HealthSpace Software Audit

December 13, 2021

City of Fort Worth
Department of Internal Audit
200 Texas Street
Fort Worth, Texas 76102

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The HealthSpace Software Audit was conducted as part of the Department of Internal Audit’s Fiscal Year 2021 Annual Audit Plan.

Audit Objectives

The objectives of this audit were to:

- evaluate internal controls within the HealthSpace software;
- determine whether existing controls ensure accountability for health inspection revenue; and,
- evaluate the delivered product, as compared to the contract.

Audit Scope

Our audit included a review of system functionality within the HealthSpace software, including a review of controls impacting FY2020 and FY2021 revenue accounts assigned to the Consumer Health Division of the City’s Code Compliance Department.

Opportunities for Improvement

Written guidance regarding the processing of canceled temporary permits

Non-redundant entry of customer payments

Routine Mayor and Council approval of fees

Proper user access rights

Executive Summary

As part of the FY2021 Annual Audit Plan, the Department of Internal Audit conducted an audit of the HealthSpace software. We concluded that the software was implemented in accordance with the contract, with contractual payments totaling $115,940.00.

The fee schedule programmed into the HealthSpace software was consistent with the fee schedule published on the City of Fort Worth’s website. However, there was no evidence that the Consumer Health Division’s fee schedule was approved, as a standalone item, by the Fort Worth City Council.

While temporary permits were charged in accordance with the established fee schedule, there were 45 invoices where temporary permit holders were not billed, because the initial permit was canceled (e.g., due to bad weather). Internal Audit did not note any exceptions with the no-billings. However, there was no evidence to support supervisory review of those no-billings.

The interface between PeopleSoft and HealthSpace functioned properly, resulting in a reconciliation of revenues recorded in HealthSpace and revenues recorded in the general ledger. However, because iNovah (the City’s point-of-sale system) did not interface with HealthSpace, Consumer Health Division staff were required to enter customer payments in both HealthSpace and iNovah (i.e., dual entry).

Four user accounts were assigned to one or more HealthSpace user access groups, with the four accounts individually having more access than the user group(s) to which they were assigned. It should be noted that we saw no evidence of access beyond the functionality that was appropriate for the users’ job roles and functions.

These audit findings are discussed in further detail within the Detailed Audit Findings section of this report.

Internal Audit provided management with an additional finding that is excluded from page 6, and from Finding 2 on pages 9 and 10 of this report, due to potential security concerns. Internal Audit follow-up will be conducted at a later date to ensure that the potential security risk has been adequately addressed.
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Background

The Consumer Health Division of the City of Fort Worth’s Code Compliance Department was established in FY2009, when the City’s Public Health Department was dissolved. The Consumer Health Division consists of 32 full-time positions:

- Consumer Health Specialist (Inspector) – 21
- Consumer Health Superintendent – 1
- Customer Service Representative – 4
- Senior Administrative Assistant – 1
- Senior Code Officer – 2
- Supervisor – 3

The Consumer Health Division is responsible for protecting the public, by providing health and safety inspections (e.g., food, childcare, and public swimming pools) within Fort Worth, and in surrounding cities/areas where City of Fort Worth (CFW) health permitting and related inspection services are provided. During FY2021, the Consumer Health Division issued a total of 9,271 health permits, and conducted 4,588 health inspections, as shown in the following charts.

![FY2021 Health Permits, by Permit Type](image)
FY2021 HEALTH INSPECTIONS, BY PERMIT TYPE

Source: HealthSpace Software
CODE COMPLIANCE DEPARTMENT
CONSUMER HEALTH DIVISION
SCHEDULE OF FEES
Effective January 1, 2020

1. FIXED ESTABLISHMENT ANNUAL PERMIT FEES:
   a. Food Establishment.................................................................$ 285.00
   1. Per employee (maximum of 100 employees)..........................$ 5.00
   b. Child Care Facilities.............................................................$ 285.00
   1. Per employee.........................................................................$ 5.00
   c. Swimming Pool/Spa/Aquatic Sprayground (per pool/spa)..............$ 285.00
   1. Per employee.........................................................................$ 5.00
   d. Hotel/Motel............................................................................$ 285.00
   1. Per employee.........................................................................$ 5.00

2. MOBILE FOOD UNIT FEES:
   a. Annual Mobile Food Unit............................................................$ 285.00
   1. Per employee.........................................................................$ 5.00
   b. Annual Push Cart (serving open food).........................................$ 285.00
   1. Per employee.........................................................................$ 5.00
   c. Ice Cream Push Cart.................................................................$ 85.00
   d. Seasonal Permit (13 to 180 days)...............................................$ 200.00

3. TEMPORARY EVENT PERMIT FEES:
   a. Temporary Event (the first day).....................................................$ 50.00
   1. Each additional day (max. 13 days).........................................$ 15.00
   b. Administrative Fees (per request if received 3 or less days before event)........................................................................$ 20.00
   c. Special Event Permit (closed to general public - invitation only).........................................................................................$ 200.00

4. FARMERS MARKET FEES:
   a. Annual Farmers Market..............................................................................no charge
   b. Annual Farmers Market Food Vendor..................................................$ 100.00

**NOTE: A re-issuance fee of 15% of the past due permit amount will be applied to all permits paid after the expiration date.**

5. CHANGE OF OWNERSHIP FEE ..........................................................$ 125.00
6. PRE-PERMIT REQUEST FOR SERVICES FEE.......................................$ 125.00
7. RE-INSPECTION FEE FOR SITE VISITS (per site inspection):
   a. After closure of a food facility, mobile food unit, child care facility, aquatic facility, 
      hotel and motel........................................................................$ 125.00

8. FOOD HANDLE CERTIFICATES (valid for two years):
   a. Classes taught at Consumer Health's main office..........................$ 16.00
   b. Classes taught at the facility by Consumer Health staff:
      No payment accepted on-site. Payment due in full at Consumer Health's main office
      (price per certificate) ..................................................................$ 16.00
      c. Taught by contract trainer with approved Food Handler curriculum.................................................................$ 12.00
      d. Fort Worth online Food Handler class .....................................$ 10.00
      e. Fort Worth online Food Manager class.....................................$ 85.00
      f. Fort Worth online Food Manager test......................................$ 40.00
      g. Food Manager reciprocal fee....................................................$ 15.00

9. DAYCARE TRAINING FEE (valid for two years).................................$ 16.00
10. POOL OPERATOR'S COURSE (valid for three years) [pre-registration required]...........$ 65.00
11. LITERATURE SALES (price per page)..................................................$ 0.10
12. DUPLICATE PERMIT OR CERTIFICATE ............................................$ 5.00
13. PLAN REVIEW FEES: (based on square footage)
    Refer to "Schedule of Plan Review Fees" ........................................$ 65.00 - $ 400.00

Source: CFW Website/Code Compliance Department’s webpage
In August 2017, the Consumer Health Division purchased HealthSpace software to replace the SWEEPS software, which had been purchased in October 1995 and implemented during calendar year 1996. The initial cost of the HealthSpace software, including software maintenance for the first year, was $115,940.00. On-going annual software maintenance costs are $36,000.00.

Although purchased in August 2017, the HealthSpace software was not implemented until August 2019. After parallel testing, the transition from SWEEPS (to HealthSpace) was completed in March 2020. Implementation delays were caused by incomplete deliverables such as data corrections/adjustments, a fully functioning HealthSpace website, and formal approval of the delivered product. The Consumer Health Division withheld final payment (totaling $27,480.00) until the vendor satisfactorily completed the outstanding deliverables.

The HealthSpace software is fully hosted and is, therefore, not installed on CFW computers. Instead, the HealthSpace software is accessible through the internet, both within and outside the CFW network.
Objectives

The objectives of this audit were to:

- evaluate internal controls within the HealthSpace software;
- determine whether existing controls ensure accountability for health inspection revenue; and,
- evaluate the delivered product, as compared to the contract.

Scope

Our audit included a review of system functionality within the HealthSpace software, including a review of controls impacting FY2020 and FY2021 revenue accounts assigned to the Consumer Health Division of the City’s Code Compliance Department.

Methodology

To achieve the audit objectives, the Department of Internal Audit performed the following:

- reviewed documentation associated with the HealthSpace software implementation, including contracts and related correspondence;
- reviewed FY2020 and FY2021 general ledger activity;
- interviewed Consumer Health Division staff;
- reviewed permit and related inspection data stored in the HealthSpace software;
- compared published health-related fees to those charged to customers; and,
- evaluated internal controls related to the creation and issuance of health-related permits, and the recording and processing of health-related revenue.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
Audit Results

The Consumer Health Division provides health permitting inspections, training classes and health-related services that benefit the public. The City’s purchase of the HealthSpace software was completed to support such activities.

Internal Audit compared the HealthSpace software contract and contract deliverables to the HealthSpace software implementation. We also reviewed contractually-required payments (totaling $115,940.00) made to the HealthSpace vendor. Our review found that contract deliverables were met, and payments were made as required by contract. Although the Consumer Health Division withheld the final deliverable payment of $27,480.00 for six months (until the vendor completed the work required by the contract), we were unable to find written sign-off/approval of contract deliverables.

We identified 45 invoices where temporary permit holders were not billed for a subsequent permit, after the initial permit was canceled (e.g., due to bad weather). Since refunds were not issued, and credit balances were not reflected on the temporary permit holders’ accounts, the temporary permit holders were not billed for the subsequent permits. Although Internal Audit did not note any exceptions with the no-billings, evidence supporting supervisory review of those no-billings was not observed.

We compared permit fees programmed into the HealthSpace software to those published on the CFW’s public internet website, and did not identify any discrepancies. However, we were unable to locate Mayor and City Council approval of the published fee schedule. The Mayor and Council approved the fees as a part of the proposed budget, but not as stand-alone item. We also compared revenue posted within HealthSpace to revenue posted to the general ledger. No exceptions were noted, as the interface between HealthSpace and PeopleSoft functioned as intended. However, since iNovah (the CFW’s point-of-sale system) did not interface with HealthSpace, Consumer Health Division staff were required to input customer payments in both iNovah and HealthSpace.

Four of 32 HealthSpace user accounts were also assigned to one or more user account groups. In each instance, the individual accounts had more access than the user group(s) to which they were assigned. It should be noted, however, that we found no evidence that any of the four users accessed more functions/data than was considered necessary for them to perform their job duties.
## Overall Risk Evaluation

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<td>Consumer Health Fee Schedule not approved by the Mayor and City Council as a stand-alone item</td>
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<td>Some HealthSpace user accounts granted more access than was appropriate</td>
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Detailed Audit Findings

1. Fees associated with temporary food establishment permits were waived, without documented supervisory approval.

The Consumer Health Division issues temporary food establishment permits for short-term food service operations lasting no more than 14 consecutive days. These permits allow for food service operations under reduced requirements, and must be in conjunction with a single event, promotion or celebration. Persons vending food or beverages, or offering samples of such products, must obtain a CFW consumer health temporary permit prior to operation, and must post the permit at their respective booth(s) in public view. The current fee for a temporary permit is $50.00 for the first day, and $15.00 for each additional day.

The Department of Internal Audit reviewed invoices associated with temporary permits issued during the audit period, and identified 45 invoices (for 21 permit holders) where a temporary permit was issued, but the cost of the permit was reduced to $0.00 within HealthSpace. According to the invoice information, each of the 21 permit holders had previously paid for a temporary permit. However, the permits were subsequently cancelled, with no refund issued to the permit holder. Upon application for a new temporary permit (same type of event and same cost), each permit holder received a fee reduction associated with the new permit. We saw no evidence that Consumer Health Division management approved the fee reductions, nor did we see evidence that HealthSpace was programmed to require managerial approval of the fee reductions. It should be noted, however, that in each instance, Internal Audit observed a canceled permit for each no-billing.

Internal Audit was told, during interviews with Consumer Health Division staff, that permit fees were non-refundable. However, the practice was not documented within the Consumer Health Division’s written policies and procedures. Lack of such guidance could result in inconsistent application among staff, and inappropriate entries could be made without detection. Furthermore, the current practice makes it more difficult to reconcile the number of permits to the total permit revenue recorded.

Section XII.V.A. of the CFW’s Financial Management Policy Statements (Internal Controls) states that procedures shall be designed, implemented, and maintained to ensure that financial transactions and activities are properly reviewed and authorized.

Recommendation 1A: The Code Compliance Director should determine whether waiving (reducing permit fees to zero) or refunding permit fees is most appropriate, and then ensure that applicable policies and procedures are developed, implemented, and evaluated on a periodic basis.

Auditee’s Response: Concur. The HealthSpace software system (HealthSpace) does not currently allow a configuration to issue refunds. The only option to issue refunds, at this time, is to process requests for refund checks through the enterprise software, PeopleSoft Financial. Refunds are made through this process, when requested. The process can be labor-intensive and take several weeks to complete. With exceptional customer service in mind, the Code Compliance Department supports our local business community and various permit holders by offering credited amounts for temporary permits within their individual HealthSpace customer accounts. Small business owners have expressed their gratitude for this service. Staff provide in-system comments to document the value credited to the account to be used on any future temporary permit. Procedural documents have been created to clarify and document key steps to this process. This ensures that all credits are validated and have been
reviewed by supervisory staff. Looking forward, Code Compliance concurs with the City Auditor’s Office. Code Compliance staff will request HealthSpace to work on software updates which allow refunds; when available, the department will coordinate with the IT Solutions Department to integrate these changes.

**Target Implementation Date:** Complete.

**Responsibility:** Blakely Cabano, Senior Management Analyst

**Applicable Department Head:** Brandon Bennett, Code Compliance Department Director

**Applicable Assistant City Manager:** Valerie Washington

**Recommendation 1B:** The Code Compliance Director should determine the feasibility of configuring HealthSpace to require managerial approval of waived permit fees (i.e., reducing permit fees to zero). If not feasible, the Code Compliance Director should ensure that compensating controls are in place to prevent improper HealthSpace entries.

**Auditee’s Response:** Concur. Internal practices have required, and will continue to require, managerial approval to waive permit fees or reduce permit amounts to zero. Procedural documents to describe this process have been created to clarify and document key steps. In addition, permission settings within the HealthSpace software system (HealthSpace) have been requested. Staff have requested future HealthSpace configurations to include additional controls for this approval through user account permission levels. Code Compliance concurs with the City Auditor’s Office and is supportive of using this possible software configuration to document managerial approval in the system.

**Target Implementation Date:** Complete.

**Responsibility:** Blakely Cabano, Senior Management Analyst

**Applicable Department Head:** Brandon Bennett, Code Compliance Department Director

**Applicable Assistant City Manager:** Valerie Washington
3. Consumer Health Division staff are required to input customer payment information into two different CFW software solutions.

As mentioned in Finding 2, the Consumer Health Division accepts payments, for health-related permits and services in the form of cash, check, or credit card at its main office location at 818 Missouri Avenue. Consumer Health Division staff manually enter customer payments into the HealthSpace software, and into the City’s point-of-sale software (iNovah). The two software solutions do not interface.

Dual entry is, therefore, required to ensure that customer payment information is recorded within the health permitting software, and to ensure that permitting revenue is accurately reflected in the general ledger. Control Objectives for Information and Related Technologies (COBIT) state that software solutions should be installed and configured to integrate with business process activities, and that controls, security, privacy and auditability measures should be implemented during software installation and configuration to ensure resource availability and data integrity. Since manual entries are more prone to human error, the dual entries are not only inefficient, but could negatively impact data integrity if there are data input errors.

It should be noted that an interface between iNovah and HealthSpace would not only prevent duplication of effort, but would also allow citizens to make payments at City locations other than the Code Compliance Department’s main office location.

**Recommendation 3:** The Code Compliance Director, in conjunction with the Chief Financial Officer, should continue to include HealthSpace on the list of software solutions that require an interface with iNovah.

**Auditee’s Response:** Concur. Code Compliance is collaborating with both the IT Solutions and Financial Management Services departments to determine if any interface between HealthSpace and iNovah software systems are feasible. Due to the high cost of this interface, management from departments will have to determine the feasibility of an interface. As a similar example, Financial Management Services is working with Development Services on a similar interface; the cost is approximately $100,000. Code Compliance concurs with the City Auditor’s Office and has communicated to partnering departments that staff support a future interface solution.

**Target Implementation Date:** Complete.

**Responsibility:** Blakely Cabano, Senior Management Analyst

**Applicable Department Head:** Brandon Bennett, Code Compliance Department Director

**Applicable Assistant City Manager:** Valerie Washington

4. The current Consumer Health Fee Schedule was not approved by the Mayor and City Council.

The Department of Internal Audit compared fees noted within the Consumer Health Fee Schedule (posted on the Code Compliance Department’s public internet site) to fees noted within the HealthSpace software. Our test results indicated that fees posted on the public internet agreed with those in the HealthSpace software. However, we found no evidence that the fees had been approved by the Mayor and City Council.
Internal Audit acknowledged that a schedule of city-wide fees was included in annual City budgets approved by the Mayor and City Council. However, there was no stand-alone approval of health-related fees. A review of public CFW documents indicated that the Mayor and City Council’s most recent adoption of stand-alone health-related permit fees was in FY2004.

Chapter 16, Article IV, Sections 16.115 and 16.142 of the CFW’s Code of Ordinances state that the City Council shall adopt a schedule of fees for food establishment permits, re-inspections, plans review, change of ownership, pre-permit requests for services, food handler certification, and food manager certification. By not routinely submitting fees for proper approval, departments may not be properly re-assessing fees to ensure that the amounts charged are comparable to the cost required to provide the service.

Recommendation 4: The Code Compliance Director, in conjunction with the Planning and Data Analytics Department Director, should ensure that a fee schedule is routinely presented to the Mayor and City Council for review and adoption, prior to publishing and charging such fees.

Auditee’s Response: Concur. The Planning and Data Analytics Department is proposing to develop an annual Master Fee Ordinance for consideration by City Council each year in conjunction with the annual operating budget process. The Master Fee Ordinance will ensure the city’s entire fee schedule is codified annually by the City Council. Individual departments will assist in developing the fee schedule, but will not be authorized to publish and charge new fees until and unless those fees are adopted as part of the Master Fee Ordinance.

Target Implementation Date: October 1, 2022

Responsibility: Planning and Data Analytics Director

Applicable Department Head: Mark McAvoy

Applicable Assistant City Manager: Fernando Costa

5. Some user accounts in HealthSpace had more access rights than were appropriate.

Four of 32 active HealthSpace user accounts had individual user rights that were also assigned to one or more user account groups. In each instance, the individual accounts had more access within HealthSpace than the user group(s) to which they were assigned.

The HealthSpace software allows user accounts to be created on an individual basis (each with their own set of software access rights), or as part of a user group (defined with specific access rights, based on a job role or function). If a user account has individual access rights and is also assigned to a user group, the account’s individual access rights take precedence. This could result in the user account inadvertently receiving more access to HealthSpace functionality than is appropriate.

After discussions with Consumer Health Division staff, it was determined that the issue was a result of the initial set-up of HealthSpace user accounts (during software implementation), the transition to the use of user groups, and the incompletion of user account clean-up after the transition. Although the identified accounts had more access than was appropriate, we saw no evidence that the accounts accessed more functionality than was appropriate for the users’ job roles and functions.
COBIT states that user access rights should be maintained in accordance with business function, process requirements, and security policies, and that a regular management review of all accounts and related privileges should be performed.

**Recommendation 5A:** The Code Compliance Director should ensure that the identified HealthSpace user accounts are reviewed and adjusted to reflect access commensurate with the users’ job roles and responsibilities.

**Auditee’s Response:** Concur. Incorrect user account permissions within the HealthSpace software system (HealthSpace) were assessed and corrected. User groups have been developed within HealthSpace commensurate with user job roles and responsibilities to prevent further errors. In addition, routine monitoring of user accounts is being conducted on a monthly basis.

- **Target Implementation Date:** Complete.
- **Responsibility:** Leticia Cordero, Interim Consumer Health Superintendent
- **Applicable Department Head:** Brandon Bennett, Code Compliance Department Director
- **Applicable Assistant City Manager:** Valerie Washington

**Recommendation 5B:** The Code Compliance Director should ensure that a routine review of HealthSpace user accounts is performed.

**Auditee’s Response:** Concur. Incorrect user account permissions within the HealthSpace software system (HealthSpace) were assessed and corrected. User groups have been developed within HealthSpace commensurate with user job roles and responsibilities to prevent further errors. In addition, routine monitoring of user accounts is being conducted on a monthly basis.

- **Target Implementation Date:** Complete.
- **Responsibility:** Leticia Cordero, Interim Consumer Health Superintendent
- **Applicable Department Head:** Brandon Bennett, Code Compliance Department Director
- **Applicable Assistant City Manager:** Valerie Washington
Acknowledgements

The Department of Internal Audit would like to thank the Code Compliance Department for its cooperation and assistance during this audit.