employee's right to sue the County for the tort of negligence.

Workers' compensation is an insurance product applicable to the CHCSO project because the project represents an increase of between 150 and 200 employees to the County as an organization. These positions will be exposed to particular types of hazardous conditions including, but not limited to, slip and falls, needle sticks or pricks, toxic exposures (medications or chemicals), and workplace violence. It

is reasonable to assume that workers' compensation claims will increase based upon the additional employees and the particular exposures of the medical services environment.

Because the County's employee population will increase under a self-operated model of correctional health care, the County's workers' compensation costs will also increase. The increase is linear and can be calculated in a fairly straightforward manner based on the number of new employees in the CHCD. For more information regarding the number of employees or other personnel data for the new department, please see the Personnel section of this report.

### **Public Entity Liability Insurance**

Public entity liability (PEL) insurance provides coverage for a loss caused by a wrongful act committed by an individual or group while conducting duties by, or on behalf of, a public entity.

Public entity liability insurance covers many of the primary types of claims seen in a corrections environment, including, but not limited to, civil rights violation claims (Section 1983 claims), negligence claims, tort claims, and failure to discharge mandatory duty claims.

Today, liability for Section 1983 claims and other negligence or tort claims is often split between the County and its third-party correctional health care provider, based upon the entity and/or employee(s) named in a suit. If a claim is based on a failure of the third-party correctional health care provider to provide services as required under its contract, that entity's insurance covers the claim.

If the County moves to a self-operated model of correctional health care, our PEL costs will increase upon expiration of the correctional health care services provider's contract. The County will then become responsible for the litigation and payment of all PEL claims, with no third-party insurance coverage.

The County insurer for this product line is WCMIC. WCMIC has stated they will send this question to their underwriting committee this summer (July-August). An answer providing the increased cost of insurance relative to this change is not expected until then.

### **Self-Insurance**

Self-insurance is a financing option available to organizations whereby losses are paid from a fund maintained by the organization, rather than paid by an insurance company through the purchase of insurance. This option takes multiple forms, including self-retention (losses are paid directly from the fund) and high deductible (losses are paid by an insurance company and reimbursed from the fund). Milwaukee County chooses to self-insure for a variety of reasons, including when insurance products are unavailable, costs for those products are too high, losses are very predictable, and for the benefit of improved cash flow.

Self-insurance is a good solution to liability exposures when the losses are predictable and not catastrophic. Today, the County self-insures our workers' compensation program because our losses in

that area are very predictable. Predictable losses can be planned and budgeted for. However, predictable losses are still subject to variances caused by changing job duties, changing industries, new processes, etc. For example, in the spring of 2019, Milwaukee County experienced multiple snow and ice events. This increased the number of employee slip and falls, resulting in unexpected workers' compensation claims.

We use the high-deductible model for our PEL because losses are fairly predictable, and a lower deductible is not cost efficient. We are passively self-insuring any losses which exceed our insurance limits.

### **Choosing a Market Product vs. Choosing Self-Insurance**

Risk Management addresses loss exposures by reviewing the following solutions:

1. Avoidance - can the exposure be avoided?
2. Transfer – can the exposure be transferred to another party?
3. Engineering – can the exposure be eliminated or reduced with safety or engineering solutions?
4. Financing – is the exposure predictable, and do we have the needed resources to self-insure?
5. Insurance – this is the last option reviewed as a solution for exposures.

Risk Management takes actions or makes recommendations for insurance products or self-insurance options based upon their review of the solutions above. Currently, Milwaukee County is self-insured in the following areas based on Risk Management's assessment of the loss exposures:

- **Workers' compensation** - Milwaukee County is presently self-insured for workers' compensation due to predictability of claims and ability to reduce or avoid claims through County efforts.
- **Workers' compensation excess insurance** - Milwaukee County is presently self-insured for our workers' compensation excess insurance due to the high cost of market products and factors mentioned for workers' compensation insurance above.
- **Public entity liability insurance** - Milwaukee County is presently insured through WCMIC for PEL insurance through a high-deductible model.
- **Medical malpractice** - Milwaukee County is presently self-insured for medical malpractice insurance because there is currently no market for this coverage available to us.
- **Cyber liability** - Milwaukee County is presently self-insured for anything over \$2 million, primarily because there is currently no market for this coverage available to us.

Below are the exposures for which the County has opted to purchase commercial insurance, based on Risk Management's review and assessment:

- Public entity liability: WCMIC
- Property: Travelers Insurance
- Energy systems: Liberty Mutual
- Airport liability: AIG
- Fidelity/crime: Great American

- Fiduciary: AIG is the first level of this insured program. Fiduciary is specific to the Pension Board.
- Fine Arts: AXA

The following section will provide an insight into what coverages are needed, why they are needed and some cost projections. The cost projections cannot be heavily relied upon because the project implementation is two years in the future. During the next two years, the markets and carriers will change, and the County will also undergo changes which will affect the costs within the projections.

### Recommendation and Cost

Risk Management recommends the following coverages\*, and estimates the following approximate per-year costs for Year 1 of self-operation:

Coverage Type	Estimated Year 1 Cost
Medical malpractice	\$750,000.00 (without tail coverage)
Cyber liability	< \$75,000.00
Workers' compensation	\$130,000.00
Public entity liability	Unknown – likely to be significant
<b>Total Cost:</b>	<b>\$955,000.00 (without PEL)</b>

\*Milwaukee County is self-insured for these coverages as described in the Summary section above.

Additionally, Risk Management requests the addition of 1.0 FTE safety services professional dedicated to the medical services operation at the HOC and MCJ, and the addition of 1.0 FTE claims management assistant to manage the additional workload likely to arise from the self-operation of correctional health care services. These costs are estimated at **\$87,004.22** per position, including salary and benefits, for a total of **\$174,008.44** per year.

The total estimated cost of self-operation of correctional health care services from Risk Management is **\$1,129,008.44**, not including the costs for PEL insurance.

### Assumptions

- 1. It is assumed that Milwaukee County will need to provide medical malpractice coverage for its physicians and other medical professionals.**

This assumption is based upon the type of work physicians, psychologists, psychiatrists, the dentist, and the nurse practitioners will perform for the County. It is also based on the understanding that proof of this type of insurance through a provider's workplace is required for licensure and future employment opportunities. If the County does not provide the insurance through a market product and instead opts to self-insure for medical malpractice coverage, additional steps may be required to recruit and retain medical practitioners, as well as to document and demonstrate proof of coverage to future employers or licensing bodies for practitioners who have left County service.

**2. It is assumed that Milwaukee County's overall risk posture will remain static over the next three years.**

This assumption is likely inaccurate. The numbers provided in this report do not reflect market changes which may occur between 2020 and 2022, nor do they account for any changes in the County's risk posture. Because these types of changes are circumstantial, they are difficult to predict. In addition, the County's lack of historical data for claims based on correctional health care services is limited. Therefore, the project team assumed a static risk posture to provide basic data.

**3. It is assumed that upon self-operation, Milwaukee County will have increased exposure in workers' compensation and public entity liability claim areas.**

This assumption is based upon the increased number of County employees able to make claims for workers' compensation and on the understanding that presently, many general liability claims brought by incarcerated patients against Wellpath (or previously, against Armor) were managed by Wellpath or Armor and no costs were passed on to the County. In the future, the County will be responsible not only to pay these claims, but also to manage them and litigate them, if needed.

**4. It is assumed that once the application is complete, Milwaukee County will be able to obtain market-based cyber liability insurance.**

It is possible that based on the responses on our application, the County may not be able to find a reasonably priced market product for cyber liability insurance. If no market product is available, the overall cost for cyber liability insurance may increase or decrease.

## Methodology

### Medical Malpractice

Medical malpractice insurance provides coverage to doctors and other medical professionals for legal claims arising from allegation of medical negligence and malpractice resulting in patient injury or death. The coverage insures costs for legal expenses, arbitration costs, settlement costs, medical damages and punitive and compensatory damages. It does not cover liability claims for sexual misconduct, illegal acts or inappropriate alteration of medical records.

Medical malpractice insurance is needed to cover the inevitable claims associated with the provision of inmate medical services. The insurance carrier will also provide expert defense resources as well as training and mitigation resources.

Most medical malpractice insurance is written with limits of \$1 million per claim and a \$3 million policy aggregate. Risk Management would also recommend an excess policy with limits of \$5 million per claim and a \$5 million policy aggregate. At this time, the total cost of this program could be in the **\$800,000.00** range.

Risk Management has communicated with the Wisconsin Department of Corrections (WI DOC) to find a comparable entity with a similar exposure and benchmark a projected cost. The WI DOC provided 10

years of medical malpractice costs for their system, including all their facilities. We are presently still waiting for additional data, including whether the WI DOC has a third-party correctional health care provider, and what their total ADP is. While Risk Management is still awaiting the data, this conversation has provided the project team with a ballpark figure for medical malpractice claims exposure. WI DOC self-insures its medical malpractice exposure and finds it has a paid claims amount between \$500,000 - \$1,000,000 per year. These costs do not include tail coverage.

**Projected Cost: \$750,000.00.**

### **Cyber Liability Insurance**

Cyber liability insurance is designed to help an organization mitigate risk exposure by offsetting costs involved with recovery after a cyber-related security breach, cyber-attack or similar event such as:

- Security breach liability – pays losses and defense
- Regulatory proceedings – pays for defense, fines, and penalty expense
- Extortion and ransom – pays for losses; does not pay ransom costs

These types of claims can be very costly (estimated \$3 million per claim at large companies, and small companies at \$22,000 per claim) because of the PII and PHI of both historical and current populations. Cyber liability insurance can reduce the costs of recovery and provide resources to help mitigate any future breaches or attacks.

Cyber liability insurance is a product under consideration because of the unpredictability of PHI and PII related events, and the associated costs of those events. The County does have cyber liability exposures in other departments as well. Currently, the County has \$2 million of insurance with a \$1.0 million deductible (essentially, we are self-insured for the first \$1.0 million). The additional exposures associated with self-administering the correctional health care program could have a substantial negative financial impact on the County if PHI or PII is negligently released, or the systems containing this data are hacked.

The cyber liability coverage in the 2018 Inmate Medical Services RFP was \$5 million per occurrence and \$5 million aggregate. For the purposes of this project, a \$5 million per occurrence and \$5 million aggregate cyber policy as requested in the Inmate Medical RFP will act as our benchmark.

The only way to get a good projected cost is to submit a cyber liability insurance application to our insurance broker and have them access the markets. The insurance companies will review and submit proposals between two and four weeks after receipt. Risk Management has been working with IMSD to secure preliminary feedback from the insurance markets for a \$3.0 - \$5.0 million excess/umbrella cyber policy, which would sit atop our \$2.0 million primary insurance layer. The insurance markets will not offer this coverage specifically for the CHCD project. The markets will only provide preliminary feedback for a County-wide product covering all exposures. This is not unexpected. The insurance companies perceive anti-selection when products are bought to cover only certain exposures. Anti-selection means the insurance company believes they are only receiving the “unfavorable” risks.

**Projected Cost: Less than \$75,000.00**

### **Workers' Compensation**

Workers' compensation is state mandated and provides lost time and medical benefits to employees injured while working for the County. Because of the number of employees, this is historically the largest potential loss exposure for the County.

Presently, workers' compensation is a self-insured program for the County. WCMIC is the County's current workers' compensation third-party administrator.

Self-insurance costs are likely to increase when bringing correctional health care in-house due to the projected additional County employees, and because of the nature of the work environment. Additional employees added to the payroll will result in additional claims and claim costs. This amount will differ depending on the actual number of additional County employees and third-party health providers. Additional costs are for claim processing, claim benefit costs and ancillary claim services (surveillance, nurse case management, defense, etc.).

We can fairly accurately predict our workers' compensation costs based on job classifications and payroll for the approximately 180 employees. This data is measured against the loss data from the MCJ, HOC, and BHD for similar job classifications and payroll(s). The preliminary estimated additional cost to the County is **\$210,000.00** annually. This value may increase or decrease based on the frequency and severity of employee injuries in any given year.

**Projected Cost: \$210,000.00**

### **Public Entity Liability**

Public entity liability insurance provides insurance coverage for bodily injury, property damage, and errors and omissions, including defense costs and settlements resulting from wrongful acts committed while County employees are performing duties by or on behalf of the County. For purposes of this project, PEL insurance protects our exposures associated with inmate lawsuits, law enforcement activities, employment discrimination, and other wrongful acts of employees (primarily bodily injury and property damage of others).

Today, the County purchases this insurance from WCMIC. Our PEL insurance is a broadly-written liability policy in a "pool of risks" structure, meaning there are 51 other counties insured by WCMIC, all of which have similar risk exposures. The structure also pays dividends to policy holders when there is favorable experience. The OCC is on the panel of available attorney groups.

Claims are paid by WCMIC claims adjusters. Claims can be submitted up to three years after they occur, and sometimes later, depending upon circumstances. These types of claims can take many years to finally be adjudicated. For example, a claim can be submitted in 2019 for an incident which occurred in

2016. The claim could be denied, paid, or contested. If a claim is contested and a suit is filed, the legal proceedings can take an additional five years or more before conclusion. Legal expenses, settlements, and jury awards are included in the PEL policy.

Financial reserves are established in the year Milwaukee County receives notice of a claim, and are determined based on the potential severity of the claim. The reserves will be tracked until they are needed to pay out a claim, or the claim is closed and the reserve funds may be returned to other County accounts. Annually, an actuary completes an analysis and the reserve levels are shared with the Comptroller, who adjusts the reserves.

Medical malpractice coverage is specifically excluded from the PEL policy.

The additional exposure associated with the County providing correctional health care services is the lost layer of insurance carried by the previous third-party service provider (Wellpath). During our most recent PEL insurance RFP, the insurance carriers were able to provide a price quote for the County, but specifically excluded the MCJ and HOC from their quotes. WCMIC has been the insurer for this for the past 20 years.

Risk Management has requested that WCMIC provide a range of costs which they may charge the County for potential increased claim activity associated with self-performance of our correctional medical services. At this time, no additional information has been received from WCMIC. WCMIC did advise us that our request may be brought up at the next WCMIC Board meeting and also with the reinsurer for the program. This information may be available in July or August.

Based on the above, Risk Management does not presently have a projected cost for this coverage.

**Projected Cost: Unknown, but could/will be significant**

#### **Safety Services**

An on-site safety professional dedicated to this facility will be needed to cover both HOC and MCJ. This will minimize and mitigate the workers' compensation costs as well as provide claims investigations. The safety professional would be responsible for safety practices at both the HOC and the MCJ.

**Projected Cost: \$87,004.22 (salary and benefits for Safety Specialist, pay grade 25). This cost is also included in the Personnel section of this report.**

#### **Risk Management Administration**

The Risk Management Division will take on additional claims processing associated with the correctional health care services program. We project an additional 1.0 FTE for processing the medical malpractice claims, the increase in workers' compensation, PEL claims, administrative time in both safety and claims management, and staff time commitment.



**Projected Cost: \$87,004.22 (salary and benefits for Claims Specialist, pay grade 25). This cost is also included in the Personnel section of this report.**

### Additional Risks

This report outlines a proposed structure for self-operation and reflects the work of multiple stakeholders that were part of the strategic team. This proposed structure, however, includes several risks that the County would be taking on should it implement a self-operation model.

- **Staffing Risk** - Self-operation requires that the organization be staffed appropriately. There are several risks that will impact the County's ability to staff self-operation. The County may not have the appropriate recruitment and retention tools to compete for talent in correctional health care. Civil service rules may slow down the ability to make timely job offers in a competitive market. The County's outdated compensation system and stagnant wages may limit the pool of applicants interested in working for the County. The County's non-portable retirement benefits may also limit the pool of interested applicants.
- **Training Risk** - The County may not have the appropriate health care training in place. The county would need a comprehensive set of policies and procedures, and to train staff in the appropriate procedures. It is unclear whether the County has this capacity in the correctional health care field.
- **Support Risk** - With limited financial resources, it is unclear whether the County can adequately invest in and maintain the operational infrastructure necessary for self-operation, which would include separately acquiring and maintaining the IT systems and equipment that are currently provided by an outside vendor.
- **Insurance Risk** - Currently, a significant amount of liability is covered by the vendor's insurance. If no vendor is in place, those liabilities belong to the County and may impact future premiums and insurance ratings.
- **Execution Risk** - Because the County does not currently provide correctional health care, it does not have the experience of successes and failures that inform quality improvement. Also, if the County is only operating its own two facilities, it will not have the learning experience that someone operating multiple facilities would have. This lack of experience may hamper the County in keeping pace with beneficial changes in the industry.
- **Economic Risk** - Currently an outside vendor takes on a substantial amount of outside risk because a fixed fee contract is in place. If no outside vendor is in place, all of the financial risk of cost increases in the industry, overtime, retention bonuses, etc. would fall on Milwaukee County.
- **Team Risk** - An outside vendor has a much larger team dedicated to correctional health. There are multiple people working in training, quality control, risk management, etc. If there is no outside vendor, the County will not be able to rely on this larger network for problem resolution.

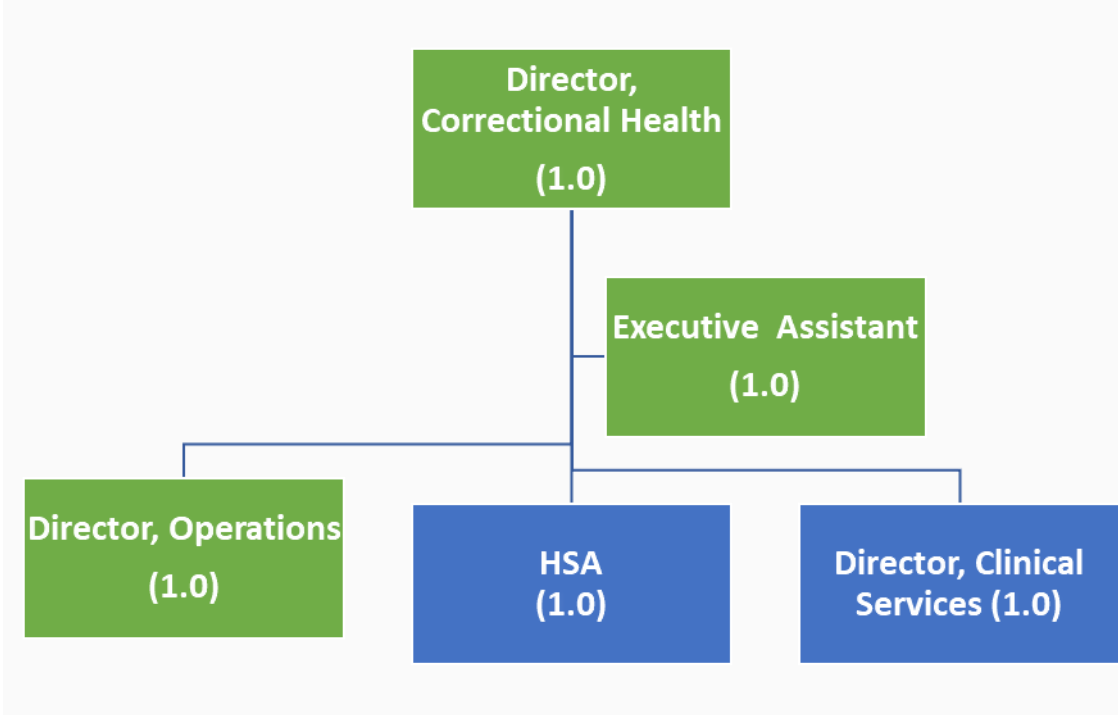
- **Intellectual Property, Copyright, Proprietary Risk** - Many of the policies, procedures, and trainings that an outside vendor has access to are proprietary, and the County would have to create its own from scratch.
- **Regulation, Compliance and Change Management Risk** - Currently, monitoring and implementing regulatory change to meet regulatory or accreditation requirements are covered by an outside vendor. An outside vendor can spread these costs over multiple locations. If there is no outside vendor, the County would be responsible for planning and executing these regulatory changes. It is unclear whether the County has this ability.
- **Infrastructure Risk** - Currently, investments in technology or other long-term operational investments are covered by an outside vendor. An outside vendor can spread these costs over multiple locations. If there is no outside vendor, the County would be responsible for planning and executing these long-term operational investments. It is unclear whether the County has this ability in the context of correctional health care.
- **Logistics Risk** - Currently, the logistics for implementing correctional health care (e.g. hiring/firing, operating, training, procuring other goods and services) rests with an outside vendor. It is unclear whether the County has this ability in the context of correctional health care.
- **IT Architectural, Data Quality and Platform Risk** - Currently, the risk related to choosing the right architecture and platform for IT decisions, and ensuring data quality and security, rests with an outside vendor. It is unclear whether the County has this ability in the context of correctional health care.

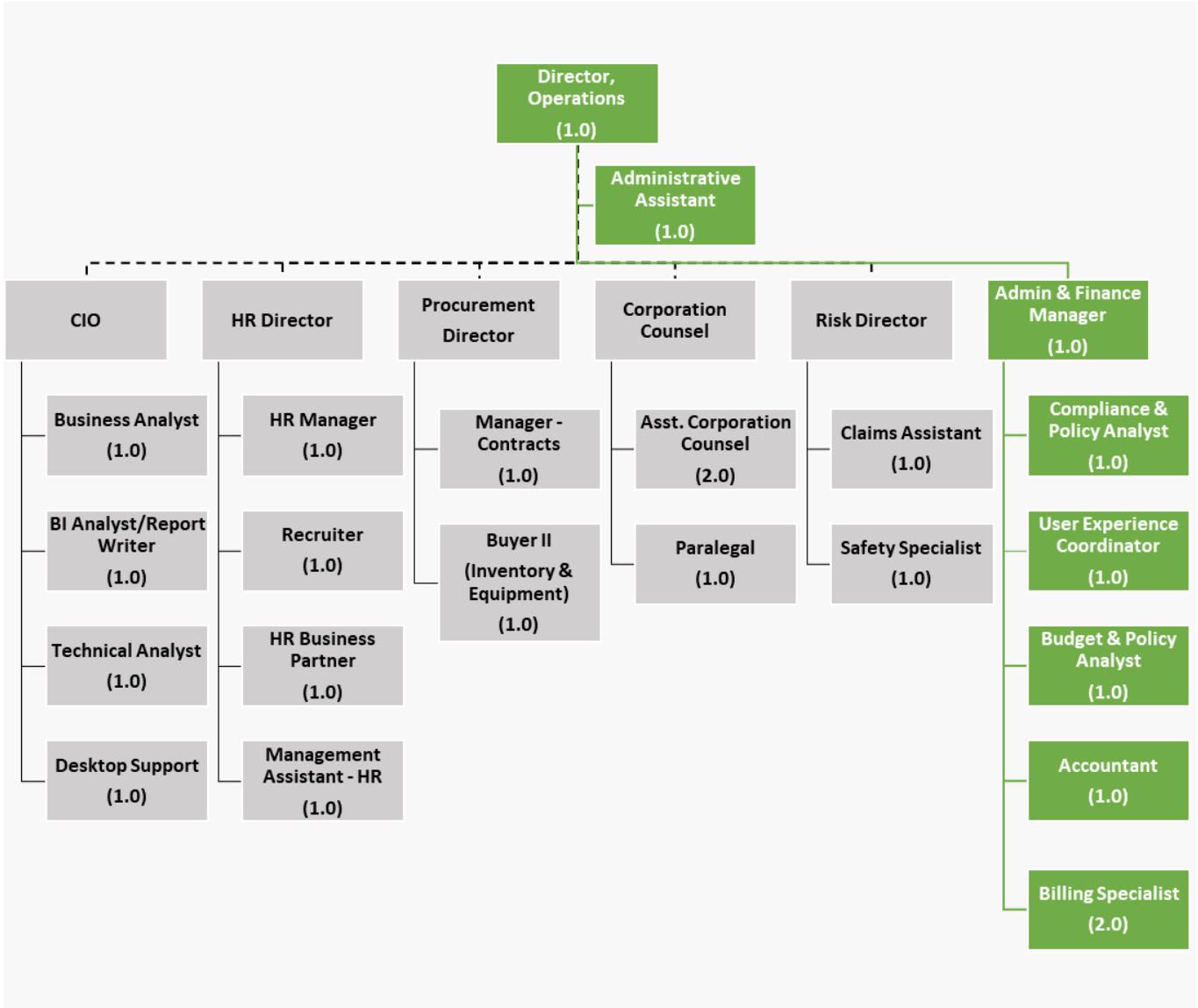
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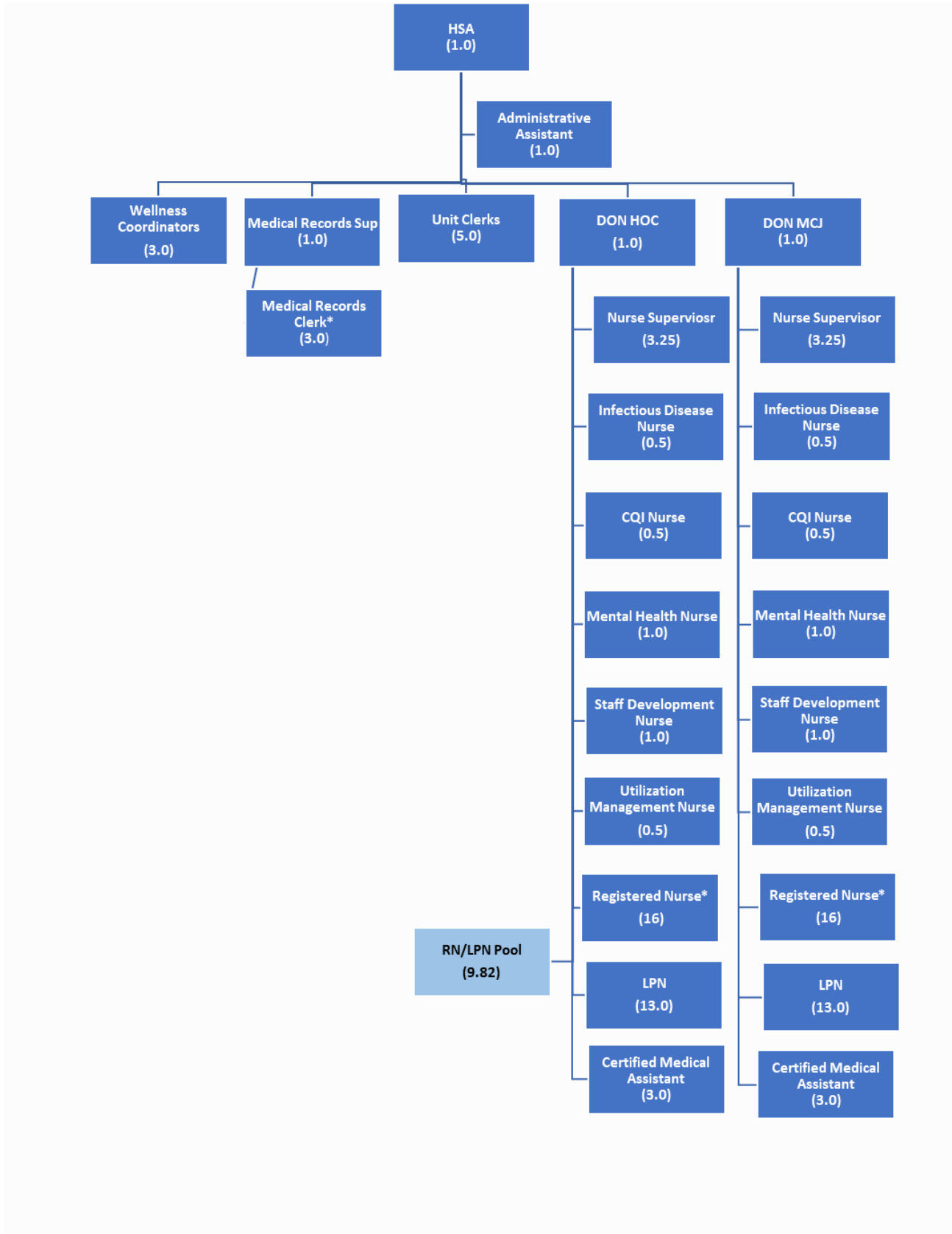
Medical Malpractice Insurance. (2018, September 20). Retrieved August 14, 2019, from [https://www.naic.org/cipr\\_topics/topic\\_med\\_mal.htm](https://www.naic.org/cipr_topics/topic_med_mal.htm)

Cyber And Privacy Insurance. (n.d.). Retrieved August 14, 2019, from <https://www.irmi.com/term/insurance-definitions/cyber-and-privacy-insurance>

## Appendix A – Recommended CHCD Organization Chart

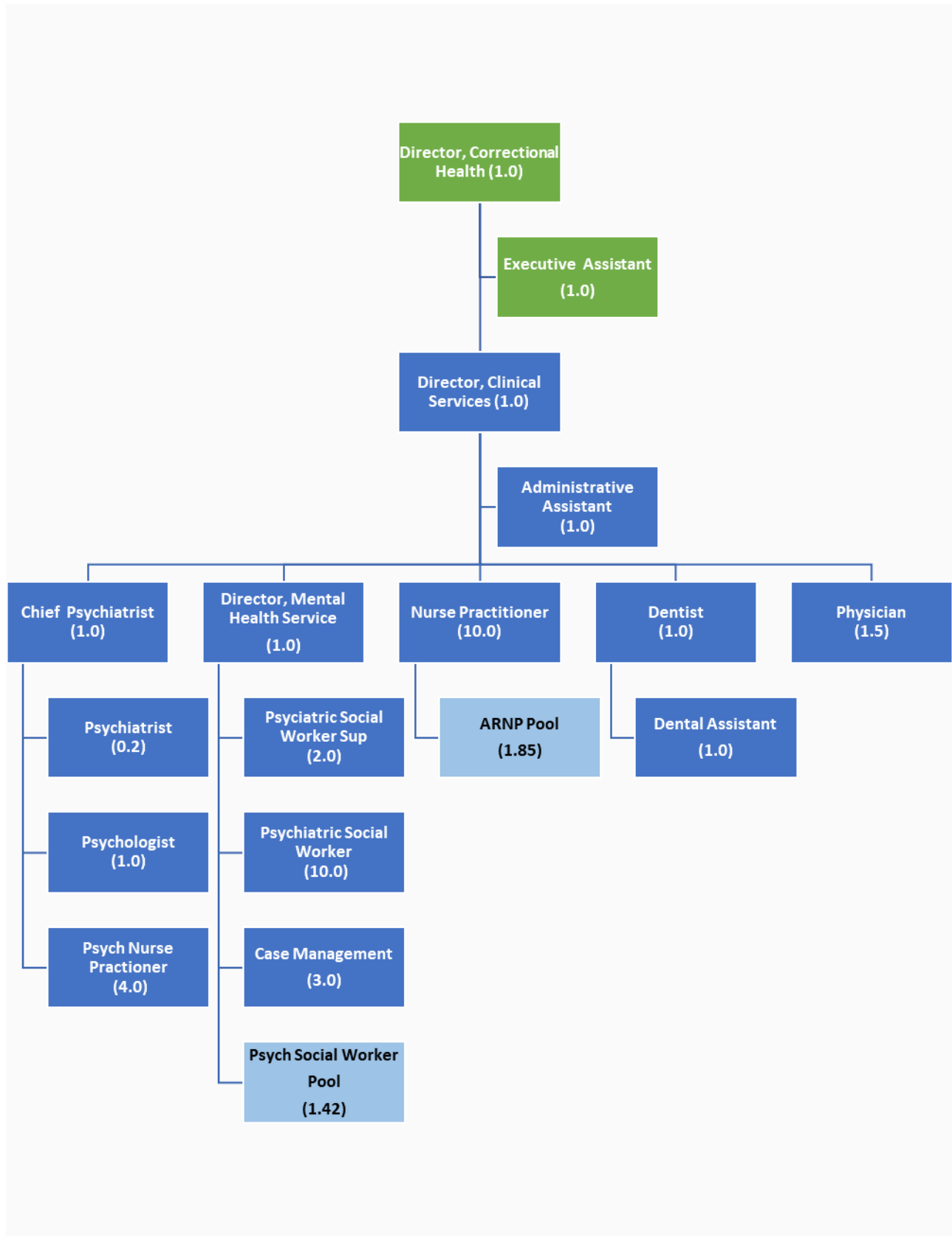






*\*To increase the level of service and efficiency, the County anticipates decreasing the current number of medical records clerks and increasing*

*the number of RNs from the current numbers.*



## Appendix B – Clinical Required Positions

Staffing Matrix		
Position Title	FTEs	Weekly Total Hours
Administrative Assistant	2.00	80
ARNP (Advanced Registered Nurse Practitioner)	10.00	400
Case Management	3.00	120
Chief Psychiatrist	1.00	40
CMA (Certified Medical Assistant)	6.00	240
Dental Assistant	1.00	40
Dentist	1.00	40
Director of Mental Health	1.00	40
Director of Nursing	2.00	80
Health Service Administrator	1.00	40
LPN	26.00	1,040
Medical Director	1.00	40
Medical Records Clerk*	3.00	120
Medical Records Supervisor	1.00	40
Physician	1.50	60
Psychiatric ARNP	4.00	160
Psychiatric Social Worker	10.00	400
Psychiatric Social Worker Supervisor	2.00	80
Psychiatrist	0.20	8
Psychologist	1.00	40
RN (Registered Nurse)*	32.00	1,280
RN – Infection Control	1.00	40
RN – Mental Health	2.00	80
RN – Quality Assurance	1.00	40
RN – Staff Development (Recruiter/Retention)	2.00	80
RN – Supervisor	6.50	260
Unit Clerk	5.00	200
<b>TOTAL:</b>	<b>127.20</b>	<b>5,088</b>



## Appendix C – Vendor Corporate Office Functions

The health care contractor manages the Milwaukee County Jail and House of Corrections (HOC) through a combination of direct on-site services, regional administrative oversight, and corporate home office support. Although each facility health authority manages the day-to-day administrative and clinical functions, there are added resources made available through the corporate office to facilitate the local management program. Those functions that are generally considered home office or regional office activities include the following:

### **Human Resource Management**

Recruitment of key facility management staff, including the health authority (health services administrator), responsible physician, mental health director, and director of nursing are primary responsibilities of the corporate office. This corporate function can also include other categories of staffing: nurse practitioners, registered nurses, licensed practical nurses, mental health clinicians, certified medical assistants, phlebotomy staff, nurses' aides, and clerical and other support staff.

Further HR functions fall to the home office, specifically: advertising, interviewing, credential and licensure verification, National Practitioner Data Base queries (background checks), payroll administration, and benefits administration are among the primary human resource activities.

### **Utilization Management**

Outside health care services including inpatient and outpatient hospital trips, emergency department visits, and specialty appointments are managed by staff assigned to the corporate office in concert with the local facility health care providers. Generally, approval to send a patient out is required in advance with the exception of emergencies, which are sent immediately to the nearest qualified hospital. Outside care is a major driver in the management of correctional health care costs. Corporate personnel include registered nurses and physicians functioning together as a utilization management team consulting with and advising local providers.

### **Claims Analysis, Adjudication, Accounts Payable, Accounts Receivable**

Claims management is a subset of utilization management intended to oversee and settle all claims for outside inpatient/outpatient hospital services, specialty clinic visits, and emergency department visits. Corporate office management personnel negotiate agreements with off-site providers. This corporate office section is also responsible for payment to subcontractors for documented delivery of services to individual jails and prisons such as laboratory, radiology, pharmacy, dialysis, medical supplies, optometry, on-site specialty clinics, regulated waste management, and equipment repair and maintenance, to name a few.

### **Quality Improvement Program**

Corporate clinical and professional personnel develop a quality measurement system designed to be utilized locally at each facility, with oversight and assistance, use of data collection tools, analysis of local issues, corrective action implementation, and re-review of sustainability of corrective action all being managed at the corporate level. Trends and identified common issues are shared among all facility clients.

### **Clinical and Administrative Training**

All staff complete ongoing clinical and administrative training at the corporate level according to an annual schedule. Facility staff enjoy the benefits of this centralized training designed to enhance clinical and supervisory skills. The health care contractors are able to offer a career path to interested personnel and develop candidates for promotional opportunities within the company.

### **Policy and Procedure Development**

Contractors develop policies consistent with correctional health care standards and disseminate the guidelines to individual health authorities working at local facilities. Local personnel are directed to develop site-specific policies and procedures to be submitted to and approved by corporate personnel and facility staff.

### **Behavioral Management**

Qualified mental health clinicians at jail and prison sites receive clinical supervision from psychiatrists, psychologists and senior mental health clinicians based out of the regional and corporate offices. With increasing proportions of inmate populations suffering from serious mental health issues, alcohol and opioid addiction, combined with increasing rates of suicide among incarcerated individuals, mental health services have become a major focus at the corporate level.

### **Information Technology**

With the advent of the electronic health record, greater emphasis on paperless systems, with both health records and administrative records, highly trained technological staff are serving in an advisory and training role for jail health staff managing an electronic record. Several health record systems are operational throughout the correctional health industry; some proprietary and some public. Keeping pace with these advances requires strong technological support.

### **Legal Services and Risk Management**

Emphasis on patient safety and staff safety has become a foundation for added emphasis on preventive measures to minimize risk. Corporate staff manage trends resulting from accidents, injuries, near-miss events, and inmate deaths, most notably by suicide. Individual lawsuits, consent decrees, stipulations, and class action lawsuits, require constant monitoring and involvement of corporate staff attorneys. The corporate office of a private vendor will have a senior legal officer and other staff attorneys depending on the number of client facilities and legal caseload. Outsourcing to special counsel will occur based on volume of cases, experience of outside counsel and nature of the claim

**Management and Statistical Reports; Grievance Management**

Somewhat related to risk management, regional and home office staff monitor statistical reports, computer generated health record reports, and facility grievances, with an objective of advising clients as to long-range initiatives under consideration by the vendor that may impact patient services and jail operations.

## Appendix D – Estimated Cost Details

Total= (salary + health+ pension+SS/Medicare)\*FTE

### Personnel Costs - Quarter 1 2020

Position Title	FTE	Pay Grade	Low Salary	Mid-Point Salary	High Salary	2020 Total Low	2020 Total Mid	2020 Total High	2021 Total Low	2021 Total Mid	2021 Total High	2022 Total Low	2022 Total Mid	2022 Total High
Admin Assistant, Executive	1.0	18M	\$41,888	\$44,883	\$47,871	\$66,781	\$70,380	\$73,971	\$67,284	\$70,919	\$74,546	\$67,788	\$71,459	\$75,121
Chief Psychiatrist	1.0	904E - NR	\$138,641	\$212,948	\$305,844	\$183,049	\$272,344	\$383,977	\$186,381	\$277,462	\$391,327	\$191,379	\$285,139	\$402,353
Compliance & Policy Analyst	1.0	26M	\$54,902	\$60,178	\$63,059	\$82,420	\$88,760	\$92,222	\$83,739	\$90,206	\$93,738	\$85,719	\$92,376	\$96,011
Correctional Health Care Director	1.0	E014	\$211,578	\$278,662	\$327,954	\$270,697	\$351,312	\$410,546	\$275,782	\$358,009	\$418,428	\$283,410	\$368,056	\$430,251
Director of Clinical Services	1.0	E014	\$211,578	\$278,662	\$327,954	\$270,697	\$351,312	\$410,546	\$275,782	\$358,009	\$418,428	\$283,410	\$368,056	\$430,251
Director of Mental Health Services	1.0	E014	\$211,578	\$278,662	\$327,954	\$270,697	\$351,312	\$410,546	\$275,782	\$358,009	\$418,428	\$283,410	\$368,056	\$430,251
Director of Nursing	2.0	E006	\$98,703	\$129,537	\$152,990	\$270,111	\$344,217	\$400,584	\$274,855	\$350,444	\$407,938	\$281,972	\$359,784	\$418,969
Director of Operations	1.0	E006	\$98,703	\$157,298	\$152,990	\$135,055	\$205,469	\$200,292	\$137,428	\$209,250	\$203,969	\$140,986	\$214,920	\$209,484
Health Services Administrator	1.0	E005	\$89,731	\$118,180	\$139,090	\$124,274	\$158,461	\$183,588	\$126,430	\$161,301	\$186,931	\$129,665	\$165,562	\$191,946
PROC Contract Manager	1.0	901E	\$66,437	\$77,077	\$97,239	\$96,281	\$109,067	\$133,296	\$97,080	\$109,994	\$134,465	\$97,878	\$110,920	\$135,633
Special Project Manager TEMP	1.0		\$70,700	\$70,700	\$70,700	\$76,109	\$76,109	\$76,109	\$85,810	\$85,810	\$85,810	\$0	\$0	\$0

### Personnel Costs - Quarter 2 2020

Position Title	FTE	Pay Grade	Low Salary	Mid-Point Salary	High Salary	2020 Total Low	2020 Total Mid	2020 Total High	2021 Total Low	2021 Total Mid	2021 Total High	2022 Total Low	2022 Total Mid	2022 Total High
Admin Assistant, Operations	1.0	18M	\$41,888	\$44,883	\$47,871	\$50,086	\$52,785	\$55,478	\$67,284	\$70,919	\$74,546	\$67,788	\$71,459	\$75,121
Finance & Admin Manager	1.0	35M	\$78,427	\$87,078	\$93,483	\$83,017	\$90,814	\$96,587	\$111,632	\$122,132	\$129,906	\$112,575	\$123,178	\$131,029
HR Business Partner	1.0	32M	\$69,036	\$76,271	\$82,205	\$74,553	\$81,074	\$86,422	\$100,234	\$109,015	\$116,218	\$101,064	\$109,932	\$117,205
HR Business Partner TEMP	1.0	32M	\$69,036	\$76,271	\$82,205	\$55,738	\$61,579	\$66,370	\$83,790	\$92,571	\$99,774	\$0	\$0	\$0
HR Manager	1.0	35M	\$78,427	\$87,078	\$93,483	\$83,017	\$90,814	\$96,587	\$111,632	\$122,132	\$129,906	\$112,575	\$123,178	\$131,029
HR Management Assistant	1.0	06PM	\$37,082	\$42,856	\$47,552	\$45,754	\$50,958	\$55,190	\$61,451	\$68,459	\$74,159	\$61,897	\$68,974	\$74,730
HR Management Assistant TEMP	1.0	06PM	\$37,082	\$42,856	\$47,552	\$29,939	\$34,601	\$38,392	\$45,007	\$52,015	\$57,715	\$0	\$0	\$0
HR Recruiter	1.0	22M	\$47,871	\$53,424	\$55,153	\$55,478	\$60,483	\$62,041	\$74,546	\$81,286	\$83,384	\$75,121	\$81,928	\$84,047
HR Recruiter TEMP	1.0	22M	\$47,871	\$53,424	\$55,153	\$38,650	\$43,133	\$44,529	\$58,102	\$64,842	\$66,940	\$0	\$0	\$0

**Personnel Costs - Quarter 3 2020**

Position Title	FTE	Pay Grade	Low Salary	Mid-Point Salary	High Salary	2020 Total Low	2020 Total Mid	2020 Total High	2021 Total Low	2021 Total Mid	2021 Total High	2022 Total Low	2022 Total Mid	2022 Total High
IMSD BI Analyst / Report Writer	1.0	27MN	\$62,908	\$68,463	\$77,734	\$46,020	\$49,358	\$54,928	\$92,797	\$99,539	\$110,791	\$93,552	\$100,361	\$111,725
IMSD Business Analyst	1.0	29M	\$60,194	\$66,702	\$72,143	\$44,390	\$48,300	\$51,569	\$89,502	\$97,401	\$104,005	\$90,226	\$98,203	\$104,872
IMSD Business Analyst TEMP	1.0	29M	\$60,194	\$66,702	\$72,143	\$32,399	\$35,902	\$38,831	\$73,058	\$80,957	\$87,561	\$0	\$0	\$0
IMSD Data Conversion Analyst TEMP	1.0	27MN	\$62,908	\$68,463	\$77,734	\$33,860	\$36,850	\$41,840	\$76,353	\$83,095	\$94,347	\$0	\$0	\$0
IMSD Desktop Support	1.0	21D	\$50,233	\$54,890	\$63,537	\$38,404	\$41,203	\$46,398	\$77,413	\$83,065	\$93,560	\$78,016	\$83,725	\$94,323
IMSD Project Manager TEMP	1.0	P011	\$55,515	\$70,249	\$80,496	\$29,881	\$37,812	\$43,327	\$67,379	\$85,262	\$97,699	\$0	\$0	\$0
IMSD Technical Analyst	1.0	27MN	\$62,908	\$68,463	\$77,734	\$46,020	\$49,358	\$54,928	\$92,797	\$99,539	\$110,791	\$93,552	\$100,361	\$111,725

**Personnel Costs - Quarter 4 2020**

Position Title	FTE	Pay Grade	Low Salary	Mid-Point Salary	High Salary	2020 Total Low	2020 Total Mid	2020 Total High	2021 Total Low	2021 Total Mid	2021 Total High	2022 Total Low	2022 Total Mid	2022 Total High
Accountant	1.0	25M	\$52,956	\$57,571	\$60,194	\$20,020	\$21,407	\$22,195	\$80,718	\$86,319	\$89,502	\$81,354	\$87,011	\$90,226
Admin Assistant	2.0	18M	\$41,888	\$44,883	\$47,871	\$33,390	\$35,190	\$36,985	\$134,568	\$141,839	\$149,092	\$135,575	\$142,917	\$150,242
Billing Specialist	2.0	A014	\$29,515	\$37,503	\$41,309	\$25,956	\$30,756	\$33,043	\$104,534	\$123,924	\$133,163	\$105,243	\$124,825	\$134,156
OCC Asst. Corp Counsel	2.0	34Z	\$49,272	\$79,593	\$119,926	\$37,827	\$56,045	\$80,280	\$152,493	\$226,095	\$324,000	\$153,677	\$228,008	\$326,883
OCC Asst. Corp Counsel TEMP	0.5	34Z	\$49,272	\$79,593	\$119,926	\$6,630	\$10,710	\$16,138	\$29,901	\$48,302	\$72,778	\$0	\$0	\$0
OCC Paralegal	1.0	24M	\$51,005	\$55,601	\$59,421	\$19,434	\$20,815	\$21,963	\$78,350	\$83,928	\$88,564	\$78,963	\$84,596	\$89,278
OCC Paralegal TEMP	0.5	24M	\$51,005	\$55,601	\$59,421	\$6,863	\$7,482	\$7,996	\$30,953	\$33,742	\$36,060	\$0	\$0	\$0
OEM Correctional Emergency Planner TEMP	1.0	28M	\$59,421	\$63,862	\$69,036	\$15,992	\$17,187	\$18,579	\$72,120	\$77,510	\$83,790	\$0	\$0	\$0
Policy & Budget Analyst	1.0	26M	\$54,902	\$60,178	\$63,059	\$20,605	\$22,190	\$23,056	\$83,079	\$89,483	\$92,980	\$83,739	\$90,206	\$93,738
PROC Buyer II	1.0	21	\$46,951	\$51,463	\$54,197	\$18,216	\$19,572	\$20,393	\$73,429	\$78,906	\$82,224	\$73,993	\$79,524	\$82,875
RISK Claims Specialist	1.0	25	\$54,010	\$58,717	\$63,233	\$20,337	\$21,751	\$23,108	\$81,997	\$87,710	\$93,191	\$82,646	\$88,415	\$93,951
RISK Safety Specialist	1.0	25	\$54,010	\$58,717	\$63,233	\$20,337	\$21,751	\$23,108	\$81,997	\$87,710	\$93,191	\$82,646	\$88,415	\$93,951
User Experience Coordinator	1.0	21D	\$50,233	\$54,890	\$63,537	\$19,202	\$20,601	\$23,199	\$77,413	\$83,065	\$93,560	\$78,016	\$83,725	\$94,323

**Personnel Costs – Quarter 1 2021**

Position Title	FTE	Pay Grade	Low Salary	Mid-Point Salary	High Salary	2020 Total Low	2020 Total Mid	2020 Total High	2021 Total Low	2021 Total Mid	2021 Total High	2022 Total Low	2022 Total Mid	2022 Total High
ARNP	10.0	P016	\$81,578	\$103,219	\$118,269	\$0	\$0	\$0	\$993,531	\$1,220,183	\$1,377,806	\$1,224,659	\$1,505,914	\$1,701,510
Case Management	3.0	M012	\$70,886	\$93,847	\$106,330	\$0	\$0	\$0	\$264,465	\$336,608	\$375,830	\$325,711	\$415,234	\$463,904
CMA	6.0	A011	\$24,773	\$31,488	\$34,674	\$0	\$0	\$0	\$239,158	\$281,354	\$301,375	\$291,840	\$344,202	\$369,046
Dental Assistant	1.0	14 - DC	\$38,106	\$40,894	\$42,721	\$0	\$0	\$0	\$53,824	\$56,744	\$58,657	\$65,968	\$69,591	\$71,966
Dentist	1.0	904E - NR	\$138,641	\$221,133	\$305,844	\$0	\$0	\$0	\$159,117	\$245,513	\$334,233	\$196,627	\$303,837	\$413,931
LPN	26.0	20 - DC	\$45,201	\$49,445	\$52,471	\$0	\$0	\$0	\$1,592,615	\$1,708,181	\$1,790,581	\$1,954,913	\$2,098,320	\$2,200,571
Medical Records Clerk*	3.0	A015	\$31,283	\$39,753	\$43,784	\$0	\$0	\$0	\$140,033	\$166,646	\$179,311	\$171,302	\$204,326	\$220,042
Medical Records Supervisor	1.0	M006	\$44,678	\$59,139	\$66,997	\$0	\$0	\$0	\$60,707	\$75,852	\$84,082	\$74,509	\$93,303	\$103,516
Nurse Supervisors	6.5	E004	\$81,578	\$110,164	\$126,443	\$0	\$0	\$0	\$652,752	\$847,355	\$958,176	\$804,250	\$1,045,735	\$1,183,254
Physicians	1.5	P025	\$163,051	\$211,572	\$236,434	\$0	\$0	\$0	\$283,980	\$360,206	\$399,264	\$350,749	\$445,339	\$493,806
Pool Staff - ARNP	1.9	P016	\$81,578	\$118,851	\$118,269	\$0	\$0	\$0	\$141,594	\$206,289	\$205,278	\$196,141	\$285,758	\$284,358
Pool Staff - Psych Social Worker	1.4	P008	\$44,075	\$79,602	\$63,898	\$0	\$0	\$0	\$58,719	\$106,051	\$85,129	\$81,340	\$146,904	\$117,923
Pool Staff - RN/LPN	9.8	N001	\$53,123	\$79,602	\$79,685	\$0	\$0	\$0	\$489,435	\$733,388	\$734,157	\$677,980	\$1,015,911	\$1,016,976
Psych ARNP	4.0	P020	\$110,968	\$140,429	\$160,909	\$0	\$0	\$0	\$520,536	\$643,957	\$729,754	\$642,649	\$795,804	\$902,270
Psychiatric Social Worker	10.0	P008	\$44,075	\$57,181	\$63,898	\$0	\$0	\$0	\$600,751	\$738,014	\$808,363	\$737,256	\$907,586	\$994,883
Psychiatric Social Worker Supervisor	2.0	29 - DC	\$60,188	\$66,695	\$72,135	\$0	\$0	\$0	\$153,901	\$167,531	\$178,926	\$189,333	\$206,247	\$220,387
Psychiatrist	0.2	P027	\$190,195	\$246,778	\$275,787	\$0	\$0	\$0	\$35,689	\$46,306	\$51,749	\$49,437	\$64,144	\$71,685
Psychologist	1.0	P017	\$89,850	\$114,306	\$130,287	\$0	\$0	\$0	\$108,017	\$133,630	\$150,367	\$133,217	\$165,000	\$185,770
RN*	32.0	N001	\$53,123	\$70,346	\$79,685	\$0	\$0	\$0	\$2,225,643	\$2,802,863	\$3,115,855	\$2,735,510	\$3,451,788	\$3,840,182
RN Infection Control	1.0	P013	\$64,750	\$84,027	\$93,891	\$0	\$0	\$0	\$81,729	\$101,918	\$112,249	\$100,596	\$125,649	\$138,468
RN Mental Health	2.0	P012	\$59,966	\$77,796	\$86,944	\$0	\$0	\$0	\$153,436	\$190,784	\$209,946	\$188,756	\$235,101	\$258,880
RN Quality Assurance	1.0	P013	\$64,750	\$84,027	\$93,891	\$0	\$0	\$0	\$81,729	\$101,918	\$112,249	\$100,596	\$125,649	\$138,468
RN Staff Development	2.0	P012	\$59,966	\$77,796	\$86,944	\$0	\$0	\$0	\$153,436	\$190,784	\$209,946	\$188,756	\$235,101	\$258,880
RN Utilization Management	1.0	P012	\$59,966	\$77,796	\$86,944	\$0	\$0	\$0	\$76,718	\$95,392	\$104,973	\$94,378	\$117,551	\$129,440
Unit Clerk	5.0	A013	\$27,830	\$35,380	\$38,979	\$0	\$0	\$0	\$215,306	\$254,843	\$273,690	\$263,065	\$312,126	\$335,513
Wellness Coordinator	3.0	915E - NR4	\$66,439	\$77,377	\$86,370	\$0	\$0	\$0	\$250,493	\$284,860	\$313,116	\$308,372	\$351,018	\$386,081

\*To increase the level of service and efficiency, the County anticipates decreasing the current number of medical records clerks and increasing the number of RN's from the current numbers.

### Personnel Costs - Totals

	FTE	2020 Total Low	2020 Total Mid	2020 Total High	2021 Total Low	2021 Total Mid	2021 Total High	2022 Total Low	2022 Total Mid	2022 Total High
	<b>179.3</b>	<b>\$2,898,189</b>	<b>\$3,549,224</b>	<b>\$4,059,138</b>	<b>\$14,038,196</b>	<b>\$17,187,345</b>	<b>\$19,052,468</b>	<b>\$15,835,743</b>	<b>\$19,530,407</b>	<b>\$21,607,411</b>
Signing Bonuses		\$0	\$0	\$0	\$435,000	\$435,000	\$435,000	\$108,750	\$108,750	\$108,750
<b>Total</b>		<b>\$2,898,189</b>	<b>\$3,549,224</b>	<b>\$4,059,138</b>	<b>\$14,473,196</b>	<b>\$17,622,345</b>	<b>\$19,487,468</b>	<b>\$15,944,493</b>	<b>\$19,639,157</b>	<b>\$21,716,161</b>

### Non-Personnel Costs

Department	2020 Budgeted Cost	2021 Budgeted Cost	2022 Budgeted Cost
Risk	\$0	\$1,455,000	\$1,455,000
Procurement (Services and Commodities)	\$22,234,140	\$9,154,338	\$4,600,316
Facilities (Space Planning)	\$767,050	\$0	\$0
IT Technology Costs	\$81,916	\$564,789	\$280,115
	<b>\$23,083,106</b>	<b>\$11,174,127</b>	<b>\$6,335,431</b>

## Appendix E – Increased Fragmentation of Health Care Results in Worse Outcomes and Increased Costs

Health care policy and delivery research highlight two broad strategies for containing health care costs; the first is to minimize utilization and have tight control over costs, the second is to reorganize delivery to maximize delivery and integration of care. In this context numerous studies have looked at the issue of how fragmentation of health care impacts cost and outcomes.

Fragmentation, meaning care that is un-integrated, where providers in different medical specialties and different settings (inpatient, clinic, emergency department) all participate in parallel but un-linked and un-coordinated systems, has been demonstrated to increase the cost of care and to result in more utilization and/or worse clinical outcomes for patients.

Three recent studies are rather illustrative of the broad findings:

First, Frandsen and others, in a 2015 study in the *American Journal of Managed Care* looked at the relationship between care fragmentation and both quality and costs of care for commercially insured, chronically ill patients. They showed results where high fragmentation of care was associated with \$4,542 more health care spending per patient per year. In addition, they noted that high fragmentation was more often associated with lapses in quality.

Second, A 2017 working paper by Agha, Frandsen and Rebitzer with the National Bureau of Economic Research used an economic mathematical model to analyze 20% of the Medicaid claims in a 10-year period. They found that more fragmented care resulted in more intensive care provision that is at-risk of over- and misutilization.

Third, Kern and others, in September 2018, in the *American Journal of Managed Care*, describe results of a cohort study they conducted over 3 years among 117,977 fee-for-service Medicare beneficiaries. They found the relationship between fragmented ambulatory care and subsequent utilization varies with the number of chronic conditions. Namely, they noted that individuals with a moderate burden of chronic conditions (1-2 or 3-4) appear to be at highest risk of excess ER visits and admissions due to fragmented care.

In summary, increased fragmentation of care negatively impacts quality and increases cost of care. Thus, in designing and developing high functioning, high-quality and cost-effective systems of care, it is important to include cost and utilization controls and at the same time take appropriate measures to decrease fragmentation via integrated systems.

John Schneider MD FAPA  
June 21, 2019

Citations:

Frandsen BR, Joynt KE, Rebitzer JB, Jha AK. Care fragmentation, quality, and costs among chronically ill patients. *Am J Manag Care*. 2015 May;21(5):355-62.

Agha L, Frandsen B, and Rebitzer JB. *Fragmented Division of Labor and Health care Costs: Evidence from Moves Across Regions*. Working Paper 23078. National Bureau of Economic Research. January 2017, Revised November 2018.

Lisa M. Kern, MD, MPH; Joanna K. Seirup, MPH; Mangala Rajan, MBA; Rachel Jawahar, PhD, MPH; and Susan S. Stuard, MBA. Fragmented Ambulatory Care and Subsequent Health care Utilization Among Medicare Beneficiaries. *Am J Manag Care*. 2018;24(9):e278-e284



## Appendix F – EHR Proposals

(Begins on next page)

Andrew,

Below is the email I sent to Patrick last year. We would still honor this pricing. I have attached multiple Quotes from different Hosting providers for your review as well.

Patrick,

Sorry this has taken longer than I had expected. Attached is a quote from a Third Party Hosting company to Host the software. They base their fees on Concurrent users so based on the numbers you provided, I did a best guess that there would be 50 Concurrent Users on any one shift. This would be a pass through cost or you can go directly to the vendor.

As for CorEMR. There would be a \$15,000.00 Fee to reinstall the software on the new Hosted Environment, and a Monthly fee of \$1.50/inmate/month or \$3,396.00 per month based on a Average Daily Population of 2264.

Please let me know if there is anything else that you require.

Thank you again for your continued interest in CorEMR.

Please let me know if I can be of further assistance.



**Mark Bodenschatz**  
National Sales Director

[mbodenschatz@coremr.com](mailto:mbodenschatz@coremr.com)  
(801) 225-0317 x111



Dataward, LLC  
9600 Misty Hollow Lane  
Oklahoma City, OK 73151 US  
405-445-4533  
billing@dataward.com  
www.dataward.com

ADDRESS

Dataward  
Dataward LLC  
Oklahoma United States

ESTIMATE 1032

DATE 05/16/2019

DATE	ACTIVITY	QTY	RATE	AMOUNT
05/16/2019	AZ-VM-D4V3 (Application Server) Virtual Machine, 4 vCPU(s), 16GB RAM, 1TB SSD	1	381.00	381.00
05/16/2019	AZ-VM-D2v3 (SQL Server) Virtual Machine, 2 vCPU(s), 8GB RAM, 500GB SSD	1	485.00	485.00
05/16/2019	AZ-Base Geographically-redundant backup	1	105.00	105.00
05/16/2019	AZ-VM-RDS Windows user license including remote desktop, two-factor authentication, and management	10	10.00	100.00
05/16/2019	AZ-VM-PIP Public IP acquisition and maintenance	1	10.00	10.00
05/16/2019	AZ-ManagedServices DataWard server management: Anti-virus, monitoring, backup, Windows patch updates	2	100.00	200.00

Does not include one-time setup charge of \$500 or SSL certificate

TOTAL

\$1,281.00

Accepted By

Accepted Date

# High-Performance Windows Managed Private Cloud with Security Foundation (Two-Node Failover Cluster-Hyper-V)

Prepared for: Devaughn  
Expires: 30 Days from delivery

## Executive Summary

### Background

You would like:

- Managed and Maintained Security Foundation (Cisco ASA Firewall, Premium Antivirus-Bitdefender, Monitoring to maximize server uptime, monthly maintenance window, Backup- R1 soft, Security Scans, Planned monthly server patches performed, and Domain Controller setup for user access control).
- Cyber Security Expert Team (Dedicated System Admin/Engineer, Network Engineer, Dedicated Account Manager, and Sales Engineer).
- Cuts Cost so you don't have to hire an in-house System Admin because we use automation from software to maximize the included 5 System Admin hours each month to help maximize online security.
- Includes Hyper-V so that we can easily scale up, Proactively with our monitoring and this is enterprise level so it includes active-active failover. We can also add load balancing easily for future growth.
- Maximize Server uptime, by performing planned monthly maintenance window.
- Redundant Environment and removes single points of failure to maximize security and uptime.
- 4-5 X the database performance due to adding SSD (IOPS) Block Storage.

### Areas of Concern

1. Reliability
2. Performance
3. High Security
4. Support
5. Backup

## 6. Disaster Recovery

### Growth Forecast (3-6 Mos)

Devaughn expects to grow consistently and to expand their services and operations.

### Recommendations

Overwatch Managed Services to help maintain constant checks on the hosting environment.

1. R1Soft Backup solution for each production server.

### Why Now?

Devaughn is looking for a better way to manage their hosting environment without increasing costs.

## Proposal

Fee					
<b>Dedicated Hosting: Firewall</b>	2	\$99.00	\$99.95	10%	\$179.91
Term: 12 mos Setup Fee: \$99.00 x 2 Discount Given: 10% Deducted \$19.99					
Firewall Model - ASA5506 Security Plus	2	\$0.00	\$50.00		\$100.00
Setup Fee: \$0.00					

Data Center - ORM1 - Orem, UT	2	\$0.00	\$0.00		\$0.00
Setup Fee: \$0.00					
<b>Dedicated Hosting: G7 Large</b>	2	\$0.00	\$349.95	10%	\$629.91
Term: 12 mos					
Setup Fee: \$0.00 x 2					
Discount Given: 10%					
<i>Deducted \$69.99</i>					
Bandwidth Usage: 50 TB Included + \$0.10/GB Overage					
Data Center - ORM1 - Orem, UT	2	\$0.00	\$0.00		\$0.00
Setup Fee: \$0.00					
Software - Windows Server	2	\$0.00	\$0.00		\$0.00
Setup Fee: \$0.00					
<b>Microsoft Licensing: Windows Server Standard Edition for VM</b>	2	\$0.00	\$39.95	10%	\$71.91
Term: 1 mos					
Setup Fee: \$0.00 x 2					
Discount Given: 10%					
<i>Deducted \$7.99</i>					
Package - 2016	2				
Quantity - 8 Cores	2	\$0.00	\$0.00		\$0.00
Setup Fee: \$0.00					
<b>Dedicated Hosting: R1Soft Backup</b>	1	\$50.00	\$14.95	0%	\$14.95
Term: 12 mos					
Setup Fee: \$50.00 x 1					
Data Center - Orem	1	\$0.00	\$0.00		\$0.00

Setup Fee: \$0.00					
Server Licenses - 3 Server Licenses	1	\$105.00	\$105.00		\$105.00
Setup Fee: \$105.00					
Storage Quota - 1000 GB	1	\$0.00	\$160.00		\$160.00
Setup Fee: \$0.00					
<b>Microsoft Licensing: SQL Server 2017 Standard</b>	1	\$0.00	\$381.74	10%	\$343.57
Term: 1 mos Setup Fee: \$0.00 x 1 Discount Given: 10% <i>Deducted \$38.174</i>					
Quantity - 4 Cores	1	\$0.00	\$0.00		\$0.00
Setup Fee: \$0.00					
<b>Security: Bitdefender</b>	1	\$0.00	\$4.95	10%	\$4.46
Term: 1 mos Setup Fee: \$0.00 x 1 Discount Given: 10% <i>Deducted \$0.495</i>					
Quantity - 8 hosts	1	\$0.00	\$34.65		\$34.65
Setup Fee: \$0.00					
<b>Managed Services: Nessus Remote Vulnerability Scan</b>	1	\$0.00	\$0.00	0%	\$0.00
Term: 1 mos Setup Fee: \$0.00 x 1					
Included Hosts - 15 hosts	1				
<b>Managed Services: Nessus Agent Vulnerability Scan</b>	1	\$0.00	\$24.95	10%	\$22.45
Term: 1 mos					

Setup Fee: \$0.00 x 1  
Discount Given: 10%  
*Deducted \$2.495*

Included Hosts - 4 hosts      1      \$0.00      \$75.00      \$75.00

Setup Fee: \$0.00

**Cloud Storage: High IOPS  
Block Storage**      1      \$25.00      \$199.95      10%      \$179.95

Term: 12 mos  
Setup Fee: \$25.00 x 1  
Discount Given: 10%  
*Deducted \$19.995*

Block Storage Size - 500 GB      1      \$0.00      \$0.00      \$0.00

Setup Fee: \$0.00

**Cloud Storage: Windows  
Cluster Management Volume**      2      \$25.00      \$14.95      10%      \$26.91

Term: 12 mos  
Setup Fee: \$25.00 x 2  
Discount Given: 10%  
*Deducted \$2.99*

Data Center - Orem      2      \$0.00      \$0.00      \$0.00

Setup Fee: \$0.00

**Cloud Storage: Block Storage**      2      \$25.00      \$49.95      10%      \$89.91

Term: 12 mos  
Setup Fee: \$25.00 x 2  
Discount Given: 10%  
*Deducted \$9.99*

Data Center - Orem      2      \$0.00      \$0.00      \$0.00

Setup Fee: \$0.00

Block Storage Size - 250 GB      2      \$0.00      \$15.00      \$30.00

Setup Fee: \$0.00



<b>Managed Services: OverWatch</b>	1	\$0.00	\$2500.00	0%	\$2500.00
Term: 6 mos Setup Fee: \$0.00 x 1 White Glove Hours: <i>Platinum</i> - 15 included, \$100/hour overage					
<b>Recurring Services Total:</b>					\$4568.58
<b>Setup Fees:</b>					\$478.00
<b>Sub Total:</b>					\$4568.58
<b>Tax (0%):</b>					\$0.00
<b>Grand Total:</b>					<b>\$5046.58</b>

### Special Terms

Benefits include:

- #1. Cost Less then hiring an in-house System Admin. We include 15 System Admin/Engineer hours a month to proactively protect the environment in a planned monthly maintenance window (additional System Admin/Engineer hours \$100/hr).
- #2. Secure Foundation (Firewall, Antivirus, Backup, Nessus Security Scans, Domain Controller (user access control), Monitoring, and Proactive Server Patches each month)
- #3. Can easily scale up because data is stored on (SSD performance)HIOPs Block Storage (SAN).
- #4. Proactively Maintain Monthly Server Patches (Windows Security Patches, PHP, .Net, and IIS)
- #5. Enterprise level environment that can failover in real time to maximize server uptime.
- #6. Removes Single points of failure, by having redundant Firewalls, proper failover clustering.
- #7. Dedicated Expert Team (Dedicated System Engineer and Account Manager who knows everything about the environment).
- #8. Maintenance Windows can be performed at any time of day in the Overwatch plan.

To accept this offer, please click the link below:

<https://customer.fiber.net/proposals?token=75273b4331b5b062c61d96d0be5999c2>

# TailWinds Technologies Quote



From: Stephen Upton  
TailWinds Technologies  
212 Frankfurt Circle  
Birmingham, AL 35211  
(205) 332-1600  
stephen@twtech.com

Prepared for: Mark Bodenschantz  
CorEMR  
1173 South 800 East  
Orem, UT 84097  
(814) 330-3820  
mbodenschantz@coremr.com

Quantity	Description	Unit Price	Ext. Price
50.00	CorEMR Access	\$40.00	\$2,000.00
		<b>Subtotal:</b>	<b>\$2,000.00</b>
		<b>Sales Tax:</b>	<b>\$0.00</b>
		<b>Total:</b>	<b>\$2,000.00</b>

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



# QUOTE



4852 Prairie Branch Road, Mansfield, MO 65704

[www.libertytechnicalsolutions.com](http://www.libertytechnicalsolutions.com)

QUOTE #	L01Q2778
DATE	May 20, 2019

To  
Mark Bodenschatz  
CorEMR  
1173 South 800 East  
Orem, UT 84097  
United States

Phone (801) 225-0317

SALESPERSON	P.O. Number	PAYMENT TERMS	DUE DATE
Scott A. Jones			

QTY	DESCRIPTION	UNIT PRICE	TOTAL PRICE
<b>HOSTED EMR Servers (Monthly Recurring)</b>			
<b>Cloud Infrastructure (Hosted in the Microsoft Azure datacenter)</b>			
1	Application Server: D4 v3 (4 vCPUs), 16GB RAM x 730 Hours; Windows; Pay as you go; 1 managed OS disk - E40 (2TB storage), 100,000 transaction units, Managed Disk, Premium SSD	\$661.66	\$661.66
1	Database Server: D2 v3 (2 vCPUs), 8GB RAM x 730 Hours; Windows - SQL Server Standard; Pay as you go; 1 managed OS disk - E20 (512 storage), 100,000 transaction units, Managed Disk, Premium SSD	\$646.03	\$646.03
<i>Pricing determined by Microsoft's Azure Pricing calculator (<a href="https://azure.microsoft.com/en-us/pricing/calculator">https://azure.microsoft.com/en-us/pricing/calculator</a>). Any adjustments required by CorEMR will be billed at Microsoft's published pricing.</i>			
<b>SubTotal</b>			\$1,307.69
<b>Management &amp; Backup</b>			
1	Hosted Workspace Initial Server - Includes RMM (remote monitoring and management) agent, file-level backup, management and remediation labor	\$275.00	\$275.00
1	Additional Hosted Workspace Server - Includes RMM (remote monitoring and management) agent, file-level backup, SQL backup, management and remediation labor	\$175.00	\$175.00
<b>SubTotal</b>			\$450.00
<b>SUBTOTAL</b>			\$1,757.69
<b>SALES TAX</b>			\$88.32
<b>TOTAL</b>			\$1,846.01

Accepted by: \_\_\_\_\_

Date: \_\_\_\_\_

PRICES SUBJECT TO CHANGE - PRICES BASED UPON TOTAL PURCHASE - ALL DELIVERY, TRAINING OR CONSULTING SERVICES TO BE BILLED AT PUBLISHED RATES FOR EACH ACTIVITY INVOLVED - LABOR IS ESTIMATED UNLESS OTHERWISE SPECIFIED - LIBERTY TECH BRANDED WORKSTATIONS INCLUDE A 1 YEAR PARTS AND LABOR WARRANTY. THE WARRANTY DOES NOT COVER TRAVEL CHARGES. LABOR IS LIMITED TO REINSTALLATION OF THE OPERATING SYSTEM AND SYSTEM DRIVERS. LABOR FOR SOFTWARE INSTALLATION AND/OR DATA RESTORATION IS NOT INCLUDED. - SOFTWARE, PERIPHERAL, NON-LIBERTY TECH BRANDED WORKSTATIONS, AND INFRASTRUCTURE EQUIPMENT WARRANTIES ARE PROVIDED BY MANUFACTURERS ONLY - WE SPECIFICALLY DISCLAIM ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR WITH REGARD TO ANY LICENSED PRODUCTS. WE SHALL NOT BE LIABLE FOR ANY LOSS OF PROFITS, BUSINESS, GOODWILL, DATA, INTERRUPTION OF BUSINESS, NOR FOR INCIDENTAL OR CONSEQUENTIAL MERCHANTABILITY OR FITNESS OF PURPOSE, DAMAGES RELATED TO THIS AGREEMENT.



**Spark Purchase and Lease Estimates  
for Milwaukee County Detention Facility**

---



Date: 06/12/19

Prepared for: Milwaukee County Detention Facility

**ESTIMATE****OPTION 1: PURCHASE ESTIMATE****Initial Investment Deliverables****\$148,155.00**

License to use the CorrecTek Spark software in one facility

The CorrecTek Standard database consisting of 125 Forms, 125 Orders, & 120 Reports. The database can be configured to meet the facility's needs.

Database Configuration

Standard Project Management Services

Standard OMS Interface

Standard Pharmacy Interface

Standard Lab Interface

Transport System Interface

HIE Interface

CorrecTek will create a "sandbox" environment for User Acceptance Testing. CorrecTek will send 2 resources onsite for 5 consecutive days to train select users for User Acceptance Testing

CorrecTek Environment Readiness Inspection

On-site Training/Go-Live Support

Dedicated CorrecTek Resources to train up to

140 end users on-site

Unlimited access to the online CorrecTek Spark eLearning

Library

**Travel Costs****\$11,510.00**

*Includes travel, transportation, lodging and meal expenses for CorrecTek resources*

---

**TOTAL UPFRONT COST**    **\$159,665.00 Monthly Recurring**  
**Cost**                    **\$1,900.00**

24/7 Technical Support

*Technical support and upgrade fees include unlimited telephone technical support and all scheduled software upgrades which will be provided as they are developed.*

<b>TOTAL 1<sup>ST</sup> YEAR COST</b>	<b>\$182,465.00</b>
<b>TOTAL 5 YEAR COST</b>	<b>\$273,665.00</b>

<b>CORRECTEK CLOUD HOSTING</b> <i>Kalleo Technologies</i>	
One Time Set Up Fee	\$3,500.00
Nurses and Providers	\$50.00/User/Month
<b>TOTAL 1<sup>ST</sup> YEAR</b>	<b>\$81,500.00</b>
<b>TOTAL 5 YEAR</b>	<b>\$393,500.00</b>



## OPTION 2: LEASE ESTIMATE

### Deliverables

- License to use the CorrecTek Spark software in one facility
- The CorrecTek Standard database consisting of 125 Forms, 125 Orders, & 120 Reports. The database can be configured to meet the facility's needs.
- Database Configuration
- Standard Project Management Services
- Standard OMS Interface
- Standard Pharmacy Interface
- Standard Lab Interface
- Transport System Interface
- HIE Interface
- CorrecTek will create a "sandbox" environment for User Acceptance Testing. CorrecTek will send 2 resources onsite for 5 consecutive days to train select users for User Acceptance Testing
- CorrecTek Environment Readiness Inspection
- On-site Training/Go-Live Support
- Dedicated CorrecTek Resources to train up to 140 end users on-site
- Unlimited access to the online CorrecTek Spark eLearning Library
- 24/7 Technical Support  
*Technical support and upgrade fees include unlimited telephone technical support and all scheduled software upgrades which will be provided as they are developed.*

### Initial Investment

- Travel Costs  
*Includes travel, transportation, lodging and meal expenses for CorrecTek resources*

**\$11,510.00**

**MONTHLY FEE** *\*Includes technical support and upgrade fee*

### 60 MONTH LEASE OPTION

**\$4,720.00**

**TOTAL 1<sup>ST</sup> YEAR** **\$56,640.00**

**TOTAL 5 YEAR** **\$294,710.00**

<b>CORRECTEK CLOUD HOSTING</b> <i>Kalleo Technologies</i>	
One Time Set Up Fee	\$3,500.00
Nurses and Providers	\$50.00/User/Month
<b>TOTAL 1<sup>ST</sup> YEAR</b>	<b>\$81,500.00</b>
<b>TOTAL 5 YEAR</b>	<b>\$393,500.00</b>

#### OPTIONAL SERVICES

<b>Sick Call Import Feed</b> <i>(Includes lifetime support)</i>	<b>\$4,000/One Time Fee</b>
<b>Radiology Interface</b> <i>(Includes lifetime support)</i>	<b>\$4,000/One Time Fee</b>
<b>Commissary Interface</b> <i>(Includes lifetime support)</i> <b>Transport</b>	<b>\$4,000/One Time Fee</b>
<b>System Interface</b> <i>(Includes lifetime support)</i>	<b>\$6,000/One Time Fee</b>
<b>Health Information Exchange Interface</b> <i>(Includes lifetime support)</i>	<b>\$6,000/One Time Fee</b>
<b>CorrecTek Advantage Plan</b> (to be utilized after go-live)	<b>\$500/Month</b>
<ul style="list-style-type: none"> <li>Unlimited configuration requests. We will create and modify your forms, protocols, reports, workflows, etc. at your request.</li> </ul>	
<ul style="list-style-type: none"> <li>Unlimited online training <b>Dedicated Account Manager</b> Act as the Subject Matter Expert (SME) on the CorrecTek application as configured and implemented for the County. Stay up-to-date on current CorrecTek related interfaces for the County and participate in troubleshooting any issues reported for CorrecTek related interfaces. Stay up-to-date on current CorrecTek related projects for the County and participate in current CorrecTek related projects as business needs dictate. Be responsible for overseeing the entire queue of CorrecTek Support tickets for the County and providing on-going assistance for ticket resolution. For any CorrecTek Support tickets requiring escalation, the Account Representative will be the primary contact. Generate, review, prepare, and disseminate weekly CorrecTek Support reports for the County. Review all CorrecTek Support tickets looking for trends in order to provide suggestions to the County point of contact on how to better utilize the CorrecTek application. Keep the CorrecTek team aware of "new issues" and County specific workflow to help escalate the closure of support tickets.</li> </ul>	<b>\$500/Month</b>



**Price Match Guarantee:**

CorrecTek will match any competitor's EMR quote based on the deliverables and prices given by the competitor on their quote. To be eligible for this offer, we would need a copy of the competitor's quote allowing us to verify the actual deliverables and prices on the quote. Once the competitor's quote has been verified, we will provide a comparable deliverables quote at the same or a lesser price.



Area of Savings	Avg. Annual Savings	Calculation/Description	Questions
<b>Reduce Your Compliance Costs</b>			
<b>Formulary medication compliance ratio</b>	13.7% of total non-formulary medications or 5.1% of total medications	<p>CEHR supports medication formularies. Savings are calculated by subtracting the current formulary compliance rate (expressed as percentage of 100) from 98, and then multiplying this number by the annual cost of non-formulary medications.</p> <p>Annual non-formulary costs X .137 = annual savings or Annual medications cost X .051 = annual savings.</p>	<p>What is your current formulary compliance rate (%)?</p> <p>What is your annual cost of non-formulary medications?</p>
<b>Duplicate Lab Tests</b>	28% of total lab costs	<p>CEHR uses InmateID for all labs and automatically matches the lab result back to the health record when it is received electronically from the contracted lab vendor.</p> <p>Annual cost of labs X .28 = annual savings.</p>	<p>What lab panels do you order?</p> <p>What is your annual cost for these labs?</p>
<b>Duplicate Radiology Tests</b>	19% of total radiology costs	<p>CEHR uses InmateID for all orders and automatically matches the read back to the health record when it is received electronically from the radiology vendor.</p> <p>Annual cost of labs X .38 = annual savings.</p>	<p>What are the annual costs of labs requested in duplicate lab tests?</p>
<b>Chronic Care Clinics</b>	3 Hospital bed days per facility with chronic care clinics and enrollment >100 inmates	<p>Because of scheduling and chronic care clinic functionality, combined with re-enrollment at intake and continuity of medical records due to InmateID being a shared primary key, inmates will receive proactive care for their chronic illnesses. On average our customer's average 3 hospital days per year, per facility that meets the criteria to the left.</p> <p>3 days X avg. cost per hospital day X number of qualifying facilities = annual saving.</p>	<p>What is the average cost per hospital bed day?</p> <p>How many inmates does your facility average at any given time?</p>
<b>Off-site record storage (if applicable)</b>	10% of off-site storage costs	<p>Hard drive space is extremely inexpensive. Combined with proper DB&amp;R methodology there is no need to store paper medical records in off-site facilities. Given a 10 year retention period, 10% of this cost can be recouped annually until year 10, when there will be no more off site storage needs.</p> <p>Annual storage costs X .10 = annual savings.</p>	<p>What is your annual cost for storing paper charts?</p>
<b>Litigation costs</b>	18% of total pre-court payouts	<p>Most payouts are due to inadequate documentation, differences in the way healthcare is delivered or gaps in care.</p>	<p>What is the average of total annual litigation payouts by</p>



		<p>CEHR supports eliminating all of these areas of risk. All of the shortcomings of the current and inadequate EHR system or paper chart are eliminated; access time, movement issues and consistency. Health records are electronic, and unlimited numbers of people can access and document on them immediately. They are available regardless of where the inmate is, or how often they move.</p> <p>Annual litigation payouts X .18 = annual savings.</p>	<p>your organization for the past three years?</p>
<b>Reduce Your Staffing Costs</b>			
<b>Inmate movement efficiencies</b>	7% of custody staff costs	<p>Because CEHR interfaces with the inmate management system medical scheduling data can be sent back to the JMS. This allows for officer efficiencies including inmate transportation/movement. Consolidated movement lists can be created rather than adding medical movement needs manually.</p> <p>Annual custody staff costs X .07 = annual savings.</p>	<p>How many custody staff do you employ, and what are your annual custody staff costs?</p>
<b>Management reporting</b>	4.8% of annual cost of care	<p>Due to the comprehensive reporting capabilities within the CEHR system and features like health maintenance and similar proactive medical care protocols, agencies are able to manage their cost of care much better. In addition, the manual labor and inefficiencies associated with extracting data from paper charts is reduced or eliminated. This results in an average reduction in the annual cost of care of 4.8%. Agencies who have aggressively built management reports and enacted policies designed to increase oversight have seen much larger savings.</p> <p>Annual cost of healthcare X .048 = annual savings.</p>	<p>What was the total cost of providing healthcare last year?</p>
<b>Medication Distribution FTEs</b>	-1.1 FTE per facility	<p>CEHR automates most of pill counting needs of medication distribution. In addition, the labor necessary to mark medications as administered or issued is greatly reduced. Due to this an average of 1.1 FTEs can be repurposed in each facility that has 4-6 pill call locations.</p> <p>1.1 X avg. nurse compensation X number of facilities = annual savings.</p>	<p>How many pill call locations do you have?</p> <p>How many FTE's do you have distributing medication?</p> <p>What is the annual FTE cost for medical distributors, salary plus benefits?</p>
<b>Medical records manipulation</b>	.88 FTEs per facility with population > 1,000	<p>CEHR eliminates the need for chart pulls and chart movement. It also greatly reduces the need to insert paper documents into charts,</p>	<p>How many FTE's do you have in Medical Records?</p>

# Fusion

		<p>or to locate charts when an inmate returns to custody.</p> <p>Avg. cost of medical records FTE X .88 X number of facilities = annual savings.</p>	<p>What is the annual salary (plus benefits) for a Medical Records FTE?</p> <p>How many hours do you spend on chart pulls, and chart movement?</p> <p>How many hours do you spend on adding loose paper to charts?</p>
<b>Lab Results</b>	1.15 FTE nurse per 1,135 lab results	CEHR automatically matches inbound lab results to the correct inmate and notifies your staff. This eliminates the need for doctors to ask about results, nursing staff to check if results are back, the need for nursing staff to notify doctor that results are back, and doctor to wait for chart pull to see results. This also increases quality and timeliness of care which is factored into the savings and expressed as FTE value.	How many labs do you order annually?
<b>Report production - staff time savings</b>	.85 FTE per single FTE used for report production	<p>CEHR includes many tools to automate and augment reporting within facilities and up the management chain. Ad-hoc reporting tools greatly enhance staff ability to create reports on any data collected within the system. Background business processor automatically generates and delivers these reports on whatever schedule the staff desires, and in many different ways and formats.</p> <p>Annual FTE cost of report production X .85 = annual savings.</p>	<p>How many staff do you employ for report production?</p> <p>What percent of their time is spent generating reports?</p> <p>What is the annual salary (plus benefits) for an FTE that does report production?</p>
<b>Dental/Medical overlap</b>	11% of dental costs	<p>Because CEHR includes integrated dental the abuse of medications and services when inmates get dental work done is eliminated. Also, the integrated dental component replaces the need for and costs associated with your current dental record solution.</p> <p>Annual cost of dental services X .11 = annual savings.</p>	What was your annual cost of dental services in FY 2018 (if applicable)?
<b>Lower Staff Turnover costs</b>	25% of annual staff turnover costs	<p>CEHR helps relieve much of the frustration healthcare staff experience. CEHR promotes staff spending more time with their inmates, and less time documenting healthcare.</p> <p>Annual turnover/training costs X .25 = annual savings</p>	<p>Please provide a breakdown of your healthcare staff by role and hours worked per week. What is your average healthcare staff turnover? What is the average cost to train new employees?</p>
<b>Lower costs for requests for information</b>	65% of cost to produce requests for information	CEHR greatly reduces the cost of creating responses to the many requests for information clinics receive each day from lawyers, government and family members.	What costs do you incur fulfilling requests for information? What staff is involved in fulfilling a request?



		Annual costs to meet requests for information X .65 = annual savings	
<b>Reduce Your Operating Costs</b>			
<b>Reduce office supplies costs</b>	65% of annual cost for office supplies (if going from paper to electronic)	CEHR clients see an average of 65% reduction in the cost of office supplies when moving from a paper charting environment to CEHR.	What is your annual cost for office supplies?
<b>Reduced material costs</b>	.88% of cost of medical forms	CEHR reduces or eliminates many of the materials costs associated with delivering and documenting healthcare such as paper pads, forms, chart folders and most other paper materials since everything is electronic.  Annual cost of paper products for healthcare X .88 = annual savings	What is the cost of paper products used in healthcare delivery?  Some costs include, but are not limited to, paper pads, forms, chart folders, chart dividers, and other paper material. If possible, please provide an estimate of the cost of each paper chart.
<b>CDC compliance reporting</b>	90% of costs associated with producing CDC reports	CEHR greatly reduces the cost of complying with CDC reporting standards for TST and STD data by automating the creation and delivery of this information.  Annual costs to meet CDC reporting requirements X .90 = annual savings	What are your annual costs associated with meeting CDC reporting requirements?
<b>Reduce overall reporting costs</b>	75% of costs associated with producing recurring operating reports	CEHR reduces the cost of producing recurring reports such as Health Services Report (HSR) and other frequently or regularly produced reports.	How many hours are spent producing each type of recurring report (A)?  How many times per year are each report produced (B)?  How many facilities produce these reports (C)?  For each type of report multiply AxBxC and then sum all results. Multiply the sum by .75

**Proposal Date:** 5/24/2019  
**Proposal #:** 4096  
**Project:**

**Bill To:**  
 Andy Desnoyers

<b>Initial One Time Cost</b>	<b>Qty</b>	<b>Total</b>
<b>Software Schedule</b>		
Fusion Electronic Health Record Software (Per Concurrent User)	50	762,750.00
Fusion eMAR (Per Concurrent User)	50	0.00
Fusion eDental (Per Concurrent User)	50	0.00
Fusion Behavioral Health/Group Notes (Per Concurrent User)	50	0.00
Fusion eSignature (Per Concurrent User)	50	0.00
Fusion Bed Board - Infirmary Module (Per Concurrent User)	50	0.00
Fusion Compliance Manager (Per Concurrent User)	50	0.00
Fusion Non-Formulary Manager (Per Concurrent User)	50	0.00
Fusion Lab Requisition (Per Concurrent User)	50	0.00
Fusion Orders Manager (Per Concurrent User)	50	0.00
Fusion Docutrak Document Management Software (Per Concurrent User)	50	0.00
Fusion Interface Software (Per Enterprise)	1	0.00
Fusion Correctional Clinical Content (Per Enterprise)	1	0.00
<b>Services Schedule</b>		
Project Management and Consulting Services	1	235,000.00
System Installation, Setup and Configuration	1	487,500.00
System Hosting Setup and Configuration	1	14,000.00
Training and Go-Live Services (includes travel and lodging)	1	95,000.00
<u>Data Migration</u> - CorEMR/ERMA	1	45,000.00
<u>Interfaces</u>		
Jail Management System interface development and deployment - Pro Phoenix	1	45,000.00
<b>Features:</b>		
- Ability to import the County's jail management system into the EHR to maintain all Admissions, Discharges, Transfers, and Updates		
- Ability to integrate mugshots into EHR		
*Demographic Interface includes 5 data points outbound to JMS. Each additional data point outbound to JMS is \$1,000 per data point and \$200 year in annual maintenance.		

**Total**

This quote is an approximation of charges and is not a guarantee of costs for services to be provided by Fusion. Quote is based on initial project information provided from the client and the actual cost may change once project elements are finalized. This quote serves as the minimum charge for the work to be performed. Should the work require more time than is estimated in this quote or should the scope of the work to be performed change, the invoice will be updated to reflect the quoted price plus any additional work billed at the standard hourly rate. This quote is valid for fifteen (15) days from the date of this invoice.

By signing this quote, the client understands and agrees to the terms and conditions detailed herein. And upon signature, the client authorizes Fusion to begin the work described in this quote and agrees to pay the total incurred invoice amount, upon completion. All special instructions and additions relative to this quote summary appear below and are accepted by the parties upon signature. All terms, products and services requested by the client that are not listed in this quote are subject to additional charges or fees.



**Proposal Date:** 5/24/2019  
**Proposal #:** 4096  
**Project:**

**Bill To:**  
 Andy Desnoyers

Description	Qty	Total
Pharmacy interface development and deployment - Clinical Solutions  Features: - Medication Orders: Outbound new orders, discontinue, profile, and refill messages - Demographics: Outbound demographic feed	1	25,000.00
Lab interface development and deployment - TBD  Features: - 'Out-of-the-box' paper requisition and specimen label. - Ability to import lab's compendium - Ability to import lab's Ask on Entry (AOE) questions - Ability to electronically send lab order - Ability to print paper requisition with patient information, order information, AOE questions, ordering provider information, and Diagnosis information - Ability to print specimen label with patient name, ID, order ID, and date - Mapping of LOINC Codes to EHR OBS terms	1	15,000.00
Radiology – TBD  Features: - Outbound HL7 order information (be specific with radiology) - Inbound HL7 text results (be specific with HL7 for radiology)	1	15,000.00
HIE interface development and deployment - WISHIN  Features: - Base Immunization Export - Immunization Reconcile Form - Base CCD/CDA Import-Export - CCD/CDA Reconcile Form - Syndromic Surveillance Export	1	55,000.00

**Total \$1,794,250.00**

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**Acceptance (Sign & Print Name with Date):**

Page 2

**Proposal Date:** 5/24/2019  
**Proposal #:** 4097  
**Project:**

**Bill To:**  
 Andy Desnoyers

<b>Annual Recurring Cost</b>	<b>Qty</b>	<b>Total</b>
<b>Annual Maintenance, Support and Hosting Schedule</b>		
Fusion Electronic Health Record Software (Per Concurrent User)	50	348,850.00
Fusion eMAR (Per Concurrent User)	50	0.00
Fusion eDental (Per Concurrent User)	50	0.00
Fusion Behavioral Health/Group Notes (Per Concurrent User)	50	0.00
Fusion eSignature (Per Concurrent User)	50	0.00
Fusion Bed Board - Infirmary Module (Per Concurrent User)	50	0.00
Fusion Compliance Manager (Per Concurrent User)	50	0.00
Fusion Non-Formulary Manager (Per Concurrent User)	50	0.00
Fusion Lab Requisition (Per Concurrent User)	50	0.00
Fusion Orders Manager (Per Concurrent User)	50	0.00
Fusion Docutrak Document Management Software (Per Concurrent User)	50	0.00
Fusion Interface Software (Per Enterprise)	1	0.00
Fusion Correctional Clinical Content (Per Enterprise)	1	0.00
Annual Maintenance and Support for JMS Interface - Pro Phoenix	1	0.00
Annual Maintenance and Support for Pharmacy Interface - Clinical Solutions	1	0.00
Annual Maintenance and Support for Lab Interface - TBD	1	0.00
Annual Maintenance and Support for Radiology Interface - TBD	1	0.00
Annual Maintenance and Support for HIE Interface - WISHIN	1	0.00
Cloud hosting (Per Concurrent User)	50	0.00
Professional Support Services - 24x7x365 Support Access	1	0.00
<b>Total</b>		<b>\$348,850.00</b>

\*Annual Maintenance, Support, and Hosting fee due at go live.

This quote is an approximation of charges and is not a guarantee of costs for services to be provided by Fusion. Quote is based on initial project information provided from the client and the actual cost may change once project elements are finalized. This quote serves as the minimum charge for the work to be performed. Should the work require more time than is estimated in this quote or should the scope of the work to be performed change, the invoice will be updated to reflect the quoted price plus any additional work billed at the standard hourly rate. This quote is valid for fifteen (15) days from the date of this invoice.

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**Acceptance (Sign & Print Name with Date):**



In addition to the pricing information above, we have elaborated on the pricing information which is based on accomplished milestones and periods of performance over a five (5) year period:

Period 1: Site Visit, Workflow Analysis, System Configuration, Interfaces, Data Migration, Implementation, Training and Go-Live

- Start: Day 1 of Contract
- End: System Go Live

Period 2-5: Ongoing Annual Maintenance, Support and Hosting

- Start: Go Live/Period 1 Sign Off (1<sup>st</sup> annual maintenance and support fee due)
- End: 365 days following Start of Period

With this approach in mind, the complete cost for all software and services included in this response is contained with the following two worksheets:

- Activities/Deliverables/Milestones Pricing Worksheet
- Software Licensing, Maintenance, Support, and Hosting Pricing Worksheet

Period 1: Activities/Deliverables/Milestones

As outlined above, this worksheet coincides directly with Period 1: Site Visit, Workflow Analysis, System Configuration, Interfaces, Data Migration, Implementation, Training and Go-Live. Further, it should be noted that no payment is made on any deliverable until completion and acceptance has occurred by the County.

Activity, Deliverable or Milestone	Pricing/Payment
Deliverable I – Purchase of Licenses	\$762,750.00
Deliverable II – Project Initiation & Planning	\$257,875.00
Deliverable III – System Installation, Setup, and Configuration	\$257,875.00
Deliverable IV – Interface/Data Migration/Technical Implementation	\$257,875.00
Deliverable V – Training and Go-Live	\$257,875.00
<b>TOTAL</b>	<b>\$1,794,250.00</b>

Period 2-5: Ongoing Annual Maintenance and Support (Fusion-Hosted)

As outlined previously in this section, this worksheet coincides directly with Periods 2-5: Ongoing Annual Maintenance, Support and Hosting. It includes the cost of the EHR software and Fusion’s maintenance, support and hosting of the system. It should be noted that the initial cost and Year 1 cost of the EHR has been addressed and included in the Total, Period 1 Cost outlined in the Activities/Deliverables/Milestones worksheet above and thus are not included below.

Software Name	Period 1	Period 2	Period 3	Period 4	Period 5
Fusion EHR	-	\$348,850.00	\$348,850.00	\$348,850.00	\$348,850.00



Total Price Summary

As further clarification to the fixed pricing provided above, Fusion has included a five (5) period cost breakdown summary below to reflect the term of the contract, as stated in the RFP:

EHR Pricing Summary	Fusion-Hosted
Period 1 (Phased Implementation)	\$1,794,250.00
Period 2 Services	\$348,850.00
Period 3 Services	\$348,850.00
Period 4 Services	\$348,850.00
Period 5 Services	\$348,850.00
<b>Total (Over 5 Periods)</b>	<b>\$3,189,650.00</b>

**Professional Services Rate Sheet Post Go-Live**

Hourly Rate Card	Cost/Hr
<p><b>Project Management</b> Includes individuals from Fusion’s Project Management team used to accomplish various additional services at any capacity, including consulting. Includes individuals in a director or manager role used for the completion of additional Software services.</p>	\$250.00
<p><b>Software Development</b> Includes rates for Fusion's software development team as it relates to projects outside of those discussed within this response or the related contract. Hourly rate for EHR development, billed as incurred on a weekly basis should a development bundle not be contracted. Billed on 30 minute intervals, minimum of one hour.</p> <ul style="list-style-type: none"> <li>- System configuration</li> <li>- System customization</li> <li>- Form Development</li> <li>- Report Development</li> <li>- Interfaces (uni-directional)</li> </ul>	\$225.00
<p><b>Training</b> Includes rates for Fusion-certified trainers who will provide additional, non-contracted training for the client. Training costs do not include travel if onsite training is requested.</p>	\$200.00

Fusion is dedicated to providing the most comprehensive EHR system for the correctional health industry. We understand that this project stems from Milwaukee County’s restructuring of their healthcare delivery model to those who are incarcerated and welcome additional discussions as it relates to our products and services for this initiative. Fusion is positioned to offer significant advantages in meeting your requirements for EHR software, services and support. With our vast experience implementing, training and supporting our EHR within the correctional health industry throughout the US, we are prepared to offer the County a complete level of knowledge, commitment and expertise that will exceed your expectations.

Fusion is excited to have the opportunity to put our best foot forward in earning the County’s business. We have discussed this opportunity with our project team and we are ready to allocate them to this project immediately should the County desire. Should you have any questions pertaining to any of this, please contact Michael Jakovcic, Executive Vice President of Fusion:

Michael Jakovcic  
E-Mail: [michael.jakovcic@fusionmgt.com](mailto:michael.jakovcic@fusionmgt.com)  
Phone: 732.218.5705 ext. 1286

Fusion

Rhode Island  
Department of  
Corrections **Replaces**  
**NextGen with Fusion-**  
**CEHR**



# Overview

Rhode Island Department of Corrections wanted to replace the previous vendor's EHR system as it was out of date and lacked certain capabilities that hindered the DOC's efficiency. Fusion was selected as the vendor of choice to replace NextGen and implement CEHR to manage a growing patient population and increased complexity in correctional healthcare.

## Interoperability and Data Migration

Rhode Island DOC is leveraging technology to help manage its fast-growing inmate population –without adding staff. Using CEHR system, the State has streamlined its clinical and administrative processes to save resources, accelerate med pass, and gather data to help them with their reporting requirements.

In addition to Centricity's immense correctional health capabilities, Fusion's integration team successfully interfaced with several external databases, including the State's Health Information Exchange (HIE) platform. In addition to implementing CEHR, Fusion successfully migrated all of the pertinent patient data from NextGen to CEHR, something in which very few vendors have done.

Due to the short amount of notice provided by the State, we allocated the necessary resources to get all of the deliverables successfully finished on time and within budget.

## Notable Achievements:

- Integrated lab results and imaging data into the clinical workflow, giving physicians faster access to data and reducing the wait time for results by
- Provided electronic signature capture for consent forms.
- Implemented a robust eMAR solution that cut med pass times by 50%
- Customized workflows and forms to make processes simplified and easier for staff

## Customization Helped Providers Implement New Best Practices

Centricity's intuitive user interface makes it easy for providers to share documents and engage in an informal dialog about a patient's condition before making any permanent notes in the patient's chart. For Rhode Island DOC, a unified prison and jail system, collaboration is critical. However, simply identifying new best practices is not sufficient for improving care – providers have to implement them. To facilitate adoption of new recommendations, for example, the State leveraged the ability to customize workflows with CEHR.

## Fusion Provides Strong Base of Support

The State observes that Fusion has supported them throughout the implementation as well as post-go live. Fusion's goal is to make every client site a reference site by providing only the best support services that can be provided.

"We've had a great working relationship with Fusion, and we consider them in many ways a partner in our efforts. One challenge they have shared with us and the rest of the industry is adapting to changes driven by regulation. Fusion has worked hard to help keep us up to date and make the changes as streamlined as possible."

## Summary

For the Prisons and Jails supported by Rhode Island, CEHR has increased efficiency and helped the organization support a measurable improvement in provider productivity and quality of care. CEHR provides the business intelligence to guide improvement and advocacy efforts and secure NCHC and ACA accreditation. Through greater productivity, patient volume has increased, which directly impacts the care provided at the detention center. Redirection of staff effort and performance data to guide improvement efforts translate into a higher quality experience and outcome for patients.

# Fusion

## Data-driven care

For the University of Connecticut Health Center, and the division providing inmate healthcare known as Correctional Managed Health Care (CMHC), an Electronic Health Record proves essential in delivering award-winning care and achieving NCCHC and ACA accreditation.



# Summary

UConn Health significantly enhanced patient outcomes and reduced costs with data-driven care empowered by Centricity Electronic Health Record (CEHR) system. A Care Model Team used collaboration tools to help deliver integrated care to complex patients, powerful data reporting to help teams improve the care model, and customizable forms to incorporate care model improvements into daily practice.

## Notable Reasons Why Fusion Was Selected Vendor-of-Choice:

- CEHR is a comprehensive and robust EHR solution that can work in any correctional setting no matter if its County or State, how small or large, standard or complex.
- Ability to interface/integrate with any 3<sup>rd</sup> part system for continuity of care.
- Exceptional project team, having over 75 years of combined hands on experience implementing CEHR in a correctional health setting.
- Ability for a seamless and timely implementation and go-live.
- Fusion's ability, along with Centricity's functionalities, to work with the State in developing a Health Information Exchange (HIE) program to be used by not only the DOC facilities, but by the Public Health Agency and UConn Health as well.



## Project Background

The general scope of the project is to implement CEHR, as well as implement a Health Information Exchange System to be utilized by all Public Health Agencies assisting with patient healthcare. The following is an overview of the entire project:

### Connecticut DOC Overview

The Connecticut Department of Correction (DOC) chose Fusion to provide CEHR, a Health Information Exchange (HIE) and provider portal to serve the state's correctional facilities. CEHR was chosen to convert the current system of handwritten documentation on hard copy (paper) records to an integrated EHR to be used by internal and external DOC customers. With CEHR, the DOC will improve the quality, timeliness and effectiveness of patient care by providing real time access to comprehensive clinical information wherever and whenever needed.

### UCHC/CMHC Overview

The University of Connecticut Health Center (UCHC) provides comprehensive health care services to offenders under the jurisdiction of the DOC. Correctional Managed Health Care (CMHC) is a division of UCHC, and oversees the implementation and management of health services for the DOC. Health services include medical, mental health, dental, nursing, substance abuse intervention and pharmaceutical services. As of July, 2013, services were provided by 748 full-time equivalent staff to a population of 16,986 incarcerated inmates and approximately 1,000 inmates residing in halfway houses. CMHC is the largest state staff model health maintenance organization in New England.

The majority of care is provided at the correctional facilities. University of Connecticut's John Dempsey Hospital (John Dempsey) provides additional inpatient and outpatient services as required. John Dempsey has a 10 bed inpatient unit for those in DOC custody; however, emergency care or specialty services are provided when needed at other hospitals and facilities across the state.

The DOC works closely with CMHC to develop and administer programs that improve inmate health and develop skills to maintain health upon release. Examples include smoking cessation, methadone maintenance and substance abuse. In addition, DOC monitors and oversees the care provided by CMHC.

### Organizational Structure

Health care includes global medical, mental health, pharmacy, and dental services. Services are provided at 17 DOC facilities statewide. Healthcare is also currently provided for approximately 1000 inmates residing at 42 DOC-contracted halfway houses and at John Dempsey, one facility for women prisoners (York), and one for youth offenders (Manson).

Connecticut is one of six states with an integrated jail and prison system. Jails have a high inmate admission and discharge rate, and present distinct management and clinical challenges. The Hartford jail averages over 35 intakes every night. Statewide, each of the 24,936 annual admissions requires a medical and mental health intake health screening. Generally, one out of five requires prompt medical or mental health intervention. The only population with a constitutional right to healthcare (general medical and mental health) is incarcerated offenders, whether sentenced or unsentenced. These rights include access to professional medical care equivalent to the community standard. In Connecticut, there are court orders, consent decrees and settlement agreements that focus on HIV/AIDS, mental health, and timely general medical care.

The facilities are divided into 10 functional units. Each functional unit has a Health Services Administrator responsible for the operations at one or more facilities. Each facility is staffed with nursing, medical, mental health, and dental employees which may be assigned anywhere within a functional unit as needed. Clinical direction is provided by a Statewide Director of Medical Services, Director of Nursing and Patient Care Services and Director of Mental Health Services and Psychiatric Care. Pharmacy Services are provided by a dedicated Correctional Managed Health Care pharmacy unit.



### Scope of Services

The DOC chose Fusion to provide CEHR and a HIE solution designed to support medical, dental, behavioral health and addiction services for 17,000 inmate patients. CEHR is certified by the ONC-Authorized Certification Body under the 2014 edition standards and this is extremely important since Connecticut DOC intends to participate in the Medicaid EHR Incentive Program for Eligible Providers. The project is being completed in two phases:

Phase 1 includes the implementation of the EHR across all DOC facilities, including:

- Registration and appointment scheduling
- Electronic support for care provided within the facilities, including medical, dental, mental health, addiction services, women's health and adolescent medicine.
- Case management and discharge planning (re-entry services)
- Real-time integration with all CMHC and UCHC systems that are used to care for patients including but not limited to pharmacy, lab, radiology and ambulatory EHR
- Integration with DOC information systems, including but not limited to the Offender Management Information System (OMIS).
- Ability to financially value the services provided to the inmate population.
- Clinical and administrative reporting that meets the needs of CMHC and DOC; extract of data to meet additional reporting needs
- Backload of electronic data from existing systems
- Scanning of paper records into the electronic system.
- HIPAA-compliant Electronic data interchange with our ASO (Administrative Services Organization) for utilization review and management as well as other external Contractors

Phase 2 of the project involves the implementation of the health information exchange including:

- Integration of patient-related state systems including but not limited to those used at DSS and DMHAS
- Real-time interoperability/electronic exchange of clinical information with care partners in the community including but not limited to FQHCs (Federally Qualified Health Centers) and hospitals, customized to meet the specialized needs of the Correction environment.
- Web-based portal that provides community partners with access to information in the DOC EHR.
- Cross-population disease management
- Integration in to the Connecticut Health Information Exchange and other information exchanges.

Fusion

# Lake County Jail in Indiana **Replaces** **CorrecTek** with **Fusion-** **CEHR**



## CEHR helps Lake County Jail streamline workflow, enhance patient care, and meet accreditation.

### The Story in a Nutshell

In 2015, Lake County Jail in Indiana was placed under federal receiver. Fusion was selected as the vendor of choice to replace CorrecTek and implement CEHR to manage a growing patient population and increased complexity in correctional healthcare.

### The Right Choice

To support the Jail in meeting the challenges that lied ahead, Fusion provided careful planning, proper system configurations and customization, a phased roll-out strategy, the establishment of an EHR Helpdesk for application support, and outstanding training before, during and after going live with the system. Most importantly, the County was looking for a tool to help the organization incorporate evidence-based recommendations into practice and meet NCCHC and ACA standards, which they had found with Fusion and the CEHR system. In addition to implementing CEHR, Fusion had to also migrate CorrecTek data. Fusion successfully migrated the data, something in which very few vendors have done.

Since we have replaced CorrecTek and deployed CEHR, we have seen greater efficiency, enabling us to redeploy staff clerical activities to more direct patient services. This has led to growth in the volume of patients being seen, with volumes rising as much as six percent without an increase in staff FTE.”

Eric Clement, HSA  
Lake County Jail

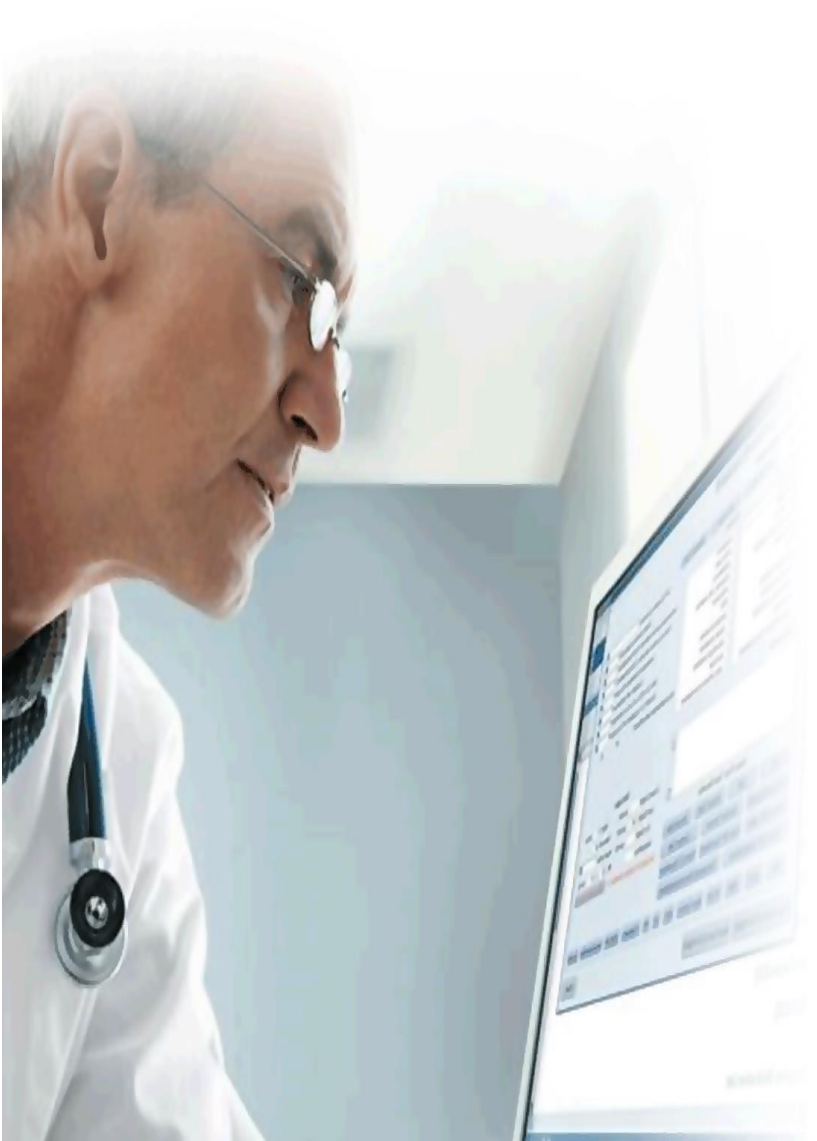
“Ultimately when we looked ‘under the hood,’ it was clear that CEHR is outstanding in terms of its capability to collect and standardize clinical data for the purposes of quality reporting and decision support,” states Eric Clement, Health Services Administrator, Lake County Jail. “Beyond the capabilities of the solution, Fusion as a vendor demonstrated its experience helping organizations use CEHR to support quality initiatives,” Clement explains.

The County relies on CEHR to help benchmark patient care, report on care quality, and monitor business health with financial analytics. “CEHR enables us to capture data in a very structured way and we can easily retrieve the data to create an aggregate report of quality measures and act on them proactively. Provider and practice level data helps us to identify areas for improvement and benchmark best practices,” Clement says.

# Fusion

# Fusion Health

## Correctional Electronic Health Records



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# Fusion

### Company Background

Fusion is one of the largest EHR providers for City, County, State, and Federal Correctional and Juvenile Justice Departments in the United States. Fusion manages over 250,000 inmates in over 200 correctional facilities throughout the US. Fusion offers a comprehensive implementation, clinical workflow development, training, support and hosting services. For over 15 years, Fusion has been delivering EHR solutions nationwide that meet NCCHC & ACA accreditation requirements.

Fusion's ability and experience in working effectively alongside key administrators, stakeholders and facility departments has allowed us to become a multifaceted correctional health IT services firm. Fusion's thorough understanding and extensive experience in providing correctional facilities with business process analysis, EHR implementation, data migration, integration services and project management services allows you to retain the most capable, experienced and thorough team to provide implementation, training, customization, data migration and integration, support and hosting services of the EHR system in establishing industry best practices to the Correctional Agency's overall agenda.

Fusion continues to lead the way of EHR management and development. We take pride in seeing our ideas and recommendations, as well as yours, successfully implemented. We provide you with innovative solutions to address all of the functional needs for your operations today, while also developing for the future. Fusion's user community is a proactive, collaborative group that regularly shares best practices. We maintain an active dialogue with our users to encourage collaboration, allowing us to provide our clients with a complete solution to meet their needs. We are unwavering in our commitment to bring creative, yet practical solutions to our clients. We provide our best information, best analysis, best counsel and best possible results every time.

We hire the best-of-the-best to keep doing what they do best – Correctional EHR consulting, implementations, configurations, training, and support. Our colleagues are among the most experienced, most knowledgeable and most innovative in the industry. We are out-of-the-box thinkers. We have worked our way up through the ranks to the most senior levels of the Correctional Healthcare industry. This unique perspective translates into an intimate understanding of how Correctional Healthcare works – and doesn't. We understand the challenges and constraints our clients face.

As the largest EHR provider for County and State Department of Corrections and Juvenile Justice Agencies in the US, we are unwavering in our commitment to bring creative, yet practical solutions to our clients. We provide our best information, best analysis, best counsel and best possible results every time. We stay ahead of healthcare rules, trends and changes, new initiatives, and business opportunities to keep our clients informed. We have the relationships which give us national reach.

Fusion's CEHR is a fully integrated, one-for-all EHR system inclusive of medical, behavioral health, dental, chronic care, pharmacy/eMAR and numerous other clinical documentation tools. CEHR provides your Agency with over 2,000 corrections-specific encounter templates many of which adhere to NCCHC, ACA, and PBNDS Standards. CEHR also has over 500 additional encounter templates of various specialty and subspecialty clinical workflows. Fusion offers your Agency a cost-effective, flexible Commercial-Off-The-Shelf ("COTS") solution in compliance with Centers for Medicare and Medicaid Services ("CMS") regulations, the Health Information Portability and Accountability Act ("HIPAA"), ICD-10 and is compatible to meet and exceed the Agency's needs and expectations. CEHR is also a Certified Electronic Health Record Technology (CEHRT) 2015 as defined by the Office of the National Coordinator for Health Information Technology (ONC). CEHR is the EHR system your Agency needs to make day-to-day operations easier and more efficient.

In addition, CEHR complies with the following best practice guidelines and data privacy/security standards:

- PII (Personally Identifiable Information) Data Management Standards and Guidelines
- NCCHC Standards (National Commission on Correctional Healthcare) Federal Clinical Standards and Guidelines
- ADA Correctional Facilities Guidelines (Americans with Disabilities Act) Standards and Guidelines
- ACA Standards (American Correctional Association) Standards and Guidelines
- HIPAA (Health Insurance Portability and Accountability Act) Data Management Standards and Guidelines
- Comply with CJIS (Criminal Justice Information Services) Data Management Standards and Guidelines

Through partnering with Fusion, your Agency will dramatically increase your organization's efficiencies for your inpatient and outpatient services, including but not limited to annual exams/initial intake screenings, clinic visits, chronic disease monitoring, telemedicine, vaccine records, sick call triage, medication administration, mental health and discharge planning for inmates. It also possesses a robust reporting environment that provides real time data to enable effective decision making through the integration with third party systems.

Being an all-in-one solution, CEHR will help meet and exceed your organization's goals and requirements by providing you with an EHR that will help your organization achieve the following goals:

- Improve quality of care
- Increase inmate safety
- Increase health care staff productivity
- Decrease administrative expenses
- Integrate with various 3<sup>rd</sup> party systems and providers in the community to share information
- Improve clinical workflow for inmate care.
- Store and archive medical records for future reference.
- Improve ability to gather medical statistics.



With a dynamic search engine and one-click problem entry, CEHR simplifies the data entry required for health providers to comply with new the ICD-10 coding requirements and reduces the number of clicks required to enter a problem. It is an exceptionally customizable product, tailored to boost your organization's efficiency. CEHR is based on physician input and has the built-in ability to customize forms and functions to meet the organization's needs

### Qualifications & Experience

Fusion is one of the largest EHR providers to local, city, state, and federal correctional facilities in the United States managing over 250,000 inmates in over 200 correctional facilities throughout the US. Not only are we one of the largest EHR vendors in corrections, we are also the industry leader in the replacement of legacy EHR systems for DOCs and DJJ's across the country. Fusion has been at the forefront of Electronic Health Records for nearly two decades in the correctional health setting. That said, the following is a sample list of corrections agencies partnered with Fusion:

Corrections Client	Approximate ADP
<b>State Department of Corrections/Juvenile Justice</b>	
Colorado Department of Juvenile Justice	600
Connecticut Department of Corrections	17,000
Connecticut Department of Juvenile Justice	500
Louisiana Department of Corrections	16,000
Mississippi Department of Corrections	30,000
New Jersey Department of Corrections	23,000
Ohio Department of Rehabilitation and Corrections	50,000
Rhode Island Department of Corrections	4,000
Washington DC Department of Corrections	3,000
Washington DC Department of Youth and Rehabilitation Services	400
<b>County and City Detention Centers/Jails</b>	
Bergen County Jail (Hackensack, NJ)	650
Camden County Corrections (Camden, NJ)	850
Chatham County Detention Center (Savannah, GA)	1,200
Erie County Corrections (Buffalo, NY)	1,000
Essex County Corrections (Newark, NJ)	1,800
Harris County Jail (Houston, TX)	10,000
Lake County Corrections (Crown Point, IN)	750
New York City Health and Hospital Corporation – Correctional Health Services	9,000
Orange County Corrections (Orlando, FL)	6,000
Sacramento County Jail (Sacramento, CA)	3,500

Fusion approaches every project with a partnership mentality, working in conjunction with the client to ensure that the EHR is implemented on time, on budget and complete. Unlike any other vendor, Fusion intimately understands what it takes to get an EHR system live at correctional facilities. Fusion leverages its extensive knowledge of the EHR and Correctional Health space and will collaborate with the agency to ensure that the system truly meets their workflow both now and for the future. Our subject matter experts (SMEs) come with years of experience to be much more than 'yes-folks' when it comes to clinical content development and overall implementation and go-live of CEHR. Fusion will leverage its knowledge and experience of how things are done throughout the country to provide the agency with proven options and alternatives throughout the implementation.

Through Fusion's Experience and Qualifications, you will see that Fusion is best suited to provide your Correctional Agency's implementation, training, customization, data migration and integration, support and hosting services for an Electronic Health Records system.



## Features and Functionalities

### Computerized Physician Order Entry (CPOE)

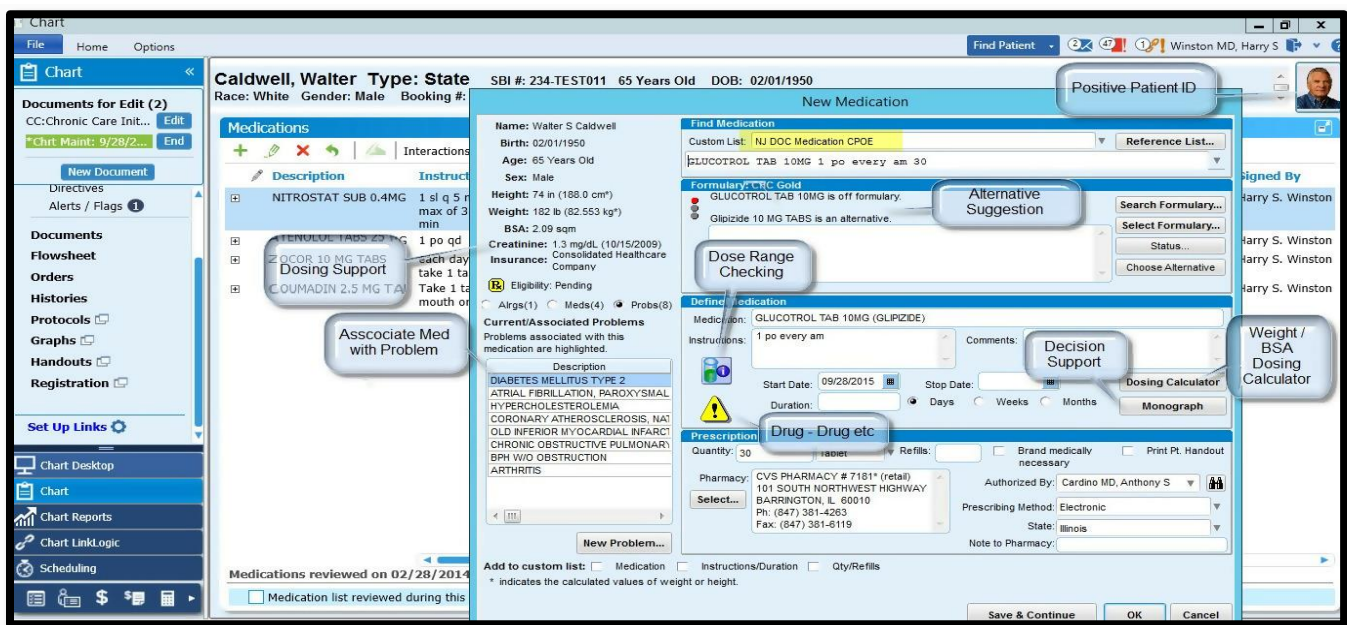
CEHR offers a fully integrated clinical order entry (CPOE) and electronic medication administration record (eMAR) solution that contains components that work together. In addition, our eMAR can provide inventory management functionality as well.

The following is a snapshot of Medication and Non-Medication CPOE Components, which comes standard with CEHR.

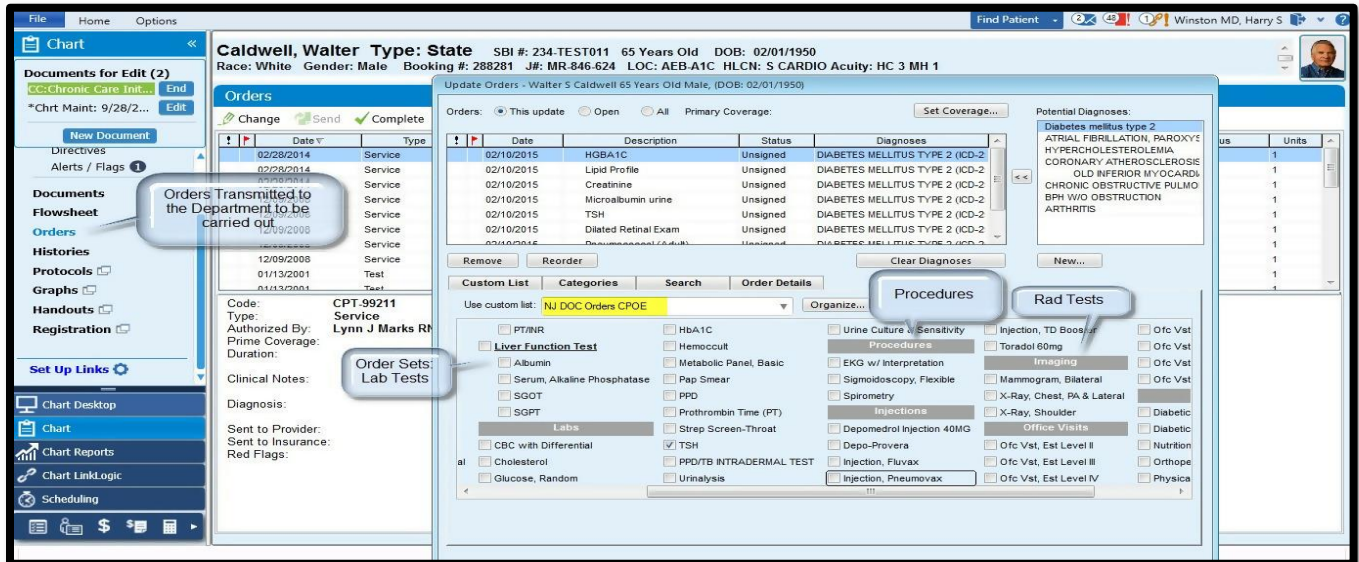
**CPOE - Medication ordering component:** powerful medication ordering component that gives the provider every tool to order medication **safely** and **efficiently**. Med ordering is one step away from most clinical screens.

**Safely:** Drug – Drug, Drug – Food, Drug – Allergy, Drug – Diagnosis, Dose Range Checking, Weight Based Dosing, Dosing Calculator and more.

**Efficiently:** Eligibility Checking, Formulary Checking with suggested alternatives, Diagnosis Association, flexible selection of Custom Med Order list, easy real-time updating of Custom Med List, adding new Problem from Med Ordering component and more.



**CPOE - Non-med ordering component:** CEHR has a powerful yet easy to use Ordering Component. Lab, radiology, consults are organized into Custom Order Lists that are easily created and tailored. Orders can be entered manually or be a part of Automated Protocol Driven Care – making ordering extremely fast and efficient. Once orders are entered, they are seamlessly routed to the appropriate department, person or provider for completion. Every step of the ordering process is monitored for safety and compliance.



### Electronic Medication Administration Record

CEHR is a fully integrated EHR system inclusive of a Correction specific eMAR, designed to increase productivity for medication administration within a corrections system. Our eMAR is robust, yet simple and has a fluid UX for faster user adoption and ease of use. From basic system interfaces between CEHR and Pharmacy Management system to complex systems such as automated packaging and dispensing systems such as Pyxis, Fusion has worked with countless vendors to successfully integrate any of these pharmacy solutions with CEHR.

A comprehensive clinical workflow which includes an eMAR, in best practices, will allow for a unified system whereby the EHR serves as the official clinical file, supported by an eMAR for effective and accountable medication administration. Through this eMAR, the ability to order medications directly to the pharmacy ensures one completely unified system.

The eMAR allows for bi-directional communication between the systems and minimizes the number of staff who will have to be trained on two systems. This integration allows for CEHR to send the eMAR the following:

- All Demographics
- Intake, Booking and Release documentation
- Medications entered from CEHR's Computerized Physician Order Entry (CPOE)

The eMAR is a paperless electronic medication administration record that enables your nursing staff to efficiently administer and track all medication administration functions. This software has extensive capabilities and is a significant upgrade to paper MAR programs.

The screenshot displays the Fusion eMAR interface. At the top, there are filters for Location (All Locations), Time (0500 - 1000), Date (06/19/2018), and Filters. Below this is the 'Alphabetic Medpass' section with buttons for 'A', 'M', and 'A - M', and a 'Save Medpass' button. The 'Medpass Information' section shows 'Out of Compliance (4)' and a list of medications not administered three consecutive times: Carter, Aaron; Madoff, Bernard; and McConaughey, Matthew. The 'Medpass Administrations' section includes a table for patient Tim Allen (665544) (FSP) with columns for Medication, Pass Time, and Status. Two medications are listed: RANITIDINE HCL 150 MG ORAL CAPS (DOT) and NIACIN 500 MG ORAL TABS (DOT), both with a status of 'Pending' and a 'Past Due' indicator.

Fusions eMAR includes many features that allow for rapid and efficient medication administration with minimum clicks, text entry field and or screens including but not limited to:

- The ability to scan the barcode on the medication and inmate's wristband/ badge to provide an electronic recording of the actual medication administration date, time, and nurse's initials.
- For specialty units such as a psychiatric unit housing inmate without wristbands/badges, the system allows for manual entry of an inmate's number.
- Injection location can be charted.
- Capability of printing a paper med pass list in an easy-to-use grid format, sorted by inmate and unit, and providing all medications and administration times. (Note: This is an especially efficient way to inform staff of inmates who need to report to the med line for stock medications.)
- A list of inmates missed during regularly scheduled med pass, making it easy to identify which inmates need to be called down to receive their medications.
- The ability for your staff to indicate reasons a medication was not administered (e.g., inmate refused or dropped, inmate no shows, out to court).
- Throughout the med pass process, the system informing you the percentage completion of the med pass, by entire population and by individual cellblock.
- For remote med pass or in areas without Wi-Fi, working off-line with a laptop and synchronizing later when Internet access is restored.
- The ability to archive 24 hours of previous med pass information, in cases of power outage and Internet down times.

Fusions eMAR easily distinguishes the different types of medication administrations. Fusions eMAR breaks down the Medication Administration into three categories:

- DOT – Directly Observed Therapy

- KOP - Keep on Person
- PRN - As Needed

When the Nurse is dispensing the medication, they have the ability to only show inmates with DOT Medications by a simple click of a button.

**Fusion eMAR**  
View MAR

Corbett, Dean O  
Gender: M Location: FSP  
Problems (6) Orders (3) Allergies (2)

### Administrations for Today

#### DOT Administrations (5)

Medication	Pass Date / Time	Status	
PROVENTIL HFA 108 (90 Base) MCG/ACT INHALATION AEROSOL SOLUTION (DOT) Order Date: 10/25/2017 - Indefinite Instructions: Take 2 puffs every 6 hours as needed for shortness of breath	06/19/2018 @ 0400 Past Due	Pending	A N
OMEPRAZOLE CPDR 20 MG (DOT) Order Date: 06/19/2018 - 06/21/2018 Instructions: bid	06/19/2018 @ 0700 Past Due	Pending	A N
OMEPRAZOLE CPDR 20 MG (DOT) Order Date: 06/19/2018 - 06/29/2018 Instructions: BID	06/19/2018 @ 0700 Past Due	Pending	A N
OMEPRAZOLE CPDR 20 MG (DOT) Order Date: 06/19/2018 - 06/21/2018 Instructions: bid	06/19/2018 @ 1930 Future Pass	Pending	A N
OMEPRAZOLE CPDR 20 MG (DOT) Order Date: 06/19/2018 - 06/29/2018 Instructions: BID	06/19/2018 @ 1930 Future Pass	Pending	A N

#### KOP Administrations (2)

Medication	Pass Date / Time	Status	
ZOCOR 20 MG ORAL TABLET (KOP) Order Date: 10/26/2017 - Indefinite Instructions: Take 1 tab every evening	Next Scheduled Resupply 06/18/2018 Past Due	Last Administered 06/08/2018 @ 1420	A
OMEPRAZOLE 20 MG ORAL CAPSULE DELAYED RELEASE (KOP) Order Date: 11/06/2017 - Indefinite Instructions: Take one per day.	Next Scheduled Resupply 06/22/2018	Last Administered 06/12/2018 @ 1120	A

#### PRN Medications (1)

Medication	Pass Date / Time	Status	
TYLENOL EXTRA STRENGTH 500 MG ORAL TABLET (PRN) Order Date: 10/25/2017 - Indefinite Instructions: Take 2 tabs every 6 hours as needed for headache	As Needed	Last Administered 06/08/2018 @ 1418	A

We are well aware the issues surrounding internet connectivity behind the walls of a corrections system. The eMAR software supports an offline data sync model. The HTML5 technologies utilized to enable this feature are Application Cache and IndexedDB. The eMAR will poll the server every 5 seconds with a HTTP request to verify connectivity. If the request does not process successfully, the client will assume it has lost network connectivity and transition into offline mode. During that time, it can still access the saved Med Passes into the IndexedDB data store through the cached HTML UI. Any administration records will be put into a queue until connectivity is re-established. Once the client successfully polls the server again, it will go back into online mode and send all records that were documented while connectivity was lost.

Fusion's eMAR has the capability of printing a paper med pass list in an easy-to-use grid format, sorted by inmate and unit, and providing all medications and administration times.

**Fusion eMAR**

Corbett, Dean O  
Gender: M Location: FSP

Problems (8) Orders (3) Allergies (2)

Print MAR: With Detail / Without Detail

Show / Hide Inactive Medications: Show / Hide

Month: June Year: 2018

**DOT Medication Administrations**

OMEPRAZOLE CPDR 20 MG (06/19/2018 - 06/21/2018) (DOT)																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
0700																															
1930																															

OMEPRAZOLE CPDR 20 MG (06/19/2018 - 06/29/2018) (DOT)																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
0700																															
1930																															

PROVENTIL HFA 108 (90 Base) MCG/ACT INHALATION AEROSOL SOLUTION (10/25/2017 - Indefinite) (DOT)																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
0400							A					N																			

### Infirmary Management

The Infirmary Manager allows staff to easily get a comprehensive view of which rooms and/or beds are available, and who is in any given room at any given time. Clicking on a room/bed brings up the inmate’s demographic and medical information, or if the room is available it is identified as such. Users are then able to click on the inmate name from within the infirmary view to go straight into the inmate’s chart for further review or documentation.

**Fusion Bedboard** | Fusion Health | Fusion Infirmary

- Facilities: FUSION, BERGIN
- + New Admission
- Admissions
- Manage Users
- Manage Beds
- Manage Facilities

Room 101	Room 102	Room 103
<ul style="list-style-type: none"> <li>J. Bieber</li> <li>Empty</li> </ul>	<ul style="list-style-type: none"> <li>M. Stewart</li> <li>S. Torres</li> <li>S. Carlson</li> </ul>	<ul style="list-style-type: none"> <li>Empty</li> </ul>

+ Add Room

The Infirmary Manager application automates bed status based on inmate location. With real-time visibility, our bed management system:

- Knows when an inmate is out of the room for tests or X-rays, and holds the bed automatically
- Knows when an inmate is discharged and automatically notifies staff to expedite bed turnover
- Knows when staff have completed work, and automatically marks the room as available

Our application shows all beds and special notations, such as isolation or gender information. Bed status can be updated either manually or automatically via the Jail Management System.

The screenshot displays the patient record for Martha Stewart, admitted on 01/29/2019. The interface includes a navigation sidebar, patient demographics, current admission details, and a list of activities and acuity levels.

**Patient Information:**  
 Name: Stewart, Martha  
 Gender: F  
 DOB: 08/03/1941  
 External Id: 266458  
 MRN: 23423441231  
 HLCN: FCC-W  
 Status: Active  
 LOC: B D 101 2

**Current Admission:**  
 Admitting: Broken leg  
 Diagnosis: Broken leg  
 Acuity: 2  
 Admitted: 01/29/2019  
 Facility: Fusion Health  
 Infirmary: Fusion Infirmary  
 Room: Room 102  
 Bed: Bed 3

**Providers:**  
 Cucuzza, Matthew (Admitting Provider)

**Current Admission Acuity History (3):**

Acuity Level	Created	Note
2	04/05/2019	sitting in a chair
3	04/04/2019	increasing pain
1	01/29/2019	Martha requires a low level of care.

**Activities (2):**

- Breakfast (Started by Cucuzza, Matthew at 01/31/2019 10:17 AM, Finished by Cucuzza, Matthew at 01/31/2019 10:17 AM)
- X-ray on leg (Started by Cucuzza, Matthew at 01/29/2019 02:44 PM, Finished by Cucuzza, Matthew at 01/29/2019 02:44 PM)

### Order Manager - Scheduling

CEHR includes an extremely powerful and flexible scheduling system. Fusion's Orders Manager tool provides staff with the ability to effectively manage and schedule inmate care within a correctional environment. All onsite scheduling is done in similar fashion, no matter what the service being provided is. Track upcoming and overdue services such as follow up care, sick call, labs, blood glucose tests, specialty services, etc. by order date, priority, or any other filter provided. Fusion Order Manager is easily customizable to meet your clinical needs. In addition, call out sheets can be electronically generated and printed to hand to the CO's. For HIPAA compliance, a toggle on the tool allows users to hide PHI prior to printing the call out sheet.

The screenshot shows the Fusion Order Manager interface with a list of orders. The interface includes filters for date, priority, and patient status, and a table of orders with columns for ID, Patient, Location, Date, Description, and Provider.

**Order Manager Table:**

Priority	ID	Patient	Location	Date	Description	Provider
		Morris-Testy, Stephen		05/28/19	Dental Sick Call	Account 3 Training
		Morris-Pfeifer, Robert		05/23/19	Syphilis Screen with Rflx to RPR	Robert Pfeifer
		Morris-Test, John		05/28/19	On Site Referral - Prescriber (Medical)	Account 6 Training
		Morris-Test, John		05/28/19	Syphilis Screen with Rflx to RPR	Account 6 Training
		Morris-Test, John		05/28/19	Syphilis Screen with Rflx to RPR	Account 6 Training
		Morris-Testy, Stephen		05/28/19	Medication Verification	Account 3 Training
		Morris-Testy, Stephen		05/28/19	Medication Verification	Account 3 Training
		Morris-Testy, Stephen		05/28/19	Mental Health Referral	Account 3 Training
		Morris-Testy, Stephen		05/28/19	Syphilis Screen with Rflx to RPR	Account 3 Training
		Morris-Testtz, Gerry		05/28/19	Military Service Evaluation Clinic (MSEC)	Account 2 Training
		Morris-Testtz, Gerry		05/28/19	Military Service Evaluation Clinic (MSEC)	Account 2 Training
		Morris-Testtz, Gerry		05/28/19	Military Service Evaluation Clinic (MSEC)	Account 2 Training

In addition, CEHR provides staff with efficient ways of managing work queues, no matter what job role the staff member has. The chart desktop is an area within CEHR where providers can manage their tasks, making sure that they complete and sign off on certain documentation, review and sign off on pending items such as lab results, and anything else that has to do with their day-to-day work activities.

From adding a new inmate on the fly to searching for first available appointments, to tracking recalls and managing authorizations and referrals, CEHR transforms scheduling into a quick and simple process. Designed for high inmate and clinic satisfaction, CEHR's scheduling provides a flexible, customizable interface as well as clear, easy-to-follow guidelines. CEHR accommodates both on-site and off-site scheduling, so hospital visits or consultant appointments can be tracked as well.

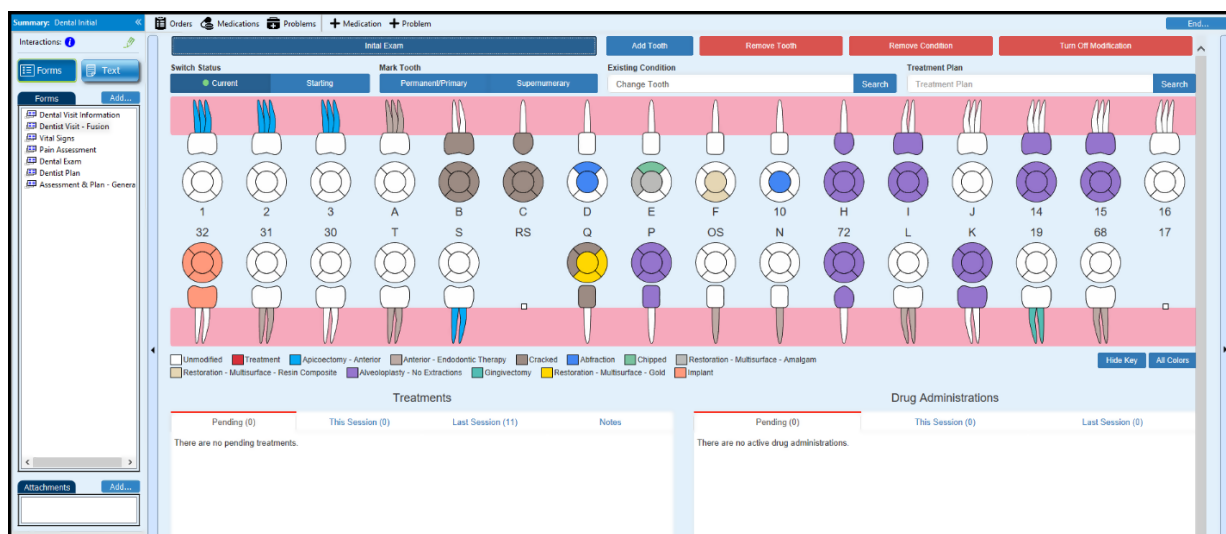
In the chart desktop view providers can easily see if they have any messages needing a response, along with unique task items. The task list can be filtered by service/document types, by name, by status, or anything else they want to prioritize and concentrate on so that they only see the work needed for completion on that particular service (i.e. diagnostic results review).

### Dental Application

Unlike many other vendors who need to subcontract their dental application through third party vendors such as Dentrix, the dental component is inherent to the system and a fully integrated component of CEHR. CEHR is utilized by numerous Correctional Health clients nationwide in providing Dental Health Services to inmates. CEHR allows dentists and hygienists to rapidly document current status of teeth and planned procedures by selecting certain teeth and documenting any issues as needed.

Some of the key features include:

- Graphical Tooth Charting
- Treatment Planning
- Drug Administrations
- Digital Radiography; X-Ray and Imaging
- Multispecialty Data Capture
- Electronic Patient Forms with Encrypted Electronic Signatures
- Multi-lingual Patient Education Software
- Restorative Chart Review



### Mental Health Functionalities

Fusion provides a comprehensive mental health offering that covers anything from the smallest of psychiatric evaluations, group therapy sessions, partial hospital extensive group therapy sessions, and inpatient admissions and monitoring. CEHR has the ability to process intake, assessment of needs, plan of care, monitoring, follow-up, and reassessment for mental health. In addition, CEHR enables configurable templates, inmate notes and other inmate-related data that may require diverse configurations and support creation of custom fields. Fusion provides a library of forms that can be leveraged for documenting mental health visits.

In addition, CEHR contains a specific system to track and document the status of inmate's in segregation across multiple housing units. Innovative segregation rounds templates allow behavioral health clinicians to document initial segregation screenings and clearances, and ongoing observations and care for as long as inmates remain in segregation. Medical and mental health templates are available for easy documentation.

Inmates can be filtered by housing location so staff with assignments to different housing units can easily identify who they need to see. They can document on each inmate on one screen without having to look-up inmates individually, document relevant findings, and then document on the next inmate without going to another screen. Each inmate's individual record is maintained in their own chart and a record of the rounds can be generated in seg log document form at any interval chosen by the staff member. Additionally, inmates who are on suicide precautions can be tracked and receive visits from behavioral health staff at any interval dictated by facility policy and procedure. Progress notes are captured of these visits and next visits are scheduled through tasking to the appropriate group of staff members from the same template.

The **Treatment Plan Manager** allows users to plan and create long term inmate goals, devise a plan to achieve those goals, and track the progress towards attaining those goals. The Treatment Plan Manager captures inmate progress on treatment plans over time through the completion of CEHR Encounters. On the landing page of the Treatment Plan Manager, the treatment plans for the inmate are filtered by plans that are in progress, completed, or a concatenation of both statuses. The statuses of these treatment plans can be updated as they are selected and worked on distinctly through Encounters. When a treatment plan is selected to be worked on, the goals are filtered by ones that are in progress, completed, or both. Any goals or objectives that are in progress are highlighted a light blue color in the table. As they are completed, the row color will change to white and an end date replaces the In Progress text in the table underneath the End Date column. As Encounters are completed, Documents are added to the inmate's Chart to record what was done during the session.

The screenshot displays the 'Treatment Plan: Hallucinatory Behavior' interface. At the top, it shows the start date (04/11/2019), target date (05/09/2019), and end date (In Progress). There are buttons for 'Complete', 'View All Tx Plans', and 'Edit Tx Plan'. Below this is a table with columns: Goal (Objectives), Type, Start Date, Target Date, and End Date. The table contains two rows of data, both with a light blue background indicating they are 'In Progress'. The first row has a goal about BPRS rating improvement. The second row has a measurable objective about medication evaluation and monitoring. Below the table is a 'Summaries' section with a table showing associated treatment plans, including 'Hallucinatory Behavior' with a 'View Summary' link and an 'Edit' button.

Goal (Objectives)	Type	Start Date	Target Date	End Date
Improvement will be evidenced by at least a one-point decrease in BPRS rating with 30 days. (1)	Individual Goals	04/11/2019	04/25/2019	In Progress
Measurable Objective: Interventions will include initial medication evaluation, weekly individual meetings and medication review and monitoring. Patient will be offered education and the opportunity to ask questions about the specific medication(s) prescribed.		04/14/2019	04/24/2019	In Progress

Date	Associated Treatment Plans	Summary
04/11/2019	Hallucinatory Behavior	View Summary



The Treatment Plan Manager provides pre-populated templates and also allows users to configure treatment plans specific for each patient or group.

The **GroupNotes** component allows users the ability to book groups of inmates, check inmate in, mark No Shows, and create group documentation. CEHR comes with DSM-5 psychiatric diagnoses included. The diagnosis codes are available utilizing the same functionality as the problems/diagnosis search. This seamless and unified diagnosis search has been proven and is currently utilized in numerous correctional agencies throughout the country who utilize CEHR.

- Schedule group appointments from one appointment block on the CEHR schedule.
- Mark inmate's arrival status.
- Documentation can also be created, reviewed, and signed.
- Upon session close, a visit gets created in CEHR.
- Upon signature, a document is created, and clinical lists are updated in the inmate's EHR chart.

CEHR provides group activity templates that enable clinicians to document in one area and have that information put into all the health records for those who attended. In addition, this same screen facilitates easy retrieval of group attendees for simplifying the addition of the unique individual notes. As an example, group therapy notes take advantage of advanced technology allowing information to be added to all group members' charts at once, while still enabling individualizing of information that is inmate specific. This saves therapists a lot of time in documenting group therapy.

**Group Name: Sex Offender Treatment Services**
Led by Michael Molzon

Group Template: Sex Offender Treatment Services

Choose a Start Time  
12 : 56 PM

Choose an End Time  
01 : 56 PM

Choose a Date  
06/21/2018

**Overall Group Questions**

Has the group been more open to discussing their past sexual offenses?

Yes  No

**Patient Roster**

All Present
All Absent

ID	Name	DOB
52134	SchmoTest, Joe	10/02/1942
123	Test, Larry	12/01/1991
2345	Test, Lee	07/20/2005
3456	Test, Lucas	05/30/1976

**Add Patients**

Search via name or ID

**Selected Patient Questions**

SchmoTest, Joe  
Sex: M DOB: October 2, 1942

**Attendance**

Leave

Has the individual had any sexual encounters since the last session? If yes please explain.

Yes, the patient

Has the individual had any sexual urges since the last session?

Yes  No

**Finalize Entire Group Note and Add to Charts**

### Formulary Manager

The Formulary Manager seamlessly integrates your preferred or customized drug list within CEHR. If end users prescribe a medication that is off the formulary they are notified and can be provided preferred or alternative medications. The Formulary Manager platform allows you to easily manage your preferred formulary with updates taking a matter of moments.

Formulary medication lists can be supported, as well as a non-formulary review process if needed. Non-formulary meds are sent to an approving authority via the Formulary Manager tool for review and authorization. Keep on person instructions, and other special instructions, can be entered with any medication order, if desired.

Facility: County Jail		
	<b>Patient Name:</b> Adams, Pugsley (796521) <b>Medication:</b> ADDERALL 30 MG ORAL TABLET <b>Instructions:</b> three times daily	<b>Date Placed:</b> 01/20/2017 12:38 <b>Order Date:</b> 01/20/2017 - 02/19/2017 <b>Authorizing Provider:</b> Eli Dunn <b>Entered By:</b> Eli Dunn
	<b>Patient Name:</b> Gates, Bill (363498) <b>Medication:</b> ADVIL CAPSULE <b>Instructions:</b> twice daily	<b>Date Placed:</b> 09/13/2017 14:19 <b>Order Date:</b> 09/13/2017 - 09/15/2017 <b>Authorizing Provider:</b> Bryan Jakovic <b>Entered By:</b> Bryan Jakovic
	<b>Patient Name:</b> McConaughy, Matthew (324565) <b>Medication:</b> TYLENOL WITH CODEINE #3 300-30 MG ORAL TABLET <b>Instructions:</b> one tab qam	<b>Date Placed:</b> 04/12/2017 10:12 <b>Order Date:</b> 04/12/2017 - 05/12/2017 <b>Authorizing Provider:</b> Dan Brunell <b>Entered By:</b> Dan Brunell

### Reporting

CEHR is a completely 'out-of-the-box' EHR system for correctional health. CEHR's foundation is extremely robust, capable of reporting on any and all data entered into the system. Reports can be run both ad-hoc for simple querying of statistical information as well as having the capability to develop a complicated, analytical report for advanced forecasting. Standard reports are provided, and additional reports will be identified during the business process analysis. Reports can be standardized across all facilities or specific to individual facilities. In addition, reports can be categorized by a number of other factors such as service areas, specialties, etc. CQI reporting can also be defined and implemented and will require input from the Agency as to the reportables. CEHR has had immense success as a complete correctional EHR.

CEHR's quality improvement and reporting tools provide timely clinical information about diabetes, myocardial infarction, strokes, hypertension, congestive heart failure, and other costly, chronic conditions that are targeted in many pay-for-performance initiatives. By feeding quality metrics data back into care team workflow, you have easy access to more clinical information to manage specific conditions and populations—and enhance the quality of care. CEHR's reporting capabilities include, but are not limited to the following:

- Provides flexible query tools capable of building complex queries with multiple conditions
- Capable of running queries and reports on demand (ad hoc), scheduling to be run at another time, or scheduling to be run periodically (Daily, weekly, monthly, temporarily for a range of dates)
- Capable of automatically sending scheduled reports via secure email or SFTP
- Provides capability of viewing reports online within the EHR or saving to PDF, word, excel or CSV format
- Running any query, canned or standard report does not degrade system performance
- Provides a standard patient summary report that prints out key clinical data such as problems, medications, allergies, current orders, labs and vitals
- System reports are written in a standard reporting tool (i.e. Microsoft SQL Reporting Services or Crystal Reports)
- Provides detailed and summary security audit reports that may be used to track activity by provider, by inmate, and by activity type
- Provides data warehouse functionality (cross-patient reporting, statistical analysis, data mining, etc.)
- A comprehensive audit report that includes all chart access activities including print, fax and export actions on chart documents that would be performed by staff as part of normal "healthcare operations" in HIPAA terminology

### Users ability to modify reports

While any ODBC-compliant report writer can be used to create custom reports, Crystal Reports is recommended. Crystal Reports is the basis of all of the standard CEHR reports. Using Crystal Reports together with CEHR provided data schema information, custom reports can be designed and imported into CEHR for direct use within CEHR. Such imported reports appear to the user alongside the CEHR-provided reports. Writing custom reports requires a staff member of moderate technical ability who has some comfort with SQL queries and macro-level programming. Fusion offers classes in Crystal Reports specific to the CEHR data schema.

In addition, ad-hoc reports are extremely easy to use and anyone at the end user level will be able to create and/or modify these kinds of reports.

### Users ability to run ad hoc reports

Ad-hoc reports, or 'inquiries' allow for instant access to clinical data that is available in the Chart module. Unlike Reports, the average user can customize an Inquiry to meet a specialized need in the moment. For example, you'd like a list of all inmates on a specific medication. Or, you'd like a list of clinical providers who have more than 15 documents that are not signed on their Desktop.

If there is an Inquiry that you utilize frequently, you may also save those parameters for future use. If you are building an Inquiry of inmates, you may also switch to the Reports area and utilize the Letters section once the inmate population has displayed itself in the results section. This way, you can print Letters for that specific inmate population. Also, Inquiries may also be used to send Bulk Flags/Care Alerts to a specific inmate population that has been captured by the Inquiry. Several examples of ad-hoc reports that can be created include:

- ad-hoc reports that can be created to find all inmates with missing demographic information (such as missing ID numbers or last names)
- ad-hoc reports that can be created to see all inmates moves that a particular party has been responsible for
- ad-hoc reports that can be created to track any and all medication and dosage fields
- ad-hoc exception reports that can be created to see which inmates did not receive a medication for a given time frame
- ad-hoc reports that can be created to see which inmates are due to have their medications (prescriptions) renewed or refilled
- ad-hoc order reports that can be created to see such things as all open orders for specific departments or all past-due orders
- ad-hoc reports that can be run on any requisition fields to track such things as all pending requisitions, all requisitions of a specific type, all requisitions for a given inmate classification, etc.
- ad-hoc that can be created to track all aspects of inventory management
- ad-hoc reports that can be created to query on definable fields and records
- ad-hoc reports that can be created and run on the-fly without the need to save a report definition
- the average user can customize an ad hoc Inquiry to meet a specialized need in the moment
- both ad-hoc and pre-built reports that can be run to identify incidents related to interaction with healthcare staff, incidents related to precautionary/suicide watch as well as involuntary-restraint of inmates

### Auditing and Audit Reporting

To facilitate compliance with your healthcare organization's security and privacy policies, CEHR monitors and logs many user activities, including user and workstation IDs, user actions, date and time, and other information such as report or document names, names of clinical values changed, and the value changes. Changes to chart documents such as adding or changing clinical values or text are tracked via Document Contribution Logging.

Auditing of viewing, previewing, printing, and faxing non-confidential inmate information can be turned off, to reduce the scope of activity information logged and stored in the database. However, activity involving confidential documents and sensitive charts is always audited. Audit trail reports that come with CEHR include inmate audit reports and user audit reports.

Quality Reports are additional specialized reports that are made available to satisfy a range of clinical reporting needs (e.g., EHR Meaningful Use Reporting). Transmission of these Reports to outside agencies (e.g., CMS) is a separate functionality. All data stored on the SQL database can be searched, sorted and reported on and we provide the reporting options to satisfy your reporting needs.

With CEHR, the Agency can visualize its progress toward achieving CQI measures at the provider and patient level. Advanced visual dashboarding calls attention to measures requiring improvement first with the ability to link back into individual EHR records to focus improvement efforts.

These reports, combined with your review and verification of the data accuracy and completeness, help move towards achievements in CQI. Workflows can be customized to highlight key MU criteria that should be captured as part of every visit, helping providers stay on track with data capture goals in preparation for attestation.

Clinical Quality Reporting (CQR) offers a fully integrated MU reporting solution for CEHR. CQR is a cloud-hosted platform that allows quick and easy access to view provider performance against Meaningful Use 2014 clinical quality measures, as specified by Office of the National Coordinator of Health IT (ONC) within CMS. Data is sent to a sophisticated database that normalizes and processes the raw data. Performance is tracked for individual inmates, providers, and multiple organizational hierarchies to focus clinical quality improvement efforts. Protected health information (PHI) is incorporated into this platform; security of your inmate data is a core element of CQR and the environment enables you to comply with privacy regulations.

### Interoperability

The systems interface portion of your implementation has been carefully incorporated into your project timeline. These services include interfaces to third-party applications such as the Agency's Jail Management System, Pharmacy, Lab, etc. CEHR offers powerful interoperability and imports and exports data using interfaces. HL7-compliant inbound and outbound data exchange interfaces are built-in to CEHR. CEHR is also capable and is currently utilized in numerous correctional settings to exchange data in real time through direct database connection through secure VPN tunnels, through FTP/SFTP as well as numerous other delivery methods. This scalable, robust system will be able to meet all current and future organizational needs.

Integration and coexistence with other computer systems is an integral part of every CEHR installation. As such, we are committed to the delivery of the products and services required for the effective deployment of fully functional interfaces. This is accomplished through a combination of:

- Excellence in product functionality and continued development
- Adherence to interface standards
- Provision of the services and tools required to implement interfaces
- Partnerships with other information system vendors, if applicable for the JIMS interface

Data elements, events, interface design, web services and parameters will be established with our project management team post contract. Fusion's approach to completing a successful interface project is as follows:

- Step 1: Review contract and breakdown roles and responsibilities of both parties involved.
- Step 2: Contact vendor contact and schedule meeting to review all deliverables associated with the project.
- Step 3: Conduct conference call and finalize assignments of all deliverables to project personnel.

- Step 4: Draft technical control document
- Step 5: Review and finalize control document
- Step 6: Install CEHR Data Transfer Station (DTS)
- Step 7: Implement interface
  - Development
  - Sample Testing
  - Automation Implementation
  - Finalize and sign off on project

Each interface will be managed via Interface Control Documents (ICD) which will provide appropriate application and system operations documentation. In addition to the ICD, Fusion will provide the following tasks associated with interface development:

- Interface requirements gathering/define standard and custom interfaces required and complete the Interface Requirements Document (IRD).
- Work with vendors to develop interfaces.
- Create cross-reference file(s) as needed.
- Define parameters for fault tolerance interfaces.
- Test the interfaces and data for format and content.
- Perform data integrity checks for all interfaces (clinical staff).
- Install and test the Health Information Exchange (HIE), if applicable.
- Train system managers to process files and manage interfaces (if applicable).

Fusion will develop specific interfaces to external systems as part of this project. Fusion will configure, code, and test all application, application extensions, data conversion, and data acquisition/interfaces once agreed upon between both Fusion and the agency. Fusion has interfaced with many 3<sup>rd</sup> party applications including but not limited to:

- Jail Management Systems- accepting new bookings, moves, and releases along with other demographic information including pictures as well as sending log information of treatment, procedure, appointment, med pass, etc.
- Pharmacy Management Systems – orders of new medications entered into the EHR will go directly to the pharmacy vendor.
- Lab Management Systems – orders to and results from multiple laboratory vendors must populate directly to/from the inmate's chart.
- Radiology - orders for external imaging and links to new images must populate directly to/from the inmate's chart.
- Kiosk & Commissary – charging of Co-Payments and ability to receive sick-call requests.
- HIE – allowing for securely sharing patient medical information electronically.

[CEHR Healthcare Connections – Integration Package with EPIC, Cerner and other EHR Systems](#) Healthcare Connections is an interoperability solution to connect CEHR clients to hospitals and other practices. The solution is better than simple CCD exchange. Purchased as an optional add on package this solution is designed to increase provider efficiency and enhance care quality by enabling staff to retrieve clinical data from other settings and seamlessly integrate the data into the provider's native workflow. CEHR Healthcare Connections includes:

- Bi-directional interface with Carequality
- Search capability
- Selective clinical reconciliation tool
- Continuous process improvement

We are committed to your success in value-based care. The benefits to the client and their affiliate hospitals include:



### Increase staff efficiency

Streamlined data exchange and reconciliation **reduce staff time** to prepare and update patient records for physician review.



### Increase provider efficiency

Integrating exchanged clinical data into the native provider workflow enables physicians to **spend less time** searching for data.



### Enhance care quality

Real-time access to needed data helps providers compile a more **complete patient context** for decision-making.

## Hosting

For nearly a decade, Fusion has been flexible, offering CEHR as a SaaS solution, a vendor hosted, or a customer hosted solution to our clients. Although many of our clients are self-hosted, we do offer CEHR as a Fusion hosted solution with monthly payment terms. Our hosted client's range in all sizes, from State Correctional Agencies with hundreds of users to smaller local County Correctional Agencies with only a handful of users.

Fusion also offers the flexibility of Remotely Hosting CEHR in our data centers while still owning the licenses. Hosting allows you to enjoy the benefits of CEHR without having to install, configure, and maintain an internal server. Our hosting services enables Corrections Agencies to leverage the full capabilities of CEHR, without the additional up-front capital costs and management associated with a traditional IT system. Fusion's hosting services offer an economical way to access integrated applications, customizable workflows, and a fully managed infrastructure serviced by Fusion. With Fusion's Hosting Services, Fusion takes responsibility for resource-intensive IT management tasks, so you can focus on your clinical mission – not your technology.

Whether the Agency decides to use the SaaS solution, a vendor hosted, or a customer hosted solution, the Agency will get the same powerful and proven functionality that helps your organization connect productivity with care.

## Data Migration

The data conversion process is a highly detailed aspect of most installations. Understanding the desired-end state of your Fusion implementation is a key consideration when deciding the type of conversions to do. Fusion has performed virtually every type of conversion that can be done, from large to small, brand-named systems to homegrown. We recognize the critical nature of converting your existing data from your current EHR system and factor conversion planning and specification design into our project plans. We will conduct a review of the project management plans, methodologies and approach to monitoring the critical elements of the EHR implementation work plan and schedule. In addition, we will develop agreed-upon quality control criteria and review their deliverables against those criteria.

Contact Information:

Website: [www.FusionEHR.com](http://www.FusionEHR.com)

Phone: 732.218.5705

Email: [BD@FusionMGT.com](mailto:BD@FusionMGT.com)

### The Fusion Difference

Fusion is an industry leader providing Electronic Health Record systems for City, County, State, and Federal Correctional and Juvenile Justice Departments in the United States. Fusion manages over 250,000 inmates in over 200 correctional facilities throughout the US. A few of the key product differentiators are identified provided below:

#### Seamlessly Integrates into Your Agency's Department of Corrections Operations

Fusion prides oneself on providing a fully integrated EHR system for Corrections helping patient transactions to flow seamlessly within the enterprise. CEHR also integrates with many other vendor solutions using standards-based interoperability.

The recently redesigned user interface for CEHR was developed based on extensive input from physicians, designed to be intuitive and reduce the number of clicks all the way from patient registration through clinical evaluation. The resulting solution is one that physicians will want to adopt, and one with which your organization can integrate with minimal disruption to your workflow.

#### Experience You Can Rely On

CEHR is a mature product with a large install-base in correctional healthcare that has grown and adapted to meet the many complexities in the industry. Fusion is a strong strategic partner with the staying power your agency can rely on to meet uncertainties such as NCCHC, ACA, Meaningful Use, ICD-10, Accountable Care, and any new challenge your agency may be faced with in the future. Fusion leverages the extensive expertise of its internal team to adapt to industry trends, but also actively engages our customer through extensive collaboration activities to ensure that all product changes are workflow-friendly and maximize the return to your enterprise.

#### Remote Hosting Option

Fusion offers the flexibility of remotely hosting CEHR in our data centers. Hosting allows you to enjoy the benefits of CEHR without having to install, configure and maintain an internal server. Our hosting option also gives you the ability to move the system in-house at a future point based on your business needs.

#### ACA and NCCHC Requirements

Fusion has worked with Correctional Facilities throughout the country in developing their clinical workflow to adhere to NCCHC, ACA and PBNDS requirements for clinical documentation and operations. We have developed hundreds of forms which our correctional and juvenile justice clients utilized daily in CEHR to adhere to these regulatory compliances.

Fusion has also developed protocols within the EHR to ensure that the clinical workflow adheres to these stringent standards. For instance, if a follow-up must be conducted within a certain timeframe of an initial consultation for chronic care, we have built in the metrics to alert staff both through reporting, e-mail notification and visually on the patient's chart that the follow-up is due.

Fusion continues to lead the way of EHR management and development. We take pride in seeing our ideas and recommendations, as well as yours, successfully implemented.

From booking to discharge, CEHR has a complete clinical roadmap developed specifically for correctional facilities.

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#### Contact Information:

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MILWAUKEE COUNTY

Corrections

Electronic Health  
Record System

Contact:

Byron Harrison (205) 552-1734

[byron.harrison@TechCareEHR.com](mailto:byron.harrison@TechCareEHR.com)

## PRODUCT AND SERVICES

### TECHCARE, NAPHCARE'S EHR SYSTEM

Beyond providing electronic health records, TechCare is a corrections-specific operational system that automates, standardizes, and enforces proactive patient care. It also connects our clients in a way that no other system can, providing on-demand, transparent information and communication regarding healthcare services.

NaphCare will install the system, pre-load data, and train all users on TechCare as a part of our turn-key implementation services. We encourage you to contact our references to gauge their level of satisfaction and our ability to deliver on our EHR implementation timeframes and promises.



### A COMPREHENSIVE SYSTEM

With NaphCare, you receive proven, progressive technology in a **comprehensive operating system tailored specifically to your needs**. Electronic records are one of TechCare's many features, but there is much more. TechCare tracks the healthcare activities of each patient upon incarceration, creating **standardized treatment processes** (with the appropriate documentation) from intake through discharge. It identifies patients' critical medical needs and **ensures timely intervention** with appropriate care. The TechCare system includes, but is not limited to the following main components:

- Electronic Health Records
- Customizable Forms and Reports
- Receiving and Intake/Discharge and Follow up
- Offsite Medical Scheduling / Offsite Medical Services Tracking
- CIWA-Ar Detoxification Tool
- Chronic Care Management
- Grievance Tracking
- Quality Assurance
- Screening Tools (Intake, TB, Mental Health)
- Specialty Care: Dental, OB, Optical, etc.
- Mental Health (Screening, Evaluation, Suicide Alerts)
- Pharmacy (Electronic Drug Orders, Electronic Medication Administration Records)
- Discharge/Re-Entry Support and Documentation
- Transfer Support and Documentation for inmates
- Interface Connections (JMS, Pharmacy, X-Ray, Laboratory, etc.)
- Medication Administration Record/Electronic Medication Administration Record
- Sick Call
- Flags & Alerts
- Queues/Dashboards (Doctor, Nurse, Pharmacy)
- Infectious Disease Control
- Detailed, Compliance Supporting, Logging

TechCare was **designed by correctional healthcare professionals**, not software developers, and it makes providing excellent care **faster**, not slower. TechCare training is also provided by correctional healthcare providers, and this helps to make the daily experience of using TechCare **easier**.

### DEDICATED IT TEAM

TechCare is the **only EHR system** offered by a correctional healthcare company. TechCare is managed and maintained in-house with our full-time developers and clinically trained support team. As a result, you will receive dedicated service and support from our technology experts, whose goal is to understand your site and customize TechCare to meet your specific needs. We provide **rapid customizations, fast support, and complete understanding** of correctional healthcare; we commit to never outsourcing this critical piece of your healthcare operation.



TechCare Development Team Management

### MOST ADVANCED APPLICATION, NO WI-FI NEEDED

TechCare is the **only EHR that allows the entire system to be available in offline mode, including eMAR**. Our system requires “0-touches” for preparation or return to network connectivity and synchronizes any changes made while off line automatically. **This eliminates the need for installing or maintaining expensive wireless networks**. These devices can go “off-line”, perform any function within the EHR, and then synchronize the data once connectivity is resumed. Synchronization is completely automatic and will continue as long as network connectivity is available. When connectivity fails, the EHR instantly moves to its local, encrypted EHR database to continue operations without action needed by the end-user. When connectivity resumes, TechCare automatically synchronizes any changes.



### ACHIEVEMENTS AND CERTIFICATIONS

As a corrections-specific EHR, TechCare is designed to implement and exceed the requirements of several certification standards beyond the ones typical for an ambulatory-care EHR. These certifications guarantee the highest level of EHR clinical reliability, sophistication and interoperability.

The TechCare team is pleased to be named one of the Top 10 EHR Solution Providers of 2016, 2017 and 2018. These standards and certifications include:



### NCCHC—NATIONAL COMMISSION ON CORRECTIONAL HEALTH CARE

TechCare fully implements the standards of NCCHC (considered the gold standard for correctional facilities health care programs) with semi-annual reviews. A vast majority, over 90 percent of the facilities using TechCare, successfully attest to NCCHC including Maricopa County, AZ (8,000 ADP), NCCHC Facility of the Year.



## ACA—AMERICAN CORRECTIONAL ASSOCIATION

TechCare fully implements the standards of ACA with ongoing reviews. Several TechCare customers successfully attest to ACA standards every year.



## URAC—UTILIZATION REVIEW ACCREDITATION COMMISSION

TechCare includes a robust Off-site and Utilization Management tool to effectively manage thousands of incarcerated patient needs every day.



## FBOP AND US MARSHAL INTEGRATION

TechCare manages the care of thousands of patients within the Federal Bureau of Prisons. Our system has been audited to meet their strict security and performance measures.



## CMS—CENTERS FOR MEDICARE AND MEDICAID SERVICES

TechCare has been successfully interfaced with several State Medicaid systems conforming to the standards of CMS.



## ONC/MEANINGFUL USE: OFFICE OF THE NATIONAL COORDINATOR FOR HEALTH INFORMATION TECHNOLOGY

TechCare is Stage 2, ONC-ATCB certified as a Complete EHR. This demanding certification ensures scalability and interoperability, and confirms NaphCare's commitment to evolving and maintaining the corrections industry's EHR software solutions leader. Note that most of our competitors in this market have not obtained this level of certification.

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**TechCare EHR was successfully used for ONC re-imburement attestation with Maricopa County Correctional Health Services. This is the first and only known correctional institution to successfully attest under Meaningful Use with a corrections-specific EHR.**

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## PARTNERSHIP IN CORRECTIONS

One of NaphCare's core philosophies is to create strong and meaningful partnerships with our clients by listening, interpreting and jointly working toward common goals. We have been successful in this regard since our founding over the past 30 years, and as a result, TechCare is the industry leader for EHR solutions in mega-jail environments. For example, Maricopa County Correctional Health Services in Arizona, Orange County Healthcare Agency and Riverside County, both in California, provide services for adult and juvenile inmates with a combined inmate population of over 18,000. For just these three facilities, TechCare manages over 3.4 million medical records.

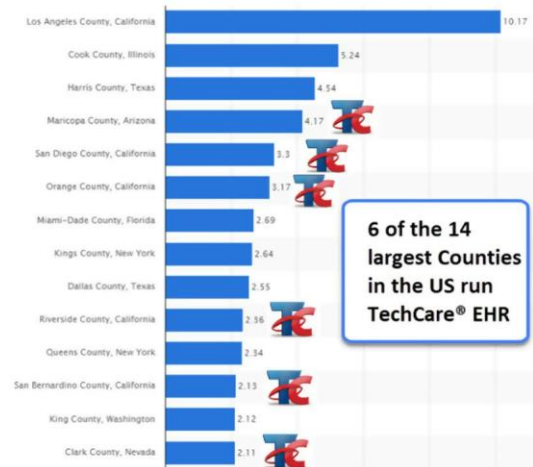
The following figure depicts 14 mega-jail facilities across the nation, 6 running TechCare for their EHR solution. In addition, refer to the list of nine current TechCare deployments along with their inmate ADP:

- Maricopa County, AZ – 7,000 ADP
- Orange County, CA – 6,500 ADP
- San Bernardino County, CA – 6,300 ADP
- Riverside County, CA – 4,200 ADP
- San Diego County, CA – 5,300 ADP

- Hillsborough County, FL – 3,000 ADP
- New Hampshire DOC – 3,000 ADP
- Fulton County, GA – 2,600 ADP
- Allegheny County, PA – 2,400 ADP

## TECHCARE ADVANTAGES

- **Fully Customizable** – TechCare is highly versatile and maintains nationwide standard levels of interoperability, ensuring continuity of care across other electronic systems. It is custom-built to meet all correctional healthcare accreditation standards and each system's unique needs.
- **ONC Meaningful Use Certified System** – NaphCare is proud to state that TechCare achieved certification by the Drummond Group, an ONC-ACB, as a complete, Ambulatory EHR System. Being **certified** as a complete, not modular, EHR signifies a higher level of sophistication without reliance on third-party party applications.
- **HIPAA Compliance** – NaphCare upholds HIPAA compliance and is supported by tools such as TechCare. TechCare maintains centralized, secure storage of patient information with processes and **procedures** automated to protect data.
- **Large-Scale Capacity** – TechCare is used to successfully **manage thousands of patients**. It is more than capable of handling all intakes and medical records that exist in your system and is able to grow as needed.
- **Electronic Tracking of On and Off-Site Appointments** – TechCare features a robust scheduling system to manage all off-site appointments and on-site clinics. The system provides information on any patient and their medical services. It also allows the viewing and printing of medical records for each appointment or medical service provided. By tracking off-site care, you **can analyze trends to save on future costs**.
- **Automatic Scheduling** – Once a patient is registered in



**Hillsborough County realized a 27 percent reduction in off-site costs with the use of NaphCare's proactive care model managed by TechCare EHR.**

TechCare, the system automatically schedules all medical encounters, including but not limited to, mental health screenings and evaluations, follow-up exams, chronic care clinics, and physician appointments. Medical staff are also kept up-to-date and alerted to any potential health concerns of each patient.

- **Contract Monitor Access to TechCare** – If your site has a Contract Monitor or outside auditing team, this team or the Contract Monitor will have access to off-site referral data during the term of the agreement to monitor contract compliance. This data is readily available in a web-based format that can be viewed instantly. The Contract Monitor is notified of all patients who are receiving off-site care.
- **Access to Information** – As an ONC-certified EHR, TechCare is **fully compatible with State Health Information Exchanges and State Medicaid** systems across the country. We will implement connectivity to these systems for you to support greater **continuity of care** for your patients.

NaphCare has successfully interfaced with MassHealth, Massachusetts State Medicaid System, which is considered to be the model for 2014 ACA systems. As a result, inmates' eligibility is pre-determined and the proper party is billed for off-site encounters, automatically.

Essex and Suffolk, Counties, MA

- **Ease of Use** – TechCare was **designed by correctional health clinicians**, not software developers. It was developed on the basis of improving care while reducing risk. TechCare makes providing care in correctional institutions **faster, more efficient and more accurate**.
- **Proven** – TechCare has been chosen to manage healthcare services at some of the largest self-op correctional systems in the country. It was selected by two of the five largest counties in the country – Maricopa County, Arizona, and Orange County, California. Fully implemented in these self-op correctional systems, TechCare is more than a technology initiative, it's a proven system.

## RISK MANAGEMENT AND QUALITY ASSURANCE

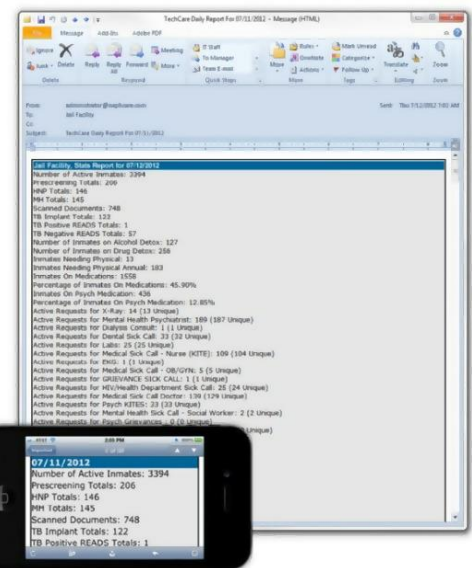
TechCare provides the highest level of quality assurance and risk management for your correctional facility. It not only maintains consistent, **iron-clad documentation**, but also **tracks** all healthcare encounters (on-site and off-site) and allows you to constantly monitor for any irregularities and improve care.

- **Standards and Certifications** – TechCare **meets or exceeds all IMQ, NCCHC and ACA** certification requirements, which will allow you to achieve these certifications as a correctional institution. Our client facilities across the country have used TechCare countless times to meet these accreditations.
- **Strict Documentation** – TechCare has a solid platform for quality charting that ensures detailed logging and documentation without loopholes, thereby **supporting chart audit and litigation activities** seamlessly and instantly.

## MEANINGFUL REPORTING & TRACKING

TechCare provides centralized storage for data that can be easily aggregated and reported using built-in search tools. In addition, this data can be used to **track aspects of patient care**, e.g., checking that all patients with hypertension have completed a chronic care management encounter within the last six months. These activities **assure quality of care** and provide detailed documentation. In addition, this information can be viewed on mobile devices for convenience.

- **Staffing Management** – TechCare's built-in tools help your professionals manage staffing requirements and make more efficient decisions to **reduce clerical time, increase clinical care** and improve the quality of care.



- **Alerts & Dashboards** – TechCare alerts on-site healthcare professionals of patient quality assurance exceptions. Simply put, our system sends warnings to the charge nurse when patient care parameters are out of bounds.

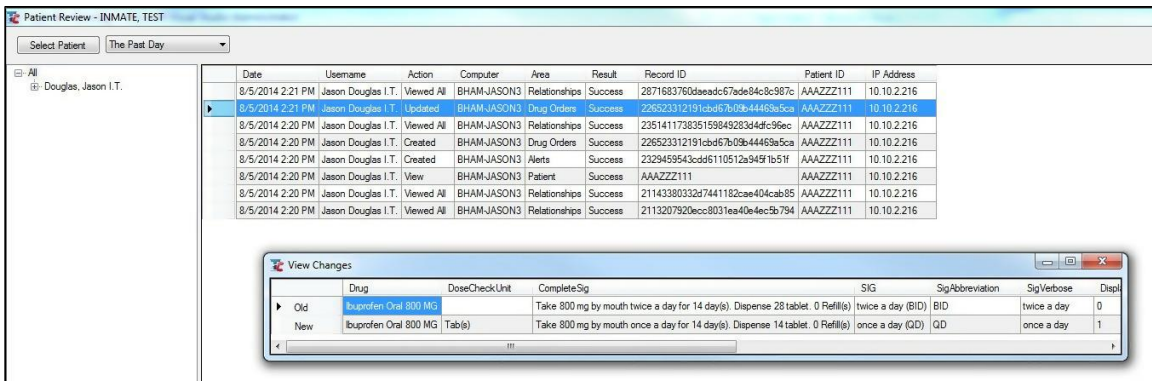
## RELIABILITY AND SUPPORT

TechCare is only as good as the team that backs it. NaphCare realizes this and has built a robust operations group that completely supports **your department's IT resources or personnel** while implementing the necessary infrastructure to run TechCare.

**24/7 Support** – NaphCare maintains an **in-house, 24/7/365 IT Helpdesk team**. If patient care is impacted or jobs are made any more difficult by poor-performing IT resources, we are there to correct it. To ensure a strong and prompt response to issues, NaphCare guarantees a strict Service Level Agreement (SLA) with our **response times averaging 15 minutes**, no matter the time of day.

## ACCOUNTABILITY

TechCare maintains an uneditable, detailed log entry of every transaction that occurs within the EHR (refer to the following figure). A Secure Hash Algorithm (SHA-1) is then applied to every entry. Hashing ensures that the message is not altered by an unauthorized user. This hash is a cryptographic function that creates a unique “thumbprint” of the activity taking into account such data elements as user name, IP address of the machine being used, activity date and time and the action being taken (e.g., creating or modifying a drug order or lab result). This unique thumbprint can then be regenerated and compared to the original to check for discrepancies. In the event of any mismatch, an automated report of discrepancy can be generated and emailed to the appropriate security compliance officer.



The screenshot shows a software interface for patient review. The main window displays a table of user actions for patient 'Douglas, Jason I.T.' over the last day. The table includes columns for Date, Username, Action, Computer, Area, Result, Record ID, Patient ID, and IP Address. Below the main table, a 'View Changes' window is open, showing a comparison between an old and new medication order for 'Ibuprofen Oral 800 MG'. The 'Old' order has a 'CompleteSig' of 'Take 800 mg by mouth twice a day for 14 day(s)' and a 'Dispense' of '28 tablet. 0 Refill(s)'. The 'New' order has a 'CompleteSig' of 'Take 800 mg by mouth once a day for 14 day(s)' and a 'Dispense' of '14 tablet. 0 Refill(s)'. The 'Sig' field for the new order is 'once a day (QD) QD'.

Date	Username	Action	Computer	Area	Result	Record ID	Patient ID	IP Address
8/5/2014 2:21 PM	Jason Douglas I.T.	Viewed All	BHAM-JASON3	Relationships	Success	2871683760d8eadc67ade84c8c987c	AAAZZ111	10.10.2.216
8/5/2014 2:21 PM	Jason Douglas I.T.	Updated	BHAM-JASON3	Drug Orders	Success	226523312191cbdf67b09b44469a5ca	AAAZZ111	10.10.2.216
8/5/2014 2:20 PM	Jason Douglas I.T.	Viewed All	BHAM-JASON3	Relationships	Success	23514117383515984928344dfc96ec	AAAZZ111	10.10.2.216
8/5/2014 2:20 PM	Jason Douglas I.T.	Created	BHAM-JASON3	Drug Orders	Success	226523312191cbdf67b09b44469a5ca	AAAZZ111	10.10.2.216
8/5/2014 2:20 PM	Jason Douglas I.T.	Created	BHAM-JASON3	Alerts	Success	2329459543cdd6110512a949f1b5f1	AAAZZ111	10.10.2.216
8/5/2014 2:20 PM	Jason Douglas I.T.	View	BHAM-JASON3	Patient	Success	AAAZZ111	AAAZZ111	10.10.2.216
8/5/2014 2:20 PM	Jason Douglas I.T.	Viewed All	BHAM-JASON3	Relationships	Success	21143380332d7441182cae40cab85	AAAZZ111	10.10.2.216
8/5/2014 2:20 PM	Jason Douglas I.T.	Viewed All	BHAM-JASON3	Relationships	Success	2113207920ecc8031tea40e4eccb794	AAAZZ111	10.10.2.216

Drug	DoseCheckUnit	CompleteSig	SIG	SigAbbreviation	SigVerbose	Disp
Ibuprofen Oral 800 MG		Take 800 mg by mouth twice a day for 14 day(s)	twice a day (BID)	BID	twice a day	0
Ibuprofen Oral 800 MG	Tab(s)	Take 800 mg by mouth once a day for 14 day(s)	once a day (QD)	QD	once a day	1

## THE FACTS

- TechCare is the only EHR product designed and maintained by a correctional healthcare company that has been in business for 30+ years.
- TechCare is the only corrections-specific EHR that has existed 15+ years.
- TechCare is the only corrections-specific EHR that provides peer-to-peer training by a team of correctional medical and mental health staff (RNs, LPNs, MDs, etc.).
- TechCare is a complete system, with all modules necessary, there are no add-ons.
- NaphCare will load all patient data (forms, medications, allergies, etc.) into TechCare.
- NaphCare has a 100 percent rate of successful implementations of TechCare.

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NaphCare successfully completed a full migration of Orange and Maricopa Counties to the TechCare EHR on time and on budget. In aggregate, these counties have 14,000+ inmates and 800+ users.

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## MOVING TO TECHCARE

NaphCare's Implementation Team is experienced in successfully transitioning correctional facilities to TechCare and has a **100 percent success rate for complete implementation**. Our approach includes two areas of focus: (1) training team members, and (2) pre-loading patient data.

### TRAINING

NaphCare has a unique approach to training users on the TechCare system. Rather than assigning software developers to train on "software," **we send NaphCare clinical staff on-site to train on patient care**. This peer-to-peer approach using **RNs, LPNs, and MDs** better equips staff for their primary job of caring for patients while using technology to be more efficient. Ultimately, staff members become more comfortable with the system faster and understand its correct usage as it relates to their particular job.

Training is more than just a one-time event; NaphCare embraces training as an ongoing process. During initial training, we provide the opportunity for select users to advance their understanding of

TechCare to that of a Super User. As TechCare experts, **Super Users provide on-going, peer-to-peer training** at your locations.

### LOADING

The process of moving to TechCare from paper-based records or an existing EHR can be overwhelming. To alleviate this concern, NaphCare staff takes the full responsibility of loading and verifying all information in

TechCare. Our implementation team and our corporate pharmacy team will load the EHR with the following information:

- Health and Physicals
- Sick Call and Off-Site Appointments
- Medications
- Allergies
- TB Reads
- Problem Lists & Special Needs
- Chronic Care Conditions
- Scheduled Diagnostic Tests
- Lab and Radiology Data
- Mental Health Conditions
- Substance Abuse Special Needs



TechCare SWAT Training Team

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**In Orange County, California, NaphCare utilized 9 RNs, 9 LPNs, and 2 Clinical Software Support staff on-site, totaling 1000+ hours of preparation and go-live training and support.**

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TechCare Implementation Team



## INTERFACES AND INTEROPERABILITY

TechCare is the first and leading EHR software solution built specifically for correctional healthcare. Woven throughout its focus on providing proactive patient care and empowering across the board gains in operational efficiency, is the core and critical thread of **Information Interoperability**.

Clearly, the County is aware and preparing for the inevitable future of information interoperability as the main means to efficiently and cost effectively manage large, dispersed and complex operations. Because we see interoperability and information sharing at the same level of importance as the County, **we include 100 percent of all current and future interfaces to TechCare at no additional charge**. Other EHRs will see this as an opportunity to up-charge the County for interface development, but we know that correctional healthcare requirements and standards evolve equally as fast as a Hospital or Community Health Center, so we embrace connectivity without introducing cost barriers.

The details that follow explain not only TechCare's system itself and the underlying technologies that power it, but also NaphCare's approach to the integration partnerships we foster and the proven results that will contribute to interoperability goals. TechCare has proven interconnectivity with the following systems:

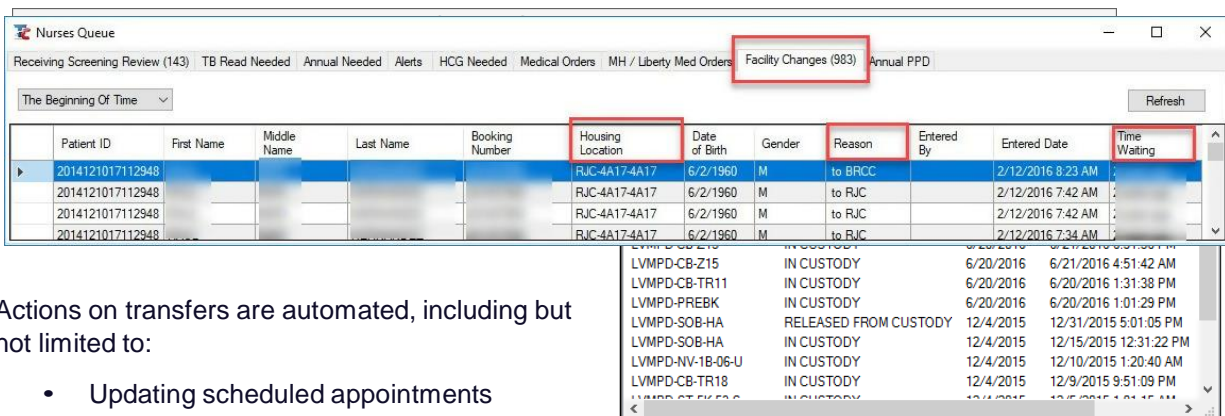
### OFFENDER MANAGEMENT SYSTEM – PROPHEONIX

TechCare builds upon the system of inmate demographic files that are currently maintained with the County's OMS. We are compatible with many Offender Management Systems to ensure patient demographic data, prior arrests and current location is up to date for providing care and passing medications cell-side. Note that we also transfer Sick Call information automatically. We will implement the bidirectional, real time interface with ProPhoenix to gather this information in addition to getting instant updates on inmate locations and movement. TechCare will process updates as often as the OMS can send them without the need for staging or manually batch processing the information. Additionally, our interface is capable of integrating court-ordered items through the OMS and then tracking them within the application to ensure compliance.

**Note that TechCare has proven integrations with ProPhoenix.**

### DEMOGRAPHICS AND MOVEMENT

Transfers are completely automated with TechCare. The moment the OMS notifies TechCare of an Intra-system Transfer, the patient demographics are updated including a complete audit history as shown in the following example screenshots. A dashboard in the Nurse's Queue allows for an easy view of who is coming into or moving out of a facility.



The screenshot shows a 'Nurses Queue' window with a table of patient transfers. The table has the following columns: Patient ID, First Name, Middle Name, Last Name, Booking Number, Housing Location, Date of Birth, Gender, Reason, Entered By, Entered Date, and Time Waiting. The table contains several rows of data, with the first row highlighted. A dropdown menu is open, showing a list of transfer actions such as 'LVMPD-CB-Z15 IN CUSTODY', 'LVMPD-CB-TR11 IN CUSTODY', 'LVMPD-PREBK IN CUSTODY', 'LVMPD-SOB-HA RELEASED FROM CUSTODY', 'LVMPD-SOB-HA IN CUSTODY', 'LVMPD-NV-1B-06-U IN CUSTODY', and 'LVMPD-CB-TR18 IN CUSTODY'.

Actions on transfers are automated, including but not limited to:

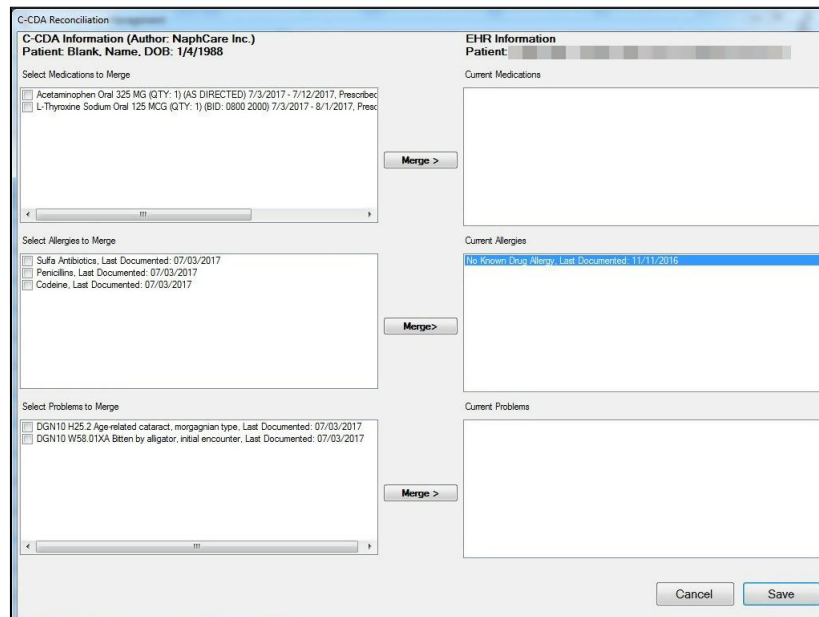
- Updating scheduled appointments
- Updating medication details (like KOP)

- Notifying med-pass nurses of new patients with new medications they need to stock
- Notifying, through the Nurses' Queue Facility Changes tab, staff on the receiving side of new arrivals that need attention, such as, performing a medication profile review when a patient is moved between secure and non-secure facilities.

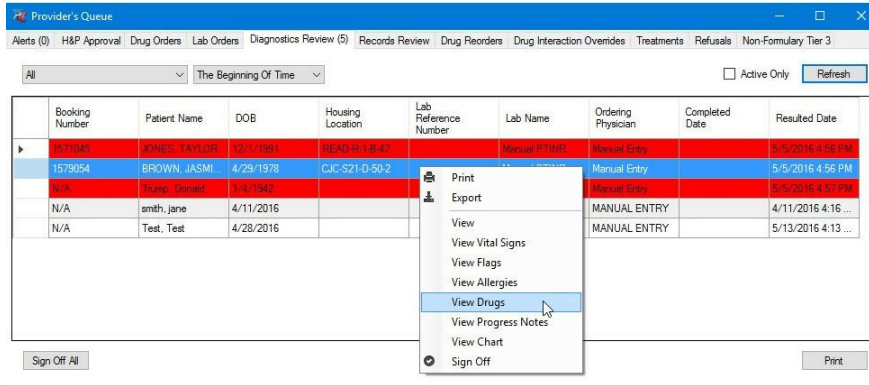
TechCare's real-time housing change updates and intake classification sections aid in tracking infectious disease patients as well. If a patient is found to have an infectious condition, **reporting can determine every inmate he/she has been housed with over the course of their incarceration**, allowing for proactive testing of those individuals. If it is known that specific infectious disease patients were housed in one area of the jail only, these patients can also be entered on admissions for automatic monitoring.

## HEALTH INFORMATION EXCHANGES (HIE) AND EHEALTH EXCHANGES

TechCare interfaces with other EHR systems and is fully capable of interfacing (bi-directionally) with Health Information Exchanges (HIEs) and any eHealth Exchange or network of EHRs. We have a proven history of successful integration with Health Information Exchanges and are compatible with CORHIO. The following example screenshot shows the import process from HIEs to TechCare.



Lab, Radiology and other results provided electronically to TechCare are immediately placed in the patient's chart and the Provider's Queue. The Provider's Queue, found in the Home Screen Dashboard drop-down menu, is a multi-tabbed display of items requiring review and sign-off by provider level staff, including H&P Approval, Diagnostics Review (shown below), Drug Re-Orders, and Refusals Monitoring. This queue, along with others, provides a detailed filtering option, which can track an inmate down to the housing unit, ordering provider, etc., which is beneficial when managing large populations. Note that alarm values are indicated in red and right-click access provides other pertinent information and action items.

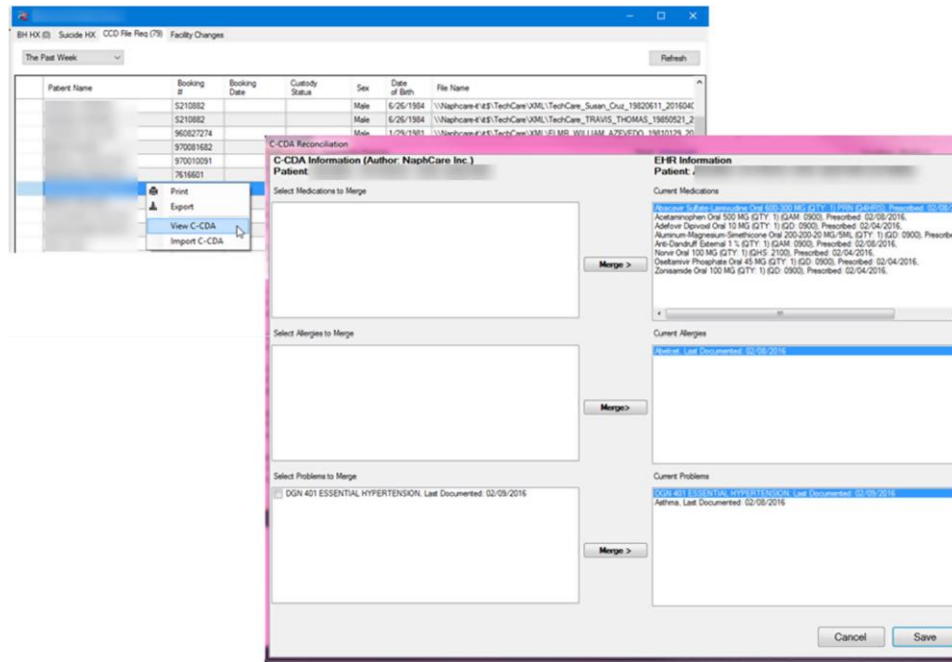


Note that TechCare has proven integrations with multiple HIEs and eHealth Exchanges.

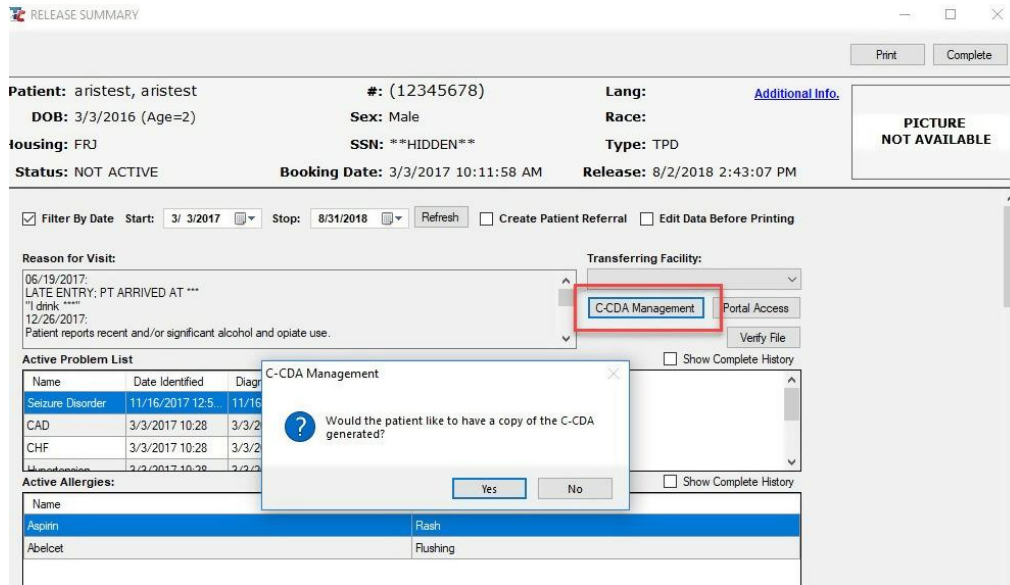
### WISHIN HEALTH INFORMATION EXCHANGE INTERFACE AND IMPLEMENTATION

As a fully ONC Certified Complete EHR, TechCare is inherently compatible with the WISHIN network. To confirm the following approach, NaphCare has directly communicated with representatives at the WISHIN network to discuss integration of TechCare EHR and the State's HIE solution.

We have agreed on a standardized approach to share information on patients entering and leaving the facility. For those patients coming in the facility and as a part of the intake process, the TechCare application will automatically query WISHIN for information. Once information is returned, it will display in TechCare as outlined below allowing clinical staff to integrate information into the patient's chart.



Similarly, when the patient is discharged from the facility, TechCare's Release Summary has built in functionality that will automatically, transmit pertinent information to WISHIN to support continuity of care in the community, following release.



**RELEASE SUMMARY**

Print Complete

**Patient:** aristest, aristest      #: (12345678)      Lang: Additional Info.

**DOB:** 3/3/2016 (Age=2)      Sex: Male      Race:

**Insurance:** FRJ      SSN: \*\*HIDDEN\*\*      Type: TPD

**Status:** NOT ACTIVE      Booking Date: 3/3/2017 10:11:58 AM      Release: 8/2/2018 2:43:07 PM

Filter By Date Start: 3/3/2017 Stop: 8/31/2018 Refresh Create Patient Referral Edit Data Before Printing

**Reason for Visit:** 06/19/2017: LATE ENTRY: PT ARRIVED AT \*\*\*  
 "I drink \*\*\*\*\*"  
 12/26/2017: Patient reports recent and/or significant alcohol and opiate use.

**Transferring Facility:** C-CDA Management Portal Access

**Active Problem List:**

Name	Date Identified	Diagn
Seizure Disorder	11/16/2017 12:5	11/16
CAD	3/3/2017 10:28	3/3/2
CHF	3/3/2017 10:28	3/3/2
Uncontrollable	3/3/2017 10:28	3/3/2

**Active Allergies:**

Name	Reaction
Aspirin	Flash
Abelcet	Flushing

**C-CDA Management**

Would the patient like to have a copy of the C-CDA generated?

Yes No

This approach enables:

- **Automated Continuity of Care:** The ultimate goal of this interface is achieved by making information needed for efficient care accessible and accurate without manual intervention.
- **Eliminated double entry:** As evidenced by Riverside County's implementation of TechCare and a similar interface, the requirement of working from two systems is eliminated.
- **Streamlined Reporting:** TechCare is well established in the correctional environment, supporting the reporting requirements of the County.

## IMPLEMENTATION METHODOLOGY, PLAN, AND TIMELINE

NaphCare has already established an introductory relationship with WISHIN and our interface development resources will be dedicated and assigned solely to the interface the instant TechCare's local hardware infrastructure is in place and prior to go live of services. Typical implementation efforts with WISHIN span approximately 10 weeks. Below we have provided a general approach to this implementation project and efforts would begin as soon as an intent to award is provided.

### Kick-Off and Requirements Gathering (2 weeks)

NaphCare coordinates an initial call between NaphCare, and WISHIN resources. It is important to establish a roadmap for the interface and positive momentum towards its timely completion. The following matrix highlights the attendees recommended and their roles until the interface is successfully deployed:

Attendee	Project Role
<b><u>NaphCare Infrastructure Team</u></b>	
TechCare Project Director	Facilitate and coordinate all resources
Network Administrator	Secure connection planning between the two systems
Information Security Officer	Ensure HIPAA compliance
<b><u>WISHIN</u></b>	
Interface Project Director	Lead communication point between the County Project Director and NaphCare Project Director
Interface Software Engineer (Lead)	Technical subject matter expert

Attendee	Project Role
Interface Software Engineer (support)	Technical subject matter expert
Network Administrator	Secure connection planning between the two systems
<b><u>NaphCare Software Team</u></b>	
TechCare Project Director	Lead communication point between the County Project Director and WISHIN Project Director
Interface Software Engineer (Lead)	Technical subject matter expert - NaphCare
Interface Software Engineer (Support)	Technical subject matter expert - NaphCare
Solutions Analyst	Meeting minutes, action items and follow-up documentation confirmation

Though the kick-off call is introductory in nature, there are specific and meaningful outcomes that will result:

- Confirm delivery method and type: Webservice, Direct+ Messaging
- Confirm file format: Common formats: HL7 2.x, HL7 3.x, C-CDA (xml)
- Confirm frequency of data exchange (real-time)
- Confirm interface is or is not bi-directional
- Confirm unique patient identifier and its type and length
- Secure connection between two systems (Local IT and Vendor IT confirm port(s) are open on server)
- Sample file exchange commitment date

NaphCare's focus is on productive, collaborative and actionable partnerships to ensure the interface is delivered efficiently and effectively.

### **Deployment (3 weeks) and Testing (2 weeks)**

NaphCare includes its custom interface engine for all clients because of the inevitable variations that exist from State to State and County to County, even amongst third-party vendors that have worked together before. This stage necessarily addresses the unique needs and workflows that make Milwaukee and their Continuity of Care processes unique.

### **Go Live (1-2 weeks)**

The agreed upon customizations identified in the Requirements Gathering stage go through industry standard iterations of Unit Testing, Assembly Testing, Integration Testing and Regression Testing with the direct involvement of everyone from key WISHIN and NaphCare stakeholders to the County's, Project and Software Leadership to achieve a successful interface on Day One of Go-Live.

### **SUMMARY**

In summary, NaphCare will complete this integration using the above plan and following timeline:

- Week 1 – Kick Off
- Week 2 – Requirements Gathering
- Week 3-5 – Deployment/Implementation
- Week 6-7 – Testing
- Week 8-9 – Go Live

Again, we have successfully completed similar integrations, on time and have a proven integration approach for improving the continuity of care within and outside of the correctional facility.

## PHARMACY – CLINICAL SOLUTIONS

NaphCare will provide bi-directional medication ordering, management, reception response and administration by interfacing with the County's pharmacy vendor, Clinical Solutions. Having a direct link between the pharmacy vendor and TechCare allows for seamless order placement, filling, and distribution without paper or manual processes prone to error. The ability for ePrescribing controlled substances will also be available. Further, TechCare has built-in, out of the box barcode scanning for patient identification to efficiently integrate processes at the point of care. TechCare has also been integrated with SureScripts national database as well as several local and state drug reporting databases, and installed as required by our current clients.



**Note that TechCare has proven integrations with Clinical Solutions.**

## LAB VENDOR

We have successfully interfaced with Private County and local services as required. We will create an HL7, bidirectional interface between LabCorp and TechCare, as we have done for every other client allowing a patient's order submission and laboratory results to be viewed instantly. Having a direct link between LabCorp allows TechCare to instantly alert the physician of critical lab values through physician dashboards among other possible actionable rule sets. An interface can be created in TechCare that updates this system as often as requested, but our experience shows that an on-demand update schedule works well where the system performs an update as data has changed on either side, as often as every minute.

## RADIOLOGY VENDOR

NaphCare will provide end-to-end image diagnostic ordering, management and results by interfacing with the County's vendor. We provide an integrated solution that allows the images to be accessed directly through the patient's chart within the TechCare interface. This allows for a seamless experience while using the EHR and imaging diagnostics services from a third party. An interface can be created in TechCare that updates this system as often as requested.

## DATA WAREHOUSE

NaphCare understands that aggregation of data yields powerful information for decision making. We have developed TechCare to interface with data warehousing systems, both proprietary and off-the-shelf. Provided with specifications from the County's or State's data warehouse system, TechCare creates an interface that updates this system as often as requested. We will provide a complete Data Dictionary and ongoing support for data analysis originating from TechCare.

The TechCare EHR solution is capable of interfacing with solutions including, but not limited to:

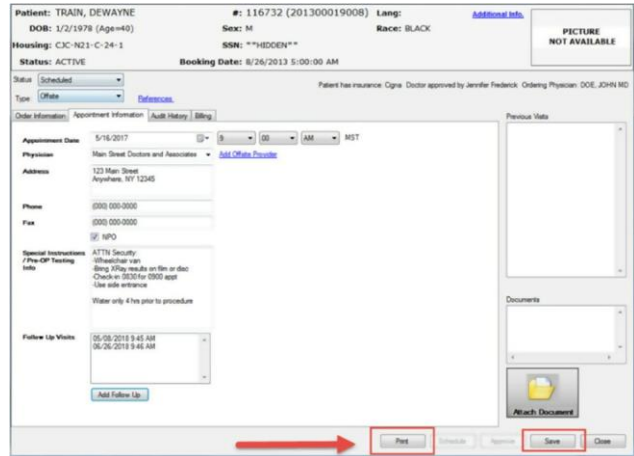
- **Radiology:** Image diagnostic ordering, management and results
- **Kiosk:** Sick Call / Appointment request submission and resolution documentation
- **Co-Pay:** Inmate Banking Systems
- **Food Service:** Diets, allergies, etc. communicated automatically
- **Hospitals and Off-Site Providers:** Maintain documentation for off-site encounters
- **County Medicaid:** Verification and eligibility for off-site encounters
- **Physician Practices:** Allows secure, patient record transmission
- **Diagnostic Systems:** EKG / Spirometry

## RESULTING BENEFITS

Clinical end users, medical records staff and custody staff receive the most benefit from interfacing data. Push button interoperability means no more scrambling to chase paper charts or print information, including but not limited to:

- Transportation Organization and Communication
- Scheduling & Coordination
- Bi-directional records transfers
- Automated follow-ups

In the TechCare to ProPhoenix interface, the instant the actual appointment has been scheduled, the patient's clinical diagnoses (including DSM-V, ICD-10 and SNOMED-CT codes), problems, active medications, lab results etc., are sent to the hospital. ProPhoenix would have the pertinent information sent to them in a timely manner with the added benefit of reduced "clutter." Information from ProPhoenix to TechCare would have a similar trigger. Once the encounter has been completed at the hospital, the CDA document is sent to TechCare so that staff can review and choose to steer the patient toward a new, collaborative course of care.



The screenshot shows a patient record for TRAIN, DEWAYNE. Key details include: DOB: 1/2/1979 (Age=40), Sex: M, Race: BLACK, SSN: \*\*HIDDEN\*\*, Booking Date: 8/26/2013 5:00:00 AM. The appointment is scheduled for 5/16/2017 at 9:00 AM. The physician is Alan Street, MD. The address is 123 Main Street, Anytown, NY 12345. The phone number is (000) 000-0000. The fax number is (000) 000-0000. The patient's status is ACTIVE. The appointment type is Office. The patient has insurance with Cigna. The doctor is approved by Jennifer Fedwick. The ordering physician is DOE, JOHN MD. The patient has special instructions: ATTY Security (shorthand var), Bring XRay results on film or disc, Check-in 3000 for 0000 app, Use side entrance, Water only 4 hrs prior to procedure. The follow-up visits are 05/08/2013 9:45 AM and 05/26/2013 9:45 AM. The 'Print' button is highlighted with a red arrow.

## THE TECHCARE CLOUD

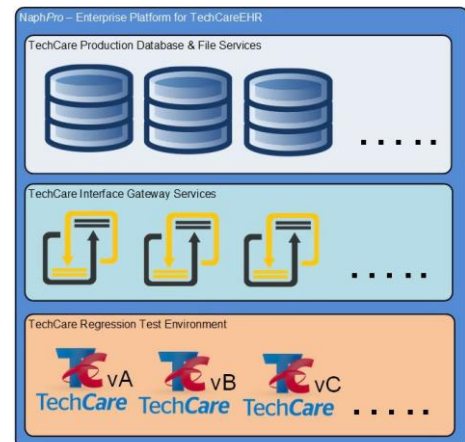
### NAPHPRO® HOSTING SYSTEM

Beyond providing just software, we offer complete, **turn-key cloud hosted services owned, managed and maintained by NaphCare** for the TechCare EHR system. This alleviates the management and cost of infrastructure resources within your organization needed to run TechCare and is a bolt-on service to existing TechCare EHR services.

Using NaphPro's Hosted system, your operations leverages infrastructure designed and maintained **strictly for the use of TechCare EHR**. The NaphPro Enterprise Platform for TechCare EHR consists of several key services.

### AUTOMATED OFFLINE READY WORKSTATIONS

The TechCare system architecture includes a complete offline feature which allows running in disconnected mode while providing complete EHR functionality on devices that are not connected to network resources. While others may provide only "offline/disconnected eMARs", the TechCare application allows full functionality of all modules. Users do not have to interact with the offline feature for any reason, it is completely automated. NaphCare is not aware of any other corrections EHR system that is capable of this level of offline functionality.



**COMPLETE REDUNDANCY**

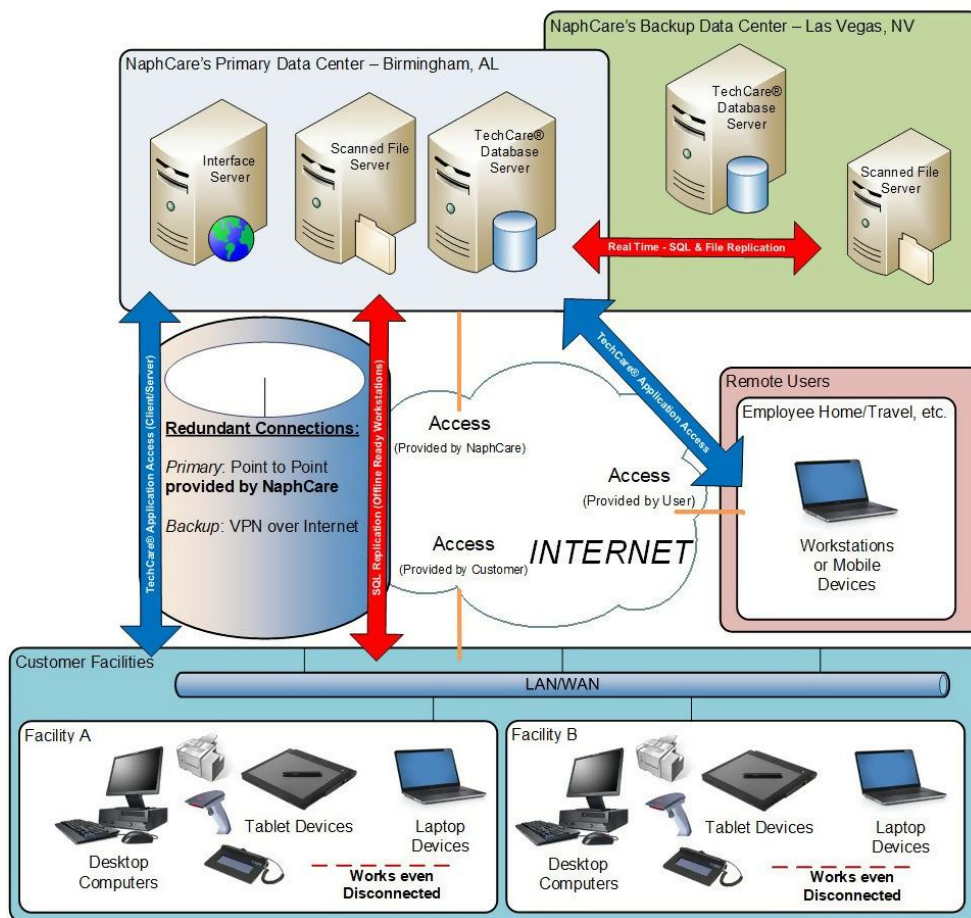
Using redundant data centers in Birmingham, AL and Las Vegas Nevada, in addition to redundant network connections and offline mode, the NaphPro system remains resilient where other systems fail. Our SaaS solution includes:

- Hot-Site Failover (Two-minute synchronization)
- Data Backup Sets (for point in time recovery)
- Completely owned and managed by NaphCare
- Dedicated, Private WAN links between NaphCare and your deployment
- Complete segmentation with dedicated resources



The following network diagram outlines the moving parts of the hosted solution. The architecture is for example purposes only as each deployment adjusts to the unique environment constraints.

Example TechCare® SaaS Architecture





**REFERENCE**

<b>Client Name</b>	Allegheny County Bureau of Corrections	2,400 ADP
<b>Address</b>	950 Second Ave., Pittsburgh, PA 15219	
<b>Reference Contact</b>	Ms. Laura Williams	
<b>Title</b>	Chief Deputy Warden, Medical	
<b>Phone Number</b>	412-350-7855	
<b>Email Address</b>	<a href="mailto:Laura.williams@alleghenycounty.us">Laura.williams@alleghenycounty.us</a>	
<b>Project Start Date</b>	22 Dec 16	
<b>Project End Date</b>	22 Jan 25	
<b>Project Description</b>	<p><u>Role and Services:</u> NaphCare was the sole provider (no outsourcing or subcontracting) for the entire project:</p> <ul style="list-style-type: none"> <li>• TechCare v4.5 EHR Software, Implementation, and Ongoing Support</li> <li>• TechCare Hosted Production and Failover Services</li> </ul> <p><u>Project Summary:</u></p> <p>In 2016, following a year-long competitive RFP process, NaphCare was awarded the contract to provide electronic medical record services to Allegheny County Bureau of Corrections. The project was extremely successful, including:</p> <ul style="list-style-type: none"> <li>• TechCare Software and Hosting Platform was live and fully-functional within seven months</li> <li>• Completely customized system including booking process, interfaces, protocols, forms, dashboards, alerts, medication pass, etc.</li> <li>• Completed all mission-critical interfaces including <b>GTL Offender Management System</b></li> <li>• Completed detailed application customization to support county-specific behavioral healthcare medication ordering workflows including reimbursement and billing to outside county agencies.</li> <li>• Provided on-site consulting sessions with NaphCare's clinical operations team to review processes to ensure efficiency and compliance with ACA standards.</li> <li>• Provided <b>on-site training</b> of hundreds of users with our team consisting of LPNs, RNs, and MDs</li> <li>• NaphCare successfully worked with County's Enterprise Technology group to provide <b>integration with County's Data Warehouse platform</b></li> <li>• Migrated active inmate data from electronic sources and clinically reviewed for correctness</li> <li>• Supported successful ACA Audit three months following Go-Live</li> </ul>	



## ESTIMATED PRICING

### INCLUDED SERVICES

The following provides a list of all the products and services that are a part of TechCare's implementation and maintenance.

<b>Software License</b>
Facility License – All Facilities, Unlimited Users/Providers
Complete EHR Product, all modules, features, etc.
<b>Interface Configuration and Maintenance</b>
Offender/Jail Management System
Lab Vendor/Provider
Pharmacy System
Mental Health Management System
Primary Medical Center for Off sites
Digital Radiology (Medical and Dental)
<b>Training Peer-to-peer</b>
Pre Go-Live – Classroom
Go-Live – Handholding
Post Go-Live – Train the Trainer
Onsite training for major Software releases
<b>Data Migration &amp; Preloading Services</b>
Appointments & Chronic Care
Medications
Problem Lists/Allergies
Offsite Medical Provider Network
<b>Customization</b>
Fully Customized System for Productive Use
Booking/Intake Process
Nursing Protocols/Forms
Interfaces (as above)
Requirements Gathering Meetings and Documentation
County/State Specific Customizations (e.g., State Health Systems, Forms, etc.)
Housing and Facility Information
Formulary/Non-Formulary
Automated Alerting
Reporting & Dashboards
<b>Support</b>
24/7 Online self-help including TechCare manuals and tutorials
24/7 Helpdesk support via voice, email and remote access
24/7 Software support

Dedicated offsite backup to NaphCare's Disaster Recovery Facility
Application, database and system monitoring and performance tuning
<b>Future Systems</b>
Compatibility with any future Offender Management Systems
All updates to Chronic Care Management regulations
State Correctional Health Care Services requirements updates
State Correctional Health Care Services auditing and reporting updates
Affordable Care Act change management and updates
Federal /State Regulatory Compliance, Accreditation and Renewal
Tailored TechCare Continuing Education
ONC Meaningful Use Certification
<b>Hosted Infrastructure</b>
Fully Hosted Solution in NaphCare's Redundant Datacenters
Unlimited Storage, Processor, RAM, etc.
Dedicated, Secure, Point-to-Point connections to NaphCare's Datacenters
FISMA, HIPAA, ePHI Security Processes
All Hosting Services included in this overview document
<b>Information Access</b>
MediSpan
CPT Database
ICD-9/10
DSM-V Codes
Electronic Prescribing

### COMPLETE SOLUTION

- TechCare and associated costs are part of a **complete solution** and are never modularized
- Product **includes cost of interfaces** with all critical systems, OMS, Pharmacy, Lab's, etc.
- Product **includes all future upgrades** and patches including Accreditation updates, Federal Regulatory Conformity updates, Affordable Care Act change management and updates.
- **Customizations** to TechCare specifically for the client are **included, without limit**, prior to go live. Following go live, features/changes requested are billed by the hour. Bugs corrections are never billed.

### ADDITIONAL INFORMATION

- All Aspects of TechCare are directly provided by NaphCare. **No third-parties** or contractors participate in providing any portion of the product or services.
- NaphCare ensures that TechCare is **fully customizable following exact specifications of your facility**, including but not limited to booking/intake process, screenings, nursing protocols, interfaces, formulary, business processes, etc.
- NaphCare has a **dedicated Implementation staff** for complete management of the customization process with recurring requirements gathering and customization testing meetings.
- NaphCare will be **responsible for data import** of active patients from paper or electronic sources and will have all imported data reviewed by clinical staff including RNs and Pharmacists.

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## ESTIMATED COSTS

The following pricing is an estimate only and is based on the information that NaphCare has presently available. Many factors can affect pricing but NaphCare strives to provide a complete, turn-key solution at a clearly communicated flat rate.

As a starting point, we have provided an estimate below for a multisite corrections operation with about 2,500 patients and 150 users. We consider an “operation” to be a collection of correctional facilities operating under the same government entity in the same geographical area.

Traditional Pricing Model	
<b>1-Time Implementation Cost:</b>	\$500,000
<b>Annual Hosting Cost (Optional):</b>	\$75,000
<b>Annual License, Maintenance, Support:</b>	\$150,000

NaphCare also **offers flat rate/subscription pricing options which eliminates a high implementation cost** and spreads that cost with consistently yearly fee. We are happy to discuss this further with the County. Also, it should be noted that **the listed pricing is all inclusive of the line items in the preceding section**, we do not “nickel and dime.”



June 28, 2019

Andrew Desnoyers, Buyer II  
Milwaukee County Procurement  
633 W. Wisconsin Ave., Suite 901  
Milwaukee, Wisconsin 53203

Dear Mr. Desnoyers –

We appreciate the opportunity earlier this month to speak with you and your colleagues about NaphCare's ability to manage Milwaukee County's offsite correctional healthcare needs. NaphCare is in a unique position to offer software solutions and offsite management services that would greatly enhance Milwaukee County's transition to a clinically strong and cost-effective correctional healthcare program.

During our discussion, you requested additional pricing information to better understand the full costs of a self-operated model for offsite healthcare. This is a challenge, as we believe that NaphCare offers unique services that cannot truly be replicated. However, we have constructed pricing for our services to support your decision-making process.

Based on our discussion, it is our understanding that Milwaukee County spends approximately \$1.5 million annually on offsite healthcare services for the incarcerated population. We propose an offer to provide offsite management services for 5% of the total cost of claims (an estimated \$75,000 per year) if offsite services are *bundled* with a contract for *TechCare®* EHR System & Services. If the County is only interested in procuring offsite management as a *stand-alone* service, the price would increase to 10% of the total cost of claims due to the loss of efficiencies provided by the *TechCare®* system.

NaphCare is offering *TechCare®* EHR System & Services for a one-time implementation fee of \$500,000 and a \$225,000 annual fee covering licensing, maintenance, support and hosting. ***After the initial investment in deployment of the system, the County would receive a comprehensive Electronic Health Record and robust offsite management services for a total of only \$300,000 per year.***

The *TechCare®* system would include the following features:

- Unlimited Users/Offenders/Providers
- Fully ONC Certified Complete
- Fully Hosted, Off-site Cloud Platform
- Unlimited Interfaces and Interoperability (including ProPheonix, WISHIN, Clinical Solutions Pharmacy, Labs, Radiology)
- Implementation
  - o Unlimited On-Site Training
  - o Unlimited Data Conversion (from paper and/or existing EHR System)
- Electronic Health Records – Complete System
  - o Utilization Management Module
    - Offsite Medical Scheduling / Offsite Medical Services Tracking
    - Provider Network Management
    - Billing, Adjustments, Invoicing, etc.
    - Module directly supports efficient management with proven history of cost savings
  - o Tools for Managing Supervised Withdrawal: CIWA-Ar (alcohol withdrawal), CIWA-B (benzodiazepines), and COWS (opioid withdrawal)
  - o Chronic Care Management
  - o Grievance Tracking
  - o Quality Assurance



- Specialty Care: Mental Health, Dental, OB, Optical, etc.
- Pharmacy (Electronic Drug Orders, Electronic Medication Administration Records)
- Discharge/Re-Entry Support and Documentation
- Medication Administration Record/Electronic Medication Administration Record
- Consent Decree Compliance Support via logging and reporting
- Staff productivity reporting to support management decisions
- Support
  - All future version updates included
  - 24/7/365 in-house helpdesk and support team

NaphCare's offsite management services would include network development, centralized medical scheduling, claims adjudication and utilization management services. In addition to the use of our in-house software systems, NaphCare uses several third-party software systems to support management of offsite healthcare services and claims processing, which are briefly explained below.

We estimate these total costs as \$295,640 per year – comparable to the price we offer to manage offsite healthcare as a standalone service. We have provided this information to help the County better understand the actual costs involved in managing offsite services.

<b>Staff</b>	<b>Annual Costs in Dollars</b>
Network Developer/Provider Relations (.5 FTE)	35,360
Case Manager RN (.25 FTE)	17,680
Scheduler (.5 FTE)	26,520
Claim Adjudicator (.5 FTE)	26,520
Data Entry (.3 FTE)	9,360
Medical Records Clerk (.5 FTE)	18,200
<b>Licenses</b>	
McKesson Claims Adjudication	63,000
Encoder Plus	15,000
DRGActive, PricerActive, APCActive	32,000
Virtual Examiner Support	52,000
<b>Total</b>	<b>295,640</b>

### Overview of Software Systems Utilized by NaphCare

- Managed Care Optimizer (MCO) program from McKesson is a claims processing software that stores all information on service providers, patients, fees, pre-authorizations and other information to adjudicate the claims. Claims can be manually entered or received electronically. MCO will validate the information, process the claim and allow for error handling. The program tracks financial transactions and produces checks to pay the vendors.
- Encoder program performs Medicare processing of hospital claims. The program will calculate Medicare's rates and bundling for APC outpatient stays and inpatient DRG rates. The program tracks provider types to ensure proper payment is calculated and allows for error handling. The program includes batch processing.
- APCActive is a set of DLL components that add the functionality of Encoder into MCO. DRGActive and PricerActive are a similar set of DLL components that provide that functionality for nightly batch processing.



- Virtual Examiner is a product that performs claims scrubbing. The program checks the member, diagnoses and procedures of the claims against published rule sets such as the NCCI Procedure-to-Procedure and Medically Unlikely edits.

## References

We have attached contact information for references with Allegheny County, Pennsylvania, and Orange County, California, who may be able to assist Milwaukee County in evaluating NaphCare as a possible partner and in evaluating the possible transition to a self-operated correctional healthcare model.

Should you need any further information regarding our proposed services, please feel free to contact me via email at [Brad.McLane@naphcare.com](mailto:Brad.McLane@naphcare.com) or by telephone at 205.536.8532.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brad T. McLane", is positioned below the word "Sincerely,".

Bradford T. McLane  
Chief Operating Officer - Administration  
NaphCare, Inc.

## REFERENCE 1

Client Name	Allegheny County Bureau of Corrections	Contract Number	7842
Address	950 Second Avenue Pittsburgh, PA 15219	Provided Services	<i>TechCare</i> EHR Software NaphCare Hosted Platform
Facilities	1 (adult correctional)	Contract Start	22-Dec-16
Population	2,200	Go Live	15-Jul-17
User Base	225	Contract End	22-Jan-25
Project Owner	Mary Jeanne Serafin	Project Contact	Laura Williams
Title	Project Manager, EHR	Title	Chief Deputy Warden, Medical
Phone	412-350-6423	Phone	412-350-7855
Email	mjserafin@ahci.org	Email	<a href="mailto:Laura.Williams@AlleghenyCounty.US">Laura.Williams@AlleghenyCounty. US</a>

**Role and Services:** NaphCare was the sole provider (no outsourcing or subcontracting) for the entire project:

- *TechCare* v4.5 EHR Software, Implementation, and Ongoing Support
- *TechCare* Hosted Production and Failover Services

### Project Summary:

In 2016, following a year-long competitive RFP process, NaphCare was awarded the contract to provide electronic medical record services to Allegheny County Bureau of Corrections. The project was extremely successful, including:

- *TechCare* Software and Hosting Platform was live and fully-functional within seven months
- Completely customized system including booking process, interfaces, protocols, forms, dashboards, alerts, medication pass, etc.
- Completed all mission-critical interfaces including **GTL Offender Management System**
- Completed detailed application customization to support county-specific behavioral healthcare medication ordering workflows including reimbursement and billing to outside county agencies.
- Provided on-site consulting sessions with NaphCare's clinical operations team to review processes to ensure efficiency and compliance with ACA standards.
- Provided **on-site training** of hundreds of users with our team consisting of LPNs, RNs, and MDs
- NaphCare successfully worked with County's Enterprise Technology group to provide **integration with County's Data Warehouse platform**
- Migrated active inmate data from electronic sources and clinically reviewed for correctness
- Supported successful ACA Audit three months following Go-Live



*“The initial phases of implementation demonstrated the extensive support that NaphCare had invested and committed to our successful transition. NaphCare staff accepted the challenge of immersing themselves in our culture and processes in order to best adapt the software to fulfill our unique needs.”*



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# COUNTY OF ALLEGHENY



To Whom It May Concern,

The Allegheny County Bureau of Corrections has an average daily population of approximately 2,200 inmates and serves as a central booking agency for over 130 municipalities county wide. The facility processes over 20,000 individuals in an average year and is responsible for the care, custody, and control of those inside the facility.

The facility is comprised of 35 housing units with 4 of those units designated for the housing of individuals with acute, severe, and/or chronic mental health needs, to include suicide and close observation statuses. Other specialty units include: intake housing units, medical housing unit, PREA Juvenile units, program pods (Substance Use Education, HOPE, Veteran's Service Unit, and Reentry), and restrictive housing units. The physical structure features two wings (east and west) that has 9 levels in which inmates are housed and mezzanine levels to accommodate visitors.

The Allegheny County Bureau of Corrections achieved an American Correctional Association (ACA) Accreditation in 2018.

At Allegheny County, we were looking for a proven technology solution to manage our health care program and assist with exceeding minimum requirements to achieve accreditations. Through a competitive RFP process, we selected *TechCore* Electronic Health Record system and services from NaphCare. In short, we chose *TechCore* because the system manages every aspect of correctional health care in an efficient and intuitive program and was provided by a correctional healthcare company that truly understands the nuances of this unique niche.

Further, *TechCare*'s ability to go completely offline, with all functionality, allowed us to skip a costly Wi-Fi deployment in our jail. Teamed with NaphCare's Cloud Services which gave us reliable, on-demand access to our EHR with unlimited storage, network and processing power, we were confident in the software and solution we selected.

The initial phases of implementation demonstrated the extensive support that NaphCare had invested and committed to our successful transition. NaphCare staff accepted the challenge of immersing themselves in our culture and processes in order to best adapt the software to fulfill our unique needs. Additionally, they were willing to collaborate with other facilities, similar in physical presentation or work flow processes, to make thoughtful recommendations for more efficient and comprehensive care services. For example, *TechCare* was fully adapted to manage our unique behavioral healthcare workflows including a complex process for the ordering of behavioral health-specific medications



ORLANDO L. HARPER, WARDEN  
ALLEGHENY COUNTY JAIL  
950 SECOND AVENUE • PITTSBURGH, PA 15219  
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COUNTY OF ALLEGHENY



RICH FRZGERALD  
COUNTY EXECUTIVE

requiring detailed billing and reporting. We knew that no *Hoff* the shelf EHR could natively support this process, but were pleased to see the NaphCare team implement the changes and integrations needed to automate the process, end-to-end.

Similarly, we also worked with NaphCare to implement our Substance Abuse Level of Care Dashboard along with strict permissions to reflect state and federal confidentiality regulations and standards. Teamed with a custom email alert engine which provides secure and PHI-free communication, we were able to ensure compliance and make the process of managing this patient population more efficiently and effectively.

Reporting functionality within *TechCare* has been another feature that has significantly enhanced our operations. Whether it's capturing data for federal court or statistics to meet grant requirements, *TechCare* is agile enough to meet the ever-changing demands of the corrections industry. The NaphCare team has developed custom reports and forms when we need them and *TechCare* is designed to be compliant with NCCCHC and ACA standards, which was instrumental in Allegheny County receiving ACA Accreditation in 2018.

We are now approaching two years of partnership, and we have come to fully appreciate the complete spectrum of what *TechCare* and NaphCare has to offer, in part due to regular onsite visits and open communication regarding our evolving needs. The NaphCare team is a reliable, fair and an extremely responsive partner that I would highly recommend without any hesitation. Please feel free to contact me at 412-512-9335 with any questions.

Sincerely,



Laura K. Williams, NCC

Chief Deputy Warden of Healthcare Services  
Allegheny County Bureau of Corrections  
950 2<sup>nd</sup> Avenue  
Pittsburgh, PA 15219  
Office: 412-350-2025  
Mobile: 412-512-9335



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## REFERENCE 2

Client Name	Orange County Health Care Agency - Corrections	Contract Number	042-541113-AF
Address	550 N. Flower Street Santa Ana, CA 92703	Provided Services	TechCare EHR Software
Facilities	8 (adult and juvenile jails)	Contract Start	18-Dec-12
Population	7,000	Go Live	15-Jan-14
User Base	350+	Contract End	20-Jun-22
Project Owner	Erin Winger	Project Contact	C. Hsien Chiang, MD
Title	Agency Director	Title	Medical Director
Phone	(714) 647-4510	Phone	(714) 647-4169
Email	ewinger@ochca.com	Email	cchiang@ochca.com

**Role and Services:** NaphCare was the sole provider (no outsourcing or subcontracting) for the entire project:

- TechCare v4.5 EHR Software, Implementation, and Ongoing Support
- TechCare Hosted Disaster Recovery Failover Services



### Project Summary:

In 2013, NaphCare was awarded the contract to provide electronic medical record services to County of Orange Health Care Agency. The project was extremely successful, including:

- TechCare was live and fully-functional within agreed upon dates set by the County
- Over 1.2 million legacy charts securely converted/migrated and accessible within TechCare
- NaphCare trained hundreds users, on-site at all locations with a team of LPNs, RNs, and MDs
- Implementation of a Custom TechCare medication packaging dashboard servicing 5 adult and 3 youth facilities from a centralized pharmacy
- County-specific database diagrams marrying in-application screens to database fields for County's SSRS experts' data mining needs
- Successfully implemented a Cloud DR solution for automated failover
- Provide ongoing support in evaluation activities of the Prison Law Office
- 5 years live with service level and response times above SLA standards

*“With 14 vendors responding to the original RFP, Orange County Selected NaphCare as our chosen vendor for this project. Their EHR, TechCare, was developed specifically for correctional settings. NaphCare truly understands correctional workflow, challenges, and needs. Given the size and complexity of our system, it was critical we find a system allowing us to accurately record all care provided to our patients and interface with multiple systems”*



June 24, 2014  
RE: NAPHCARE - TECHCARE™

**COUNTY OF ORANGE HEALTH CARE  
AGENCY**

**CORRECTIONAL HEALTH SERVICE**

To Whom It May Concern:

Implementation of an Electronic Health Record (EHR) is a complex and challenging undertaking. The

Orange County Health Care Agency (HCA) – Correctional Health Services division (CHS) implemented an EHR within the five adult jails and five juvenile detention facilities earlier this year. The facilities collectively house nearly 7500 adults and juveniles on a typical day.

With 14 vendors responding to the original RFP, Orange County selected NaphCare as our chosen vendor for this project. Their EHR, TechCare, was developed specifically for correctional settings. NaphCare truly understands correctional workflow, challenges, and needs. Given the size and complexity of our system, it was critical we find a system allowing us to accurately record all care provided to our patients, and interface with multiple systems providing patient demographics, including current housing and custody status, diagnostic results, medication administration records, and care provided in other county programs also serving this population.

The implementation process went as smoothly as one could hope! Personally, I have been involved in several EHR implementations in my 30-year career, and I can confidently state this was the most well- executed and managed implementation I have experienced. The NaphCare team was incredibly accommodating ranging from flexibility with on-site staff and super-user training sessions--- to on-site implementation support--- to immediate troubleshooting during the implementation process. Having NaphCare staff on-site during "go live" was invaluable. Their presence provided great energy, decreased staff anxiety, and provided rapid resolution of staff questions/concerns.

We are currently six months into the project, and the support from the NaphCare team has not wavered. They are as responsive today as they have been throughout the entire process. Their commitment to a successful implementation for Orange County has been exceedingly evident. We truly have a partnership with NaphCare for many years to come.

Kim Pearson, Deputy Agency Director CHS

## Appendix G – Standard Medical Equipment List

Medical equipment is defined as fixed (attached to building), or durable (e.g. exam tables, scopes). Radiology equipment is generally fixed, or it could be mobile and brought into the jail, depending on individual circumstances. There are two broad categories of equipment in every health service unit in every jail or prison; administrative or clinical. The following are examples included in each category considered minimum requirements for an NCCHC accredited facility:

### **Administrative Equipment**

- Private office space with desks, file cabinets, and personal computers
- Sufficient number of offices used by health care management staff and providers
- Carts to hold records and/or supplies
- Inmate/patient waiting area with chairs in or near the health clinic
- Private offices in booking for interviewing new admissions
- Health care reference books, periodicals, audio and video resources

### **Clinical Equipment for Examination Rooms**

- Examination tables in each examination room for male or female patient
- Hand-washing equipment
- A light capable of providing direct illumination
- Scale
- Thermometer
- Blood pressure monitoring equipment
- Stethoscope
- Ophthalmoscope
- Otoscope

### **Clinical Equipment for General Use**

- Transportation equipment (wheelchairs, stretcher)
- Biohazardous waste trash containers
- Sterilizer for non-disposable medical or dental equipment
- Pulse oximeter
- Oxygen
- Medication carts
- Mobile emergency bags/carts
- Automatic external defibrillators (AED)
- Personal protective equipment (gloves, eye protection, gowns, masks)

### **Clinical Equipment – Dental**

- Hand-washing equipment
- Dental examination chair

- Examination light
- Instruments
- Biohazardous waste trash containers
- Dentist’s stool
- The presence of a dental operatory also requires:
  - An x-ray unit with developing capability
  - Blood pressure monitoring equipment
  - Oxygen

#### **Infirmiry Equipment**

- Infirmiry beds (hospital type), tables, desks, chairs
- Negative air pressure monitoring and alarms
- Hoyer lift
- Personal computers
- Medication carts
- Wheelchairs

#### **Other Equipment**

- Sick call boxes in housing units
- Crutches, canes
- Medical orthoses, prostheses, aids to impairment

Administrative/custody staff including the responsible health authority should conduct an annual inventory. Equipment must be inspected, repaired if needed, and maintained appropriately. The above list should be compared to a current facility inventory of medical equipment to determine needs for transition to self-operation.

The above equipment is available through a number of health care supply companies (see section on medical supplies).

## Appendix H – Self-Operation Medical Equipment Requirements

Upon rolling out the effective date for self-operation, the County will assume responsibility for all constitutionally required patient care within the jails. In order to procure and stock the proper medical equipment while remaining fiscally prudent, the County will require an assessment of equipment needs based upon services provided at each respective facility and a method of purchasing that meets the statutes and policies of the County. Correctional health care spending is inclusive of on-site care, outpatient medical products for long and short-term care, health, residential, and personal care and other expenditures funded by the County budget.

Government agencies typically use a purchase order system when ordering and receiving inventory of medical supplies and equipment. This involves submission of orders in accordance with inventory management data in the health services department and supplies are generally ordered through a business entity that specializes in medical equipment and supplies and whose services are approved through the contracting procedures within the County agency.

Best practices in correctional health care dictate that there will be a broad array of supplies that are typically kept on hand, and include items used for various medical and dental use. Wound management supplies are kept in stock for treatment of cuts, abrasions, small fractures, and infection control. These items include adhesive bandages, cast and bandage protectors, sterile and non-sterile gauze bandages, dressing retention bandages, gauze sponges and pads, tubular gauze bandages, Unna boots, and specialty leg wraps. These supplies are used with various tape types that must also be on hand. These include clear, cloth, elastic, foam, and paper tape.

Items may be kept in supply for treatment of common chronic illnesses and for post-surgery practices. Items include compression therapy socks and garments, crutches and canes, braces that meet security requirements, and aids to impairment such as wheelchairs.

Medical gloves are imperative for sanitary treatment procedures, infection control, and protection from pathogens. Gloves must be available for use in all clinical areas including exam rooms on the units, any infirmary housing, and at intake.

Medical units must also keep miscellaneous supplies on hand for the various emergent and non-emergent events that occur regularly in a jail system. These items include allergy masks, bandage scissors, CPR shields, eye patches, surgical masks, and wound cleansers.

Jails that house females should keep an inventory of supplies on hand for treatment of issues related to pregnancy such as maternity slings and back support items that can be purchased from the medical equipment vendor.

There are many supply items that do not need to be maintained on hand, but the health services purchasing agent should have knowledge of how to acquire the items once a provider has prescribed their usage.

In accordance with national standards and best practices, each facility clinical area should have, at a minimum, the following equipment supplies and materials: hand washing facilities and alternate means of hand sanitation, examination tables, a light capable of providing direct illumination, scale, thermometer, blood pressure monitoring equipment, stethoscopes, ophthalmoscope, otoscope, transportation equipment such as wheelchairs and stretchers, containers for biohazardous materials and sharps, sterilizer for non-disposable medical or dental equipment, appropriate space, equipment and supplies for pelvic examinations for facilities housing females, oxygen, AEDs, pulse oximeter, and personal protective equipment such as gloves, eye protection, gowns, and masks.

According to national standards and best practices, on-site dental areas must contain hand washing facilities, dental examination chair, examination light, instruments, containers for bio hazardous materials and sharps, a dentist's stool, and personal protective equipment. The presence of a dental operatory requires the addition of at least an x-ray unit with developing capability, blood pressure monitoring equipment, and oxygen.

For the purpose of on-site diagnostic services, facilities should have, at a minimum, multiple test dipstick urinalysis, finger stick blood glucose tests, peak flow meters (handheld or other), stool-blood testing material, and pregnancy tests.

Areas that are considered to belong to the clinic and will need to store an inventory of basic supplies include the main clinic, any exam rooms on housing units, the intake area, and any specialty housing such as infirmary and mental health housing.

As we get closer to the date of self-operation, it is suggested that the CHCD Director work with the NCCHC Resources monitor to develop a list of required equipment items and begin purchasing and storing the items in a sterile and appropriate area in order to have the required supplies and equipment on hand.



## Appendix I – Supply Management Needs

The types of supplies and materials for examination and treatment depends on the level of health care provided and the capabilities and needs of health staff.

Suitable medical and health care reference books, periodicals, audio recordings, video recordings, and online resources should be available to health staff. Resources should include current medical, dental mental health, pharmacological, and nursing literature.

Weekly inventories should be maintained on supply items subject to abuse, including syringes, needles, scissors, and other sharps. Measured quantities, based on population and annual admissions, should be maintained for multiple-test dipstick urinalysis, finger-stick blood glucose tests, peak flow meters, stool blood-testing materials, and pregnancy test kits (for women’s facilities). Supplies range from paper supplies such as sick call slips, to medical orthoses or prostheses and other aids to impairment.

Estimates of supplies needed, and the establishment of par stock required, can be made with the assistance of any one of a number of medical supply companies currently doing business with jails and prisons throughout the United States, and senior health staff at the facility. Although bed capacity and annual admissions is a major indicator of the volume of supplies required, other factors need to be considered such as the size of an infirmary, on-site dialysis, receiving volume and other specialty clinics. Many facilities utilize a number of supply companies, opting for best pricing.

Contractual arrangements and negotiated discounts should be initiated through the facility procurement process. Wisconsin state and/or county regulations may require the use of preferred vendors for such purchases. Nationally recognized supply vendors include:

McKesson	<a href="http://www.mckessonmedicalsupplies.com">www.mckessonmedicalsupplies.com</a>	medical supplies
CardinalHealth	<a href="http://www.cardinalhealth.com">www.cardinalhealth.com</a>	medical supplies
MedLine	<a href="http://www.medline.com">www.medline.com</a>	medical supplies
Henry Schein	<a href="http://www.henryschein.com">www.henryschein.com</a>	dental supplies

As an example, Axess Medical is a certified minority-business enterprise doing business with Wellpath as part of a national contract, including supplying the MCJ and HOC. An obvious source of information with regard to volume of supplies required for self-operation start-up would be the current health care contractor.

**ILLUSTRATION ONLY**

**Cost Projection: Annual Medical Supplies and Equipment**

Based on limited information, the following projection can be made using 2019 data from one of the medical supply companies mentioned above.

Assuming a monthly ADP of 2,000 inmates, with an equipment/supply cost of \$7.50 per inmate per month ( $\$7.50 \times 2,000 \times 12 = \$180,000.00$  annualized)

Assuming a monthly ADP of 2,000 inmates, with an infirmary (add \$0.25), with an equipment/supply cost of \$7.75 per inmate per month ( $\$7.75 \times 2,000 \times 12 = \$186,000.00$  annualized)

NOTE: Included are general medical supplies such as syringes, bandages, nutritional supplements, IV solution and over-the counter medications. The estimate also includes small durable medical equipment with a limit of \$2,000.00 maximum per item.

This example is illustrative only and would require detailed review of current medical supply consumption experience at MCJ and HOC, along with an inventory of all equipment.

## Appendix J – Wellpath 3-Month Consumable Refill List

Supplier Desc	Catalog Num	E1 Item Num	Item Desc	Qty	UOM - S	BTM #	Price	Ext Price
WELCH ALLYN INC	42NTB-E1	567111	MONITOR, VITAL SPOT OXI TEMP W/O STAND WA	2	EA	2612-42014	\$ 2,756.25	\$ 5,512.50
WELCH ALLYN INC	CP150A-1ENB	844125	ECG, CP150 INTERPRETIVEWA	1	EA	2740-15001	\$ 3,450.00	\$ 3,450.00
WELCH ALLYN INC	42NTB-E1	567111	MONITOR, VITAL SPOT OXI TEMP W/O STAND WA	1	EA	2612-42014	\$ 2,756.25	\$ 2,756.25
WELCH ALLYN INC	42NTB-E1	567111	MONITOR, VITAL SPOT OXI TEMP W/O STAND WA	1	EA	2612-42014	\$ 2,756.25	\$ 2,756.25
WELCH ALLYN INC	105353	850332	PAPER, CHART F/ECG MONIT CP150(200ST/PK 5PK/CS) WA	5	PK	2745-35310	\$ 155.00	\$ 775.00
EXERGEN CORP	140008	540677	THERMOMETER, TAT2000C TEMPORALEXERGN	4	EA	290-TAT-2000	\$ 187.00	\$ 748.00
EXERGEN CORP	140008	540677	THERMOMETER, TAT2000C TEMPORALEXERGN	4	EA	290-TAT-2000	\$ 187.00	\$ 748.00
EXERGEN CORP	140008	540677	THERMOMETER, TAT2000C TEMPORALEXERGN	4	EA	290-TAT-2000	\$ 187.00	\$ 748.00
WELCH ALLYN INC	4700-60	701610	STAND, MOBILE W/BASKETWA	2	EA	2613-06047	\$ 355.00	\$ 710.00
MCKESSON MEDICAL SURGICAL	16-4825	511333	BANDAGE, ADHSV SHR PTCH 2X4 STR LF(50/BX 24BX/CS)	6	BX	279-3614BX	\$ 112.00	\$ 672.00
ARKRAY USA INC	500100	718283	TEST STRIP, BLD GLUC ASSURE PLATINUM (100/BX 6BX/C ARKRAY	3	CS	ALB500100	\$ 210.00	\$ 630.00
ARKRAY USA INC	500100	718283	TEST STRIP, BLD GLUC ASSURE PLATINUM (100/BX 6BX/C ARKRAY	3	CS	ALB500100	\$ 210.00	\$ 630.00
WELCH ALLYN INC	52434-U	487037	SPECULA, KLNSPC 4.25MM (34/TU25TU/BG 10BG/CS) WA	8	TU	94-52434-UB	\$ 54.90	\$ 439.20
MCKESSON MEDICAL SURGICAL	5000	951311	TEST KIT, PREGNANCY HCG DIPSTICK (25/KT)	10	KT	1460-87125	\$ 42.10	\$ 421.00
MCKESSON MEDICAL SURGICAL	5000	951311	TEST KIT, PREGNANCY HCG DIPSTICK (25/KT)	10	KT	1460-87125	\$ 42.10	\$ 421.00
MCKESSON MEDICAL SURGICAL	5000	951311	TEST KIT, PREGNANCY HCG DIPSTICK (25/KT)	10	KT	1460-87125	\$ 42.10	\$ 421.00
ARKRAY USA INC	500100	718283	TEST STRIP, BLD GLUC ASSURE PLATINUM (100/BX 6BX/C ARKRAY	2	CS	ALB500100	\$ 210.00	\$ 420.00
ARKRAY USA INC	500100	718283	TEST STRIP, BLD GLUC ASSURE PLATINUM (100/BX 6BX/C ARKRAY	2	CS	ALB500100	\$ 210.00	\$ 420.00
WELCH ALLYN INC	4700-60	701610	STAND, MOBILE W/BASKETWA	1	EA	2613-06047	\$ 355.00	\$ 355.00
WELCH ALLYN INC	4700-60	701610	STAND, MOBILE W/BASKETWA	1	EA	2613-06047	\$ 355.00	\$ 355.00
KENT PRECISION FOODS GROUP INC	X387-M3600	1065946	SQWINCHER, PDR MIX ORG 2.5GL/23.83OZ PKT (32PKT/CS)	3	CS	1310-40506	\$ 117.70	\$ 353.10
MCKESSON MEDICAL SURGICAL	5000	951311	TEST KIT, PREGNANCY HCG DIPSTICK (25/KT)	8	KT	1460-87125	\$ 42.10	\$ 336.80
RETRACTABLE TECHNOLOGIES INC	15221	666134	SYRINGE/NDL, INSULIN 0.5CC U-100 30GX1/2" (100/BX RETRAC	2	BX	1632-22130	\$ 165.71	\$ 331.42
WELCH ALLYN INC	105353	850332	PAPER, CHART F/ECG MONIT CP150(200ST/PK 5PK/CS) WA	2	PK	2745-35310	\$ 155.00	\$ 310.00
BAXTER HEALTHCARE CORP	2C8519	454695	SOLUTION SET, CONTINU-FLO 2 LUER VALVES (48/CS) BAXTIV	1	CS	2C8519	\$ 295.00	\$ 295.00
BAXTER HEALTHCARE CORP	2C8519	454695	SOLUTION SET, CONTINU-FLO 2 LUER VALVES (48/CS) BAXTIV	1	CS	2C8519	\$ 295.00	\$ 295.00
BAXTER HEALTHCARE CORP	2C8519	454695	SOLUTION SET, CONTINU-FLO 2 LUER VALVES (48/CS) BAXTIV	1	CS	2C8519	\$ 295.00	\$ 295.00
MCKESSON MEDICAL SURGICAL	WPW50	499965	WIPE, PRE-MOIST W/DSPNG LID (50/PK 12PK/CS) MGM16	5	PK	1063-01321	\$ 55.33	\$ 276.65
RETRACTABLE TECHNOLOGIES INC	10131	416664	SYRINGE/NDL, TB 1CC 27GX1/2" (100/BX 8BX/CS) RETRAC	1	CS	11616	\$ 256.00	\$ 256.00
MCKESSON MEDICAL SURGICAL	5000	951311	TEST KIT, PREGNANCY HCG DIPSTICK (25/KT)	6	KT	1460-87125	\$ 42.10	\$ 252.60
KENT PRECISION FOODS GROUP INC	X387-M3600	1065946	SQWINCHER, PDR MIX ORG 2.5GL/23.83OZ PKT (32PKT/CS)	2	CS	1310-40506	\$ 117.70	\$ 235.40
KENT PRECISION FOODS GROUP INC	X387-M3600	1065946	SQWINCHER, PDR MIX ORG 2.5GL/23.83OZ PKT (32PKT/CS)	2	CS	1310-40506	\$ 117.70	\$ 235.40
KENT PRECISION FOODS GROUP INC	X387-M3600	1065946	SQWINCHER, PDR MIX ORG 2.5GL/23.83OZ PKT (32PKT/CS)	2	CS	1310-40506	\$ 117.70	\$ 235.40
ARKRAY USA INC	500100	718283	TEST STRIP, BLD GLUC ASSURE PLATINUM (100/BX 6BX/C ARKRAY	1	CS	ALB500100	\$ 210.00	\$ 210.00
ARKRAY USA INC	500100	718283	TEST STRIP, BLD GLUC ASSURE PLATINUM (100/BX 6BX/C ARKRAY	1	CS	ALB500100	\$ 210.00	\$ 210.00
FABRICATION ENTERPRISES INC	12-1926	794385	OXIMETER, FINGERTIP PULSE BASELINE FABENT	8	EA	69100MS	\$ 22.10	\$ 176.80
MCKESSON MEDICAL SURGICAL	121-105G	804314	URINE TEST STRIP, 10SG F/121-120ANALYZ (100/1V 12V MGM121	3	VL	660556	\$ 56.70	\$ 170.10
BECTON DICKINSON	367283	222269	COLLECTION SET, BLD SAFETY LUER ADPT 23GX3/4"(50/B BD	2	BX	367283	\$ 82.50	\$ 165.00
MCKESSON MEDICAL SURGICAL	563	911759	CONTAINER, SPCMN N/5 W/LID 4OZ(20/BX 25BX/CS) MGM16	2	CS	1072-75904	\$ 82.15	\$ 164.30
MCKESSON MEDICAL SURGICAL	127-100ER	1060834	TEST KIT, OCCULT BLD ER SGL SLIDE (100/BX)	1	BX	G1314	\$ 153.00	\$ 153.00
MCKESSON MEDICAL SURGICAL	01-720-	803186	SPHYG, ANEROID DLX LF BLK ADLT(1/BX) MGM01	6	BX	547670BK	\$ 25.00	\$ 150.00
MCKESSON MEDICAL SURGICAL	01-720-	803187	SPHYG, ANEROID DLX LF BURG LGADLT (1/BX) MGM01	5	BX	E6091	\$ 30.00	\$ 150.00
TRINITY STERILE INC	50233	573542	IV START KIT, W/CHLORAPREP SEPP AMP (100/CS) RX TRNSTR	1	CS	DYND74278	\$ 147.50	\$ 147.50
RETRACTABLE TECHNOLOGIES INC	10211	440096	SYRINGE/NDL, INSULIN 29GX1/2"(BX/100) RETRAC	1	CS	C490347	\$ 141.35	\$ 141.35
ARKRAY USA INC	500001	721220	METER, BLD GLUC ASSURE PLATARKRAY	20	EA	ALB500001	\$ 7.00	\$ 140.00
RETRACTABLE TECHNOLOGIES INC	10391	348825	SYRINGE/NDL, VANISH POINT 3CC25GX1" (100/BX) RETRAC	2	BX	10391	\$ 67.90	\$ 135.80
FABRICATION ENTERPRISES INC	12-1926	794385	OXIMETER, FINGERTIP PULSE BASELINE FABENT	6	EA	69100MS	\$ 22.10	\$ 132.60
MCKESSON MEDICAL SURGICAL	01-720-	803186	SPHYG, ANEROID DLX LF BLK ADLT(1/BX) MGM01	5	BX	547670BK	\$ 25.00	\$ 125.00
GRAHAM FIELD HEALTH PRODUCTS	9600	485119	ENVELOPE, PILL (1000/BX)GF	4	BX	G1310	\$ 30.50	\$ 122.00
GRAHAM FIELD HEALTH PRODUCTS	9600	485119	ENVELOPE, PILL (1000/BX)GF	4	BX	G1310	\$ 30.50	\$ 122.00
KENT PRECISION FOODS GROUP INC	X387-M3600	1065946	SQWINCHER, PDR MIX ORG 2.5GL/23.83OZ PKT (32PKT/CS)	1	CS	1310-40506	\$ 117.70	\$ 117.70
KENT PRECISION FOODS GROUP INC	X387-M3600	1065946	SQWINCHER, PDR MIX ORG 2.5GL/23.83OZ PKT (32PKT/CS)	1	CS	1310-40506	\$ 117.70	\$ 117.70
BECTON DICKINSON	381412	329999	CATH, INSYTE IAG STR YLW 24GX.75" (50/BX) BD	1	BX	353241	\$ 117.00	\$ 117.00
BECTON DICKINSON	381423	330000	CATH, INSYTE IAG STR BLU 22GX1" (50/BX) BD	1	BX	354221	\$ 117.00	\$ 117.00
FABRICATION ENTERPRISES INC	12-1926	794385	OXIMETER, FINGERTIP PULSE BASELINE FABENT	5	EA	69100MS	\$ 22.10	\$ 110.50
MCKESSON MEDICAL SURGICAL	2262	881399	CONTAINER, SHARPS COLL HORIZ RED 5QT (10/BX 2BX/CS) MGM128	1	BX	298507SA	\$ 110.50	\$ 110.50
CARDINAL HEALTHCARE	85075A	344297	CONTAINER, SHARPS SQT RED(20/CS) 8507 KENDAL	1	CS	298507SA	\$ 110.50	\$ 110.50
MCKESSON MEDICAL SURGICAL	32634	911720	MASK, OXY N/REBREATH LF ADLT 7TU (50/CS)	1	CS	2351-93501	\$ 107.20	\$ 107.20
MCKESSON MEDICAL SURGICAL	01-720-	803186	SPHYG, ANEROID DLX LF BLK ADLT(1/BX) MGM01	4	BX	547670BK	\$ 25.00	\$ 100.00

ARKRAY USA INC	500006	711309	CONTROL, SOL GLUCOSEOSE ASSURENO RMAL/HIGH	8	BX	661328	\$ 11.50	\$ 92.00
ARKRAY USA INC	500006	711309	CONTROL, SOL GLUCOSEOSE ASSURENO RMAL/HIGH	8	BX	661328	\$ 11.43	\$ 91.44
MCKESSON MEDICAL SURGICAL	01-720-	803187	SPHYG, ANEROID DLX LF BURG LGADLT (1/BX) MGM01	3	BX	E6091	\$ 30.00	\$ 90.00
ARKRAY USA INC	980225	668950	LANCET, ASSURE LANCE (200/BX 24/BX/CS) ARKRAY	4	BX	2764-80225	\$ 22.22	\$ 88.88
FABRICATION ENTERPRISES INC	12-1926	794385	OXIMETER, FINGERTIP PULSE BASELINE FABENT	4	EA	69100M5	\$ 22.10	\$ 88.40
BECTON DICKINSON	967283	222269	COLLECTION SET, BLD SAFETY LUER ADPT 23GX3/4"(50/B BD	1	BX	367283	\$ 82.50	\$ 82.50
COLONIAL BAG CORPORATION	PXR24	883999	BAG, BIOHZD RED 24X24 10GLCOLBAG	1	CS	NONHDR24RL	\$ 82.46	\$ 82.46
MCKESSON MEDICAL SURGICAL	16-9526	491102	CONTAINER, SPEC W/LID STR 4OZTAPED (100/CS) MGM16	1	CS	1072-75904	\$ 82.15	\$ 82.15
MCKESSON MEDICAL SURGICAL	563	911759	CONTAINER, SPCMN N/S W/LID 4OZ(20/BX 25BX/CS) MGM16	1	CS	1072-75904	\$ 82.15	\$ 82.15
MCKESSON MEDICAL SURGICAL	4986	886409	DRESSING, FILM TRANS W/FRM DELSTR 4"X4 3/4" (50/BX)	1	BX	351626	\$ 80.00	\$ 80.00
MCKESSON MEDICAL SURGICAL	50-66160	880563	WIPE, GERMICIDE LG 6"X6.75"(160/BX 12BX/CS) MGM16	1	CS	297272	\$ 79.22	\$ 79.22
MCKESSON MEDICAL SURGICAL	50-66160	880563	WIPE, GERMICIDE LG 6"X6.75"(160/BX 12BX/CS) MGM16	1	CS	297272	\$ 79.22	\$ 79.22
MCKESSON MEDICAL SURGICAL	50-66160	880563	WIPE, GERMICIDE LG 6"X6.75"(160/BX 12BX/CS) MGM16	1	CS	297272	\$ 79.22	\$ 79.22
MCKESSON MEDICAL SURGICAL	50-66160	880563	WIPE, GERMICIDE LG 6"X6.75"(160/BX 12BX/CS) MGM16	1	CS	297272	\$ 79.22	\$ 79.22
MCKESSON MEDICAL SURGICAL	50-66160	880563	WIPE, GERMICIDE LG 6"X6.75"(160/BX 12BX/CS) MGM16	1	CS	297272	\$ 79.22	\$ 79.22
MCKESSON MEDICAL SURGICAL	118-42213	867500	TRIPLE ANTIBIOTIC, OINT .9GM (144/BX 12BX/CS) MGM118	6	BX	1350-14547	\$ 13.00	\$ 78.00
MCKESSON MEDICAL SURGICAL	16-4290	471997	DRESSING, N/ADHER STR 8X3 LF (75/BX 88X/CS) MGM16	2	BX	82015	\$ 38.90	\$ 77.80
MCKESSON MEDICAL SURGICAL	44082000	440028	SPONGE, GZE 4"X4" 8PLY N/S (200/BG) MGM16	1	CS	84084	\$ 75.25	\$ 75.25
MCKESSON MEDICAL SURGICAL	37-6270	520118	SALINE, IRR SOL STR 250ML (24/CS)	1	CS	607112	\$ 75.12	\$ 75.12
MCKESSON MEDICAL SURGICAL	37-6270	520118	SALINE, IRR SOL STR 250ML (24/CS)	1	CS	607112	\$ 75.12	\$ 75.12
MCKESSON MEDICAL SURGICAL	14-6976C	765875	GLOVE EXAM NITRL 3.5C PF BLU MED (200/BX)	1	CS	1012-44984	\$ 75.00	\$ 75.00
MCKESSON MEDICAL SURGICAL	14-6974C	765874	GLOVE EXAM NITRL 3.5C PF BLU SM (200/BX)	1	CS	1015-44983	\$ 75.00	\$ 75.00
MCKESSON MEDICAL SURGICAL	14-6976C	765875	GLOVE EXAM NITRL 3.5C PF BLU MED (200/BX)	1	CS	1012-44984	\$ 75.00	\$ 75.00
MCKESSON MEDICAL SURGICAL	14-6978C	765876	GLOVE EXAM NITRL 3.5C PF BLU LG (200/BX) MGM14	1	CS	1012-44985	\$ 75.00	\$ 75.00
MCKESSON MEDICAL SURGICAL	25-2691	326544	LACERATION TRAY, NW TWL (20/CS) MGM03	1	CS	661972	\$ 73.00	\$ 73.00
DRIVE MEDICAL DESIGN & MFG	5650D	153528	NEBULIZER/COMPRESSOR, PULMO-AIDE W/FLTR 5610D DEVIBS	1	EA	27-4650D	\$ 72.75	\$ 72.75
ARKRAY USA INC	980228	689753	LANCET, SFTY MICROFLOW 28G (200/BX 24BX/CS) ARKRAY	4	BX	2764-80228	\$ 17.14	\$ 68.56
ARKRAY USA INC	980228	689753	LANCET, SFTY MICROFLOW 28G (200/BX 24BX/CS) ARKRAY	4	BX	2764-80228	\$ 17.14	\$ 68.56
RETRACTABLE TECHNOLOGIES INC	10381	348833	SYRINGE/NDL, VANISH POINT 3CC20GX1 1/2" (100/BX) RETRAC	1	BX	10391	\$ 67.90	\$ 67.90
ARKRAY USA INC	980225	668950	LANCET, ASSURE LANCE (200/BX 24/BX/CS) ARKRAY	3	BX	2764-80225	\$ 22.22	\$ 66.66
ARKRAY USA INC	980225	668950	LANCET, ASSURE LANCE (200/BX 24/BX/CS) ARKRAY	3	BX	2764-80225	\$ 22.22	\$ 66.66
ARKRAY USA INC	980225	668950	LANCET, ASSURE LANCE (200/BX 24/BX/CS) ARKRAY	3	BX	2764-80225	\$ 22.22	\$ 66.66
WELCH ALLYN INC	05031-750	953916	COVER, PROBE ORAL SURETEMP DISP (250/BX 30BX/CS) WA	4	BX	2733-53175	\$ 10.96	\$ 65.76
MCKESSON MEDICAL SURGICAL	14-136	832682	GLOVE, EXAM VNYL PF MED (150/BX) MGM14C	2	CS	DY2612	\$ 32.50	\$ 65.00
MCKESSON MEDICAL SURGICAL	32633	911719	MASK, OXY LF MED CONC 7"TU (50/CS)	2	CS	30054	\$ 31.50	\$ 63.00
MCKESSON MEDICAL SURGICAL	121-105G	804314	URINE TEST STRIP, 10SG F/121-120ANALYZ (100/VL 12V MGM121	1	VL	660556	\$ 56.70	\$ 56.70
ARKRAY USA INC	500001	721220	METER, BLD GLUC ASSURE PLATARKRAY	8	EA	ALB500001	\$ 7.00	\$ 56.00
MCKESSON MEDICAL SURGICAL	16-157	930089	SPECULA, EAR 4MM (1000/BX 10BX/CS) MGM16	1	BX	94-52434-UB	\$ 54.90	\$ 54.90
MCKESSON MEDICAL SURGICAL	118-42213	867500	TRIPLE ANTIBIOTIC, OINT .9GM (144/BX 12BX/CS) MGM118	4	BX	1350-14547	\$ 13.00	\$ 52.00
ARKRAY USA INC	980228	689753	LANCET, SFTY MICROFLOW 28G (200/BX 24BX/CS) ARKRAY	3	BX	2764-80228	\$ 17.14	\$ 51.42
ARKRAY USA INC	980228	689753	LANCET, SFTY MICROFLOW 28G (200/BX 24BX/CS) ARKRAY	3	BX	2764-80228	\$ 17.14	\$ 51.42
MCKESSON MEDICAL SURGICAL	16-4821	466878	BANDAGE, ADHSV SHR STRP 1X3 (100/BX 24BX/CS)	1	CS	279-3608BX	\$ 50.85	\$ 50.85
MCKESSON MEDICAL SURGICAL	53-28033-8	937916	SANITIZER, HAND W/PUMP 8OZ (24/CS) MGM53	1	CS	12812	\$ 49.20	\$ 49.20
ARKRAY USA INC	500006	711309	CONTROL, SOL GLUCOSEOSE ASSURENO RMAL/HIGH	4	BX	661328	\$ 11.50	\$ 46.00
MCKESSON MEDICAL SURGICAL	56-80342	1028129	BASIN, WASH GRAPHITE 8QT RECTANGLE (50/CS)	1	CS	1027-80342	\$ 46.00	\$ 46.00
MCKESSON MEDICAL SURGICAL	16-4293	373777	DRESSING, N/ADHER STR 3X4 LF (100/BX) MGM16	3	BX	150069	\$ 15.19	\$ 45.57
MCKESSON MEDICAL SURGICAL	146-10400-8	1065294	CRUTCH, ALUM PSH-BTN ADJ ADLT350LB (8PR/CS)	2	PR	GP131	\$ 22.70	\$ 45.40
ARKRAY USA INC	980225	668950	LANCET, ASSURE LANCE (200/BX 24/BX/CS) ARKRAY	2	BX	2764-80225	\$ 22.22	\$ 44.44
WELCH ALLYN INC	05031-750	953916	COVER, PROBE ORAL SURETEMP DISP (250/BX 30BX/CS) WA	4	BX	2733-53175	\$ 10.96	\$ 43.84
WELCH ALLYN INC	05031-750	953916	COVER, PROBE ORAL SURETEMP DISP (250/BX 30BX/CS) WA	4	BX	2733-53175	\$ 10.96	\$ 43.84
MCKESSON MEDICAL SURGICAL	58-204	191089	PAD, ALCOHOL PREP STR MED (200/BX) MGM16	1	CS	1330-85300	\$ 43.80	\$ 43.80
MCKESSON MEDICAL SURGICAL	58-204	191089	PAD, ALCOHOL PREP STR MED (200/BX) MGM16	1	CS	1330-85300	\$ 43.80	\$ 43.80
MCKESSON MEDICAL SURGICAL	58-204	191089	PAD, ALCOHOL PREP STR MED (200/BX) MGM16	1	CS	1330-85300	\$ 43.80	\$ 43.80
MCKESSON MEDICAL SURGICAL	16-4292	373768	DRESSING, N/ADHER STR 2X3 LF (100/BX) MGM16	4	BX	150068	\$ 10.60	\$ 42.40
MCKESSON MEDICAL SURGICAL	53-28032-4	937914	SANITIZER, HAND 4OZ (24/CS)MGM53	1	CS	17765	\$ 39.50	\$ 39.50
MCKESSON MEDICAL SURGICAL	32643	911726	NEBULIZER, LF ADLT MASK 7"TU (50/CS)	1	CS	411882	\$ 39.00	\$ 39.00
MCKESSON MEDICAL SURGICAL	32643	911726	NEBULIZER, LF ADLT MASK 7"TU (50/CS)	1	CS	411882	\$ 39.00	\$ 39.00
MCKESSON MEDICAL SURGICAL	32643	911726	NEBULIZER, LF ADLT MASK 7"TU (50/CS)	1	CS	411882	\$ 39.00	\$ 39.00
MCKESSON MEDICAL SURGICAL	32644	911727	NEBULIZER, W/MOUTHPHC LF ADLT 7TU (50/CS)	1	CS	411882	\$ 39.00	\$ 39.00
MCKESSON MEDICAL SURGICAL	32643	911726	NEBULIZER, LF ADLT MASK 7"TU (50/CS)	1	CS	411882	\$ 39.00	\$ 39.00
MCKESSON MEDICAL SURGICAL	16-4250	446057	PAD, ABD 5X9" STR LF (1/PK 20PK/BX) MGM16	1	CS	1212-12110	\$ 38.50	\$ 38.50
MCKESSON MEDICAL SURGICAL	24-202	484942	BLADE, TONGUE SR 6" N/S LF (500/BX 10BX/CS) MGM16	5	BX	M233797	\$ 7.60	\$ 38.00
MCKESSON MEDICAL SURGICAL	01-670BKGM	363744	STETHOSCOPE, DUAL HEAD BLKMG01	8	EA	792-6-0027-40	\$ 4.70	\$ 37.60
MCKESSON MEDICAL SURGICAL	14-136	832682	GLOVE, EXAM VNYL PF MED (150/BX) MGM14C	1	CS	DY2612	\$ 32.50	\$ 32.50
MCKESSON MEDICAL SURGICAL	14-138	832683	GLOVE, EXAM VNYL PF LG (150/BX) MGM14C	1	CS	DY2612	\$ 32.50	\$ 32.50

MCKESSON MEDICAL SURGICAL	14-138	832683	GLOVE, EXAM VNYL PF LG (150/BX) MGM14C	1	CS	DY2612	\$ 32.50	\$ 32.50
MCKESSON MEDICAL SURGICAL	14-136	832682	GLOVE, EXAM VNYL PF MED (150/BX) MGM14C	1	CS	DY2612	\$ 32.50	\$ 32.50
MCKESSON MEDICAL SURGICAL	14-136	832682	GLOVE, EXAM VNYL PF MED (150/BX) MGM14C	1	CS	DY2612	\$ 32.50	\$ 32.50
MCKESSON MEDICAL SURGICAL	14-138	832683	GLOVE, EXAM VNYL PF LG (150/BX) MGM14C	1	CS	DY2613	\$ 32.50	\$ 32.50
MCKESSON MEDICAL SURGICAL	14-140	833078	GLOVE, EXAM VNYL PF XLG (130/BX) MGM14C	1	CS	DY2614	\$ 32.50	\$ 32.50
MCKESSON MEDICAL SURGICAL	8004	876303	CLOSURE, SKIN FLEX LF TAN 1/2X4" 6/PK 50PK/BX 4BX MGM16	1	BX	1123-54118	\$ 32.00	\$ 32.00
MCKESSON MEDICAL SURGICAL	16-1033-6	454621	BANDAGE, ELAS SLF-CLSR PREM N/S LF 6X5YDS MGM16	3	BX	1121-03661	\$ 10.60	\$ 31.80
MCKESSON MEDICAL SURGICAL	18-D50	195520	SHEATH, THERMOMETER ORAL DIGITAL (50/BX 100BX/CS) MGM18	6	BX	508-15-615-000	\$ 5.25	\$ 31.50
MCKESSON MEDICAL SURGICAL	37-6280	733255	SALINE, IRR SOL 0.9% 500ML (18/CS) MGM37	1	CS	355200	\$ 31.20	\$ 31.20
GRAHAM FIELD HEALTH PRODUCTS	9600	485119	ENVELOPE, PILL (1000/BX)GF	1	BX	G1310	\$ 30.50	\$ 30.50
3M (HEALTHCARE DIVISION)	1534-	445279	TAPE, ADHSV TRANSPORE WHT 2" (6RL/BX 10BX/CS) 3M	2	BX	1515272	\$ 15.24	\$ 30.48
MCKESSON MEDICAL SURGICAL	16-4293	373777	DRESSING, N/ADHER STR 3X4 LF (100/BX) MGM16	2	BX	150069	\$ 15.19	\$ 30.38
MEDEGEN MEDICAL PRODUCTS LLC	H360-10	199095	BASIN, WASH RECTGL 6QOT ROSE (50/CS) MECTACT	1	CS	1072-25001	\$ 30.00	\$ 30.00
PROFESSIONAL DISPOSABLES INC	P13472	642391	WIPE, SANI-HANDS ALC (135/CN 12/CS) PRFDIS	5	CN	Q20372	\$ 5.85	\$ 29.25
MCKESSON MEDICAL SURGICAL	14-6976C	765875	GLOVE EXAM NITRL 3.5C PF BLU MED (200/BX)	2	CS	1015-31002	\$ 14.50	\$ 29.00
MCKESSON MEDICAL SURGICAL	56-802355	1020361	URINAL, W/TRANSPARENT LID (48/CS)	1	CS	1072-14001	\$ 28.64	\$ 28.64
DRIVE MEDICAL DESIGN & MFG	AGF-101	585054	ELECTRODE, SQ 1.75"X1.75" (4/PK) DRVMED	20	PK	23008	\$ 1.27	\$ 25.40
LAERDAL MEDICAL CORP	980010	1107053	CERVICAL COLLAR, STIFFNECK SERV ADJ	4	EA	L980010	\$ 5.90	\$ 23.60
MCKESSON MEDICAL SURGICAL	56-70293	1028136	CUP, DENTURE W/LID AQUA (250/CS)	30	EA	DYND70293H	\$ 0.73	\$ 21.90
MCKESSON MEDICAL SURGICAL	16-1033-4	454620	BANDAGE, ELAS SLF-CLSR PREM N/S LF 4X5YDS MGM16	3	BX	1121-03660	\$ 7.25	\$ 21.75
MCKESSON MEDICAL SURGICAL	23-D0022	49176	ALCOHOL, ISOPROPYL 70% 16OZ (12/CS) MGM23	1	CS	201001	\$ 21.72	\$ 21.72
MCKESSON MEDICAL SURGICAL	16-1033-6	454621	BANDAGE, ELAS SLF-CLSR PREM N/S LF 6X5YDS MGM16	2	BX	1121-03661	\$ 10.60	\$ 21.20
GRAHAM FIELD HEALTH PRODUCTS	1240	35929	CHART, EYE TEST SMELLEN PLASTIC GF	3	EA	F814601	\$ 6.80	\$ 20.40
MCKESSON MEDICAL SURGICAL	16-1033-2	454618	BANDAGE, ELAS SLF-CLSR PREM N/S LF 2X5YDS MGM16	5	BX	1121-03658	\$ 3.90	\$ 19.50
MCKESSON MEDICAL SURGICAL	16-47310	455531	TAPE, ADHSV PAPER LF 1"X10YDS(12RL/BX 12/CS) MGM16	4	BX	86111	\$ 4.80	\$ 19.20
MCKESSON MEDICAL SURGICAL	16-47210	455537	TAPE, ADHSV TRANSP PLAS LF 1"X10YDS (12RL/BX 12/CS) MGM16	4	BX	86111	\$ 4.80	\$ 19.20
MCKESSON MEDICAL SURGICAL	16-4242	762703	SPONGE, GZE 4"X4" 12PLY STR 2'S (25PK/BX) MGM16	4	BX	1212-12105	\$ 4.50	\$ 18.00
MCKESSON MEDICAL SURGICAL	32637	911722	CANNULA, NASAL CONTRD LF ADLT7" (50/CS)	1	CS	301-107EA	\$ 16.00	\$ 16.00
MCKESSON MEDICAL SURGICAL	16-1033-4	454620	BANDAGE, ELAS SLF-CLSR PREM N/S LF 4X5YDS MGM16	2	BX	1121-03660	\$ 7.25	\$ 14.50
MCKESSON MEDICAL SURGICAL	14-6N36	957803	GLOVE, EXAM NITRL 3.0 PF BLU LG (250/BX 10BX/CS)	1	CS	1015-31003	\$ 14.50	\$ 14.50
MCKESSON MEDICAL SURGICAL	14-6976C	765875	GLOVE EXAM NITRL 3.5C PF BLU MED (200/BX)	1	CS	1015-31002	\$ 14.50	\$ 14.50
MCKESSON MEDICAL SURGICAL	59-79C	521483	COMPRESS, INST COLD DLX 6.75"X9" LF (24/CS) MGM16	3	CS	1431-55000	\$ 4.80	\$ 14.40
AMERICAN DIAGNOSTIC CORP	665Y-100	371654	STETHOSCOPE, DISP YLW (10/CT 10CT/CS) AMDIAG	3	CT	540309	\$ 4.50	\$ 13.50
MCKESSON MEDICAL SURGICAL	413B	793284	THERMOMETER, DIG ORAL LF (12/BX) MGM01	3	EA	17002	\$ 4.30	\$ 12.90
3M (HEALTHCARE DIVISION)	1527-3	5765	TAPE, ADHSV TRANSPORE 3"X10YDS(4RL/BX) 3M	1	BX	7018-952	\$ 12.50	\$ 12.50
MCKESSON MEDICAL SURGICAL	16-1033-3	454619	BANDAGE, ELAS SLF-CLSR PREM N/S LF 3X5YDS MGM16	3	BX	1121-03658	\$ 3.90	\$ 11.70
EATON MEDICALS CORP	250-400W	371100	CASE, CONTACT LENS ALL WHITE (100/BG) EATON	1	BG	442751	\$ 11.50	\$ 11.50
MCKESSON MEDICAL SURGICAL	16-4290	471997	DRESSING, N/ADHER STR 8X3 LF (75/BX 8BX/CS) MGM16	1	BX	47-12388X	\$ 11.49	\$ 11.49
MCKESSON MEDICAL SURGICAL	164-DXA14	1088449	TEST KIT, DRUG SCREEN CUP 14PANEL WAIVED (25/BX)	1	BX	2780-31240	\$ 10.50	\$ 10.50
MCKESSON MEDICAL SURGICAL	16-63211	634757	SCALPEL, SAFETY #11 (1/PK 10PK/BX 20BX/CS) MGM16	2	BX	400012	\$ 4.85	\$ 9.70
MCKESSON MEDICAL SURGICAL	59-57C	521482	COMPRESS, COLD INST DLX 5.5"X6.75" LF (24/CS) MGM16	2	CS	1431-55000	\$ 4.80	\$ 9.60
MCKESSON MEDICAL SURGICAL	59-79C	521483	COMPRESS, INST COLD DLX 6.75"X9" LF (24/CS) MGM16	2	CS	1431-55000	\$ 4.80	\$ 9.60
AMERICAN DIAGNOSTIC CORP	603BK	363826	STETHOSCOPE, NURSES S/STL BLKADLT	3	EA	170200	\$ 3.10	\$ 9.30
AKORN INC	50383077504	526554	LIDOCAINE HCL, SOL VISCOSU 2%100ML 9HITEC	1	EA	0775-04	\$ 9.00	\$ 9.00
MCKESSON MEDICAL SURGICAL	16-47120	455535	TAPE, ADHSV CLOTH SILK LF 2"X10YD (6RL/BX) MGM16	1	BX	1110-14008	\$ 9.00	\$ 9.00
MCKESSON MEDICAL SURGICAL	16-1033-2	454618	BANDAGE, ELAS SLF-CLSR PREM N/S LF 2X5YDS MGM16	2	BX	1121-03658	\$ 3.90	\$ 7.80
MCKESSON MEDICAL SURGICAL	16-1033-3	454619	BANDAGE, ELAS SLF-CLSR PREM N/S LF 3X5YDS MGM16	2	BX	1121-03658	\$ 3.90	\$ 7.80
PHARMA TEK INC	39822990001	290720	AMMONIA, AMP .3ML INH (10/PK)9PHARM	3	PK	1360-07546	\$ 2.40	\$ 7.20
MCKESSON MEDICAL SURGICAL	14-6NSTR6	1065407	GLOVE, EXAM NITRILE STR PF LG(50PR/BX 4BX/CS)	1	BX	298240	\$ 7.10	\$ 7.10
MCKESSON MEDICAL SURGICAL	16-4228	635942	SPONGE, GZE 2"X2" 8PLY STR (2/PK 50PK/BX 30B) MGM16	4	BX	1212-1203	\$ 1.50	\$ 6.00
AMERICAN DIAGNOSTIC CORP	320B	374911	SCISSOR, TRAUMAMMOOREM	8	EA	61411	\$ 0.70	\$ 5.60
MCKESSON MEDICAL SURGICAL	18-D50	195520	SHEATH, THERMOMETER ORAL DIGITAL (50/BX 100BX/CS) MGM18	1	BX	508-15-615-000	\$ 5.25	\$ 5.25
MCKESSON MEDICAL SURGICAL	16-63815	1029066	SCALPEL, DISP NON-SFTY STR LF#15 (10/BX 10BX/CS)	1	BX	400013	\$ 4.85	\$ 4.85
MCKESSON MEDICAL SURGICAL	59-79C	521483	COMPRESS, INST COLD DLX 6.75"X9" LF (24/CS) MGM16	1	CS	1431-55000	\$ 4.80	\$ 4.80
MCKESSON MEDICAL SURGICAL	16-019	999366	BANDAGE, CNFRM STR 4"X4.1YDS (RL 12RL/BG 8BG/CS)	1	CS	80704	\$ 3.96	\$ 3.96
PROCTER & GAMBLE DISTRIBUTING	1004	863310	RAZOR, GOOD NEWS GILLETTE DISP(10/PK 10PK/CS PROHBC	1	PK	2744-70837	\$ 3.40	\$ 3.40
MCKESSON MEDICAL SURGICAL	16-017	999367	BANDAGE, CNFRM STR 2"X4.1YDS (1/PK 12PK/BG 8BG/CS)	1	BG	80702	\$ 3.07	\$ 3.07
MCKESSON MEDICAL SURGICAL	22082000	373772	SPONGE, GZE 2"X2" 8PLY N/S (200/BX)	2	CS	276-8505BG	\$ 0.90	\$ 1.80
MCKESSON MEDICAL SURGICAL	16-4264	446051	BANDAGE, GZE FLUFF 4.5" STR (100RL/CS) MGM16	1	CS	1121-36645	\$ 0.73	\$ 0.73
ABBOTT NUTRITION	64931	1048241	ENSURE, ORIG INST ARC VAN 8OZ(24/CS)	13	CS		\$ -	\$ -
INDEPENDENCE MEDICAL	76806	733780	CATHETER, COUDE TIPPED 6FR 16"(EA) INDMED	7	EA		\$ -	\$ -
MCKESSON MEDICAL SURGICAL	91-2002	689981	MASK, FACE PROC W/EARLP LF BLU(50/BX 10BX/CS) MGM16	6	BX		\$ -	\$ -
ABBOTT NUTRITION	64931	1048241	ENSURE, ORIG INST ARC VAN 8OZ(24/CS)	6	CS		\$ -	\$ -
WELCH ALLYN INC	45008-0000	483087	ELECTRODE, RESTING TAB (100/PK10PK/CS) WA	5	PK		\$ -	\$ -
RESPIRONICS INC	HS755-012	545257	FLOWMETER, PERSONAL BEST FULLRANGE (12/CS) RESPIR	5	EA		\$ -	\$ -

COLOPLAST CORP	1967	227283	PASTE, TRIAD HYROPHILIC WND 6OZ COLPLT	4	EA	\$ -
ABBOTT NUTRITION	64931	1048241	ENSURE, ORIG INST ARC VAN 8OZ(24/CS)	4	CS	\$ -
MCKESSON MEDICAL SURGICAL	Y5149	996288	CUP, DRINKING PLASTIC TRANSLUCENT 5OZ (100/SL 20SL/CS)	4	CS	\$ -
ALCON SURGICAL INC	00065035610	668319	OPTI-FREE REPLENISH MULTI- PURP, SOL 10OZ 9ALCON	4	EA	\$ -
SAALFELD REDISTRIBUTION	03957	777219	GATORADE, ORG 8.5OZ (40/CS)SALFLD	4	CS	\$ -
MCKESSON MEDICAL SURGICAL	84-04	40345	STOCKING, ANTI-EMBOLISM REG KNEE XLG RX ONLY	3	DZ	\$ -
MCKESSON MEDICAL SURGICAL	84-02	40343	STOCKING, ANTI-EMBOLISM KNEE MED RX ONLY	2	DZ	\$ -
MCKESSON MEDICAL SURGICAL	16-M1614	1020813	CATHETER, URETHRAL STRAIGHT TIP UNCOATED PVC MALE 16"14FR (3	2	BX	\$ -
MCKESSON MEDICAL SURGICAL	16-M1616	1020817	CATHETER, URETHRAL STRAIGHT TIP UNCOATED PVC MALE 16"16FR (3	2	BX	\$ -
MCKESSON MEDICAL SURGICAL	16-9505	188670	CUP, MED GRAD W/LIP 1OZ (100/SL) MGM16	2	CS	\$ -
MCKESSON MEDICAL SURGICAL	91-2002	689981	MASK, FACE PROC W/EARLP LF BLU(50/BX 10BX/CS) MGM16	2	BX	\$ -
MCKESSON MEDICAL SURGICAL	Y5149	996288	CUP, DRINKING PLASTIC TRANSLUCENT 5OZ (100/SL 20SL/CS)	2	CS	\$ -
DIAL CORP	DI88047	181634	SOAP, DIAL LIQ GAL08047 DIAL	2	GL	\$ -
MISTY MOUNTAIN SPRING WATER LL	0-52241-	1027004	WATER, DISTILLED GL (3GL/CS)	2	CS	\$ -
DIAL CORP	DI88047	181634	SOAP, DIAL LIQ GAL08047 DIAL	2	GL	\$ -
MISTY MOUNTAIN SPRING WATER LL	0-52241-	1027004	WATER, DISTILLED GL (3GL/CS)	2	CS	\$ -
ALCON SURGICAL INC	00065035610	668319	OPTI-FREE REPLENISH MULTI- PURP, SOL 10OZ 9ALCON	2	EA	\$ -
C2R GLOBAL MANUFACTURING INC	RXFUN	883252	FUNNEL, F/RX DESTROYER MEDS DISP SYSTEM	2	EA	\$ -
MCKESSON MEDICAL SURGICAL	Y5149	996288	CUP, DRINKING PLASTIC TRANSLUCENT 5OZ (100/SL 20SL/CS)	2	CS	\$ -
SDI DIAGNOSTICS	29-7000	187716	MOUTHPIECE, SPIROTUBE TYPE A (100/BG 5BG/CS) SDIDIG	2	BG	\$ -
DIAL CORP	DI88047	181634	SOAP, DIAL LIQ GAL08047 DIAL	2	GL	\$ -
COLOPLAST CORP	416	216835	CATHETER, SELF STRT STR 16FR (30/BX)	2	BX	\$ -
MCKESSON MEDICAL SURGICAL	16-M1616C	1020819	CATHETER, URETHRAL COUDE UNCOATED PVC MALE 16"16FR (30EA/BX	2	BX	\$ -
MEDICAL CHEMICAL CORP	783A-2OZ	301735	STAIN, POTASSIUM HYDROXIDE KOH10% 2OZ DROPPER BTL MEDCHM	2	EA	\$ -
RMS MEDICAL SYSTEMS INC	P1F1R110NE	663427	PUMP, SUCTION RES Q KITMOOREM	2	EA	\$ -
MCKESSON MEDICAL SURGICAL	146-	1065278	WHEELCHAIR, DDA SF 20" 350LBS	2	EA	\$ -
MCKESSON MEDICAL SURGICAL	84-12	40347	STOCKING, ANTI-EMBOLISM KNEE LNG MED RX ONLY	1	DZ	\$ -
WELCH ALLYN INC	52134	120255	SPECULUM, KLNSPC 4MM (25/TB 20TB/BX) WA	1	BX	\$ -
HOLLISTER INC	19104	532941	POUCH/SKIN BARRIER KIT, NEW IMAGE DRN 2 3/4" (5/BX) HOLSTR	1	BX	\$ -
MCKESSON MEDICAL SURGICAL	16-9505	188670	CUP, MED GRAD W/LIP 1OZ (100/SL) MGM16	1	CS	\$ -
MCKESSON MEDICAL SURGICAL	Y5149	996288	CUP, DRINKING PLASTIC TRANSLUCENT 5OZ (100/SL 20SL/CS)	1	CS	\$ -
DIAL CORP	DI84014	416207	SOAP, DIAL LIQ W/PUMP 7.5 OZ (12/CS) DIAL	1	CS	\$ -
MCKESSON MEDICAL SURGICAL	UWBLG	724917	UNDERWEAR, CLOTH LK SZ 44-58LG (18/BG 4BG/CS) MGM783	1	CS	\$ -
RMS MEDICAL SYSTEMS INC	P1F1R110NE	663427	PUMP, SUCTION RES Q KITMOOREM	1	EA	\$ -
MCKESSON MEDICAL SURGICAL	16-9505	188670	CUP, MED GRAD W/LIP 1OZ (100/SL) MGM16	1	CS	\$ -
CARDINAL HEALTHCARE	63015	874627	BRIEF, INCONT SIMPLICITY 3D XLG (15/BG 4BG/CS)	1	BG	\$ -
CARDINAL HEALTHCARE	63015	874627	BRIEF, INCONT SIMPLICITY 3D XLG (15/BG 4BG/CS)	1	CS	\$ -
MCKESSON MEDICAL SURGICAL	31521100	552406	GOWN, ISO FULL ELASCUF LF YLW(10/PK 5PK MGM16	1	CS	\$ -
MCKESSON MEDICAL SURGICAL	UWBXXL	724919	UNDERWEAR, CLOTH LK SZ 68-80 2XLG(12/BG 4 MGM783	1	CS	\$ -
BECTON DICKINSON	367298	372458	BLOOD COLLECTION SET, SFTY LK25X12"(50/BX) BD	1	BX	\$ -
COLOPLAST CORP	16767	995392	POUCH, OST CONVEX SENSURA 1PC3/8"x1 11/16" (10/BX)	1	BX	\$ -
BECTON DICKINSON	367298	372458	BLOOD COLLECTION SET, SFTY LK25X12"(50/BX) BD	1	BX	\$ -
B BRAUN MEDICAL INC	B2000B	334214	CAP DEVICE, DUAL FUNC (100/BX)B2000B BBRAUN	1	BX	\$ -
ETHICON INC	4152	702660	DRESSING, ANTIMICROBIAL BIOPATCH 1" (10/BX 4BX/CS) ETHWND	1	BX	\$ -
SAALFELD REDISTRIBUTION	03956	777218	GATORADE, LEMON LIME 8.5OZ (40/CS) SALFLD	1	CS	\$ -
MCKESSON MEDICAL SURGICAL	16-9505	188670	CUP, MED GRAD W/LIP 1OZ (100/SL) MGM16	1	CS	\$ -
C2R GLOBAL MANUFACTURING INC	RX64	883254	RX DESTROYER, SOL F/DISP OF UNUSED MEDS 64OZ (4/CS)	1	CS	\$ -
MCKESSON MEDICAL SURGICAL	16-9505	188670	CUP, MED GRAD W/LIP 1OZ (100/SL) MGM16	1	CS	\$ -
WELCH ALLYN INC	45008-0000	483087	ELECTRODE, RESTING TAB (100/PK10PK/CS) WA	1	CS	\$ -
COLOPLAST CORP	450	533617	CATHETER, URETHRAL MALE 14FR (50/BX) MENTOR	1	BX	\$ -
MCKESSON MEDICAL SURGICAL	122-LBX	948660	ADHESIVE, SKIN LIQUIBAND EXCEED 0.8ML (10/BX 6BX/CS)	1	BX	\$ -
3M (HEALTHCARE DIVISION)	CFF1-270	987068	PROTECTOR, PORT CUROS IND (270/BX 20BX/C)	1	BX	\$ -
DRIVE MEDICAL DESIGN & MFG	10318-6	554751	CANE, CHROME OFF-SET XLNG HD (6/CS) DRVMED	1	EA	\$ -
MCKESSON MEDICAL SURGICAL	146-RTL10306	1065214	CANE, OFFSET ALUM BLK (6/CS))	1	EA	\$ -
RESPIRONICS INC	1070037	742933	MASK, CPAP NASAL COMFORTGEL W/HDGEAR BLU LG RESPIR	1	EA	\$ -
MCKESSON MEDICAL SURGICAL	BRULXL	800833	BRIEF, INCONT ULTRA BRTHABLE XLG SZ59-64(15/BG 4BG MGM783	1	CS	\$ -
LAGASSE INC	BAGGK10500	171951	BAG, PAPER GROCERY BRN #10 (500/CS) LAGASE	1	CS	\$ -
MCKESSON MEDICAL SURGICAL	UWBXL	724918	UNDERWEAR, CLOTH LK SZ 58-68 XLG (14/BG 4 MGM783	1	CS	\$ -
DURACELL DISTRIBUTING INC	DA10B8ZM10	1009779	BATTERY, F/HEARING AIDS210 (8/PK 6PK/BX 6BX/CS)	1	BX	\$ -
HEALTHLINK INC	400749	806606	ACID, TRICHLORACETIC 75% 4OZBICINF	1	EA	\$ -
COAGUSENSE, INC.	03P56-50	804023	TEST STRIP, PT BLD COLL COAG-SENSE 2LO/2HI (50/BX) COAGSN	1	BX	\$ -
COAGUSENSE, INC.	03P60-01	803318	METER, COAGUSENSE PROFESSIONALKIT PT/INR	1	KT	\$ -
SPECIAL HANDLING	FRGHT	307728	FREIGHT/DELIVERY CHG,SPECHC	1	EA	\$ -

## Appendix K – Health Services Subcontracts

### Milwaukee County Project Deliverable #2

**A more detailed list of the supplies that are typically purchased and stocked and a list of services such as biohazardous waste removal that are required only for health services operations and would not be currently contracted for by the County.**

May 15, 2019

Self-Operation will require the County to purchase or contract individually for a number of services specific to the health services program. The list of subcontract services can and will vary with each jail, but the most common are the following (services in **bold type** are the most expensive):

- Independent professional contractors:
  - On-site primary care physicians, psychiatrists and dentists are frequently retained as independent contractors and not county employees.
- **Outside hospital services:**
  - Inpatient care
  - Outpatient care
  - Emergency care
  - Ambulance services
  - Physical therapy
  - Specialty care (cardiology, surgery, dermatology, obstetrics, HIV, hepatitis C)
- On-site specialty clinics
- **Pharmaceutical services**
- Imaging services
  - X-ray
  - Ultrasound
- Laboratory services
- EKG services
- Dental services
  - Individual dentists
  - Oral surgery
  - Orthodontic care
  - Dental laboratory services
- Vision care
  - Optometry
  - Eyeglasses
  - Contact lenses

- Dialysis services
  - On-site
  - Off-site
- Medical equipment and supplies
  - Equipment repair
- Biohazardous waste removal
  - Regulated medical waste
  - Sharps containers
- Podiatry services
  - Prescriptive footwear
- Bilingual translation (interpretive services)
- Nutritional services
  - Dietitian
- Telemedicine
- Prosthetic devices
- Medication assisted treatment for opioid addicted inmates
  - Pregnant patients with opioid addiction
  - Other opioid addicted patients, male and female
- Negative air pressure rooms in the infirmary
  - Periodic testing and repair
- Electronic health record system
  - Lease vs. purchase
- Paper forms, paper health records, copy services
- Other: based on scope of services



## Appendix L – Self-Operation Clinic Space Analysis

At both the MCJ and HOC, there must be sufficient clinical space and supplies in order to provide the care that is required for the inmate population. This includes examination and treatment rooms for medical, dental, and mental health needs. There should be adequate office space with administrative files, secure storage of records, and desks. When laboratory, radiological or other ancillary services are provided, the designated areas must be adequate to hold equipment and records.

**Assessments of clinical space at the facilities found that space is being used efficiently for the services provided at both facilities.** Clinical services at the MCJ are mostly conducted on the second floor in the clinic area, where the main facility clinic is located. Here, patients are escorted to appointments with providers and for clinical encounters based upon need. The second-floor clinic area has offices for providers, the director(s) of nursing and the HSA, a patient waiting room, exam rooms, medication room, dental area, nurses' station with security officer post, and an area for office supplies.

Additionally, the facility infirmary is located near the clinic area. There is an exam room, a prep-room, and 11 beds, three of which are in negative pressure rooms. The infirmary has a nurses' station that also has a security officer post.

Sick call is held on all housing units, using a private space for encounters. There are exam rooms next to some housing units that are not used often.

Acute mental health services at the MCJ are conducted on the second floor also. The mental health unit has three sub pods, two of which have eight cells and one with three cells designated for suicide watch and close observation of patients. Patients are seen on the unit and can also be escorted to the main clinic area.

There is a dialysis room available at the MCJ, however it is currently not in use and does not have the dialysis equipment. If services were to be expanded to include dialysis, the room could potentially be reactivated.

The main clinic at the HOC is on the second floor. The population at the HOC has less medical and mental health acuity; services are provided mostly in-house and consist mostly of sick call encounters and chronic care clinics. There is sufficient office space for the HSA, providers, and nurses. There are exam rooms in the main clinic area as well as on the housing units. The medication room is across the hallway from the main clinic. Patients who require specialty care are transported off site. Patients who require a higher level of care than the health staff can provide at the HOC are currently being transported to the MCJ. **Unless the mission changes for the classification of inmates that determines housing either at the MCJ or the HOC, the current plan for clinical care and clinical space is adequate at both facilities.**