UT Southwestern
Medical Center

Willed Body Program Audit

Internal Audit Report 22:51

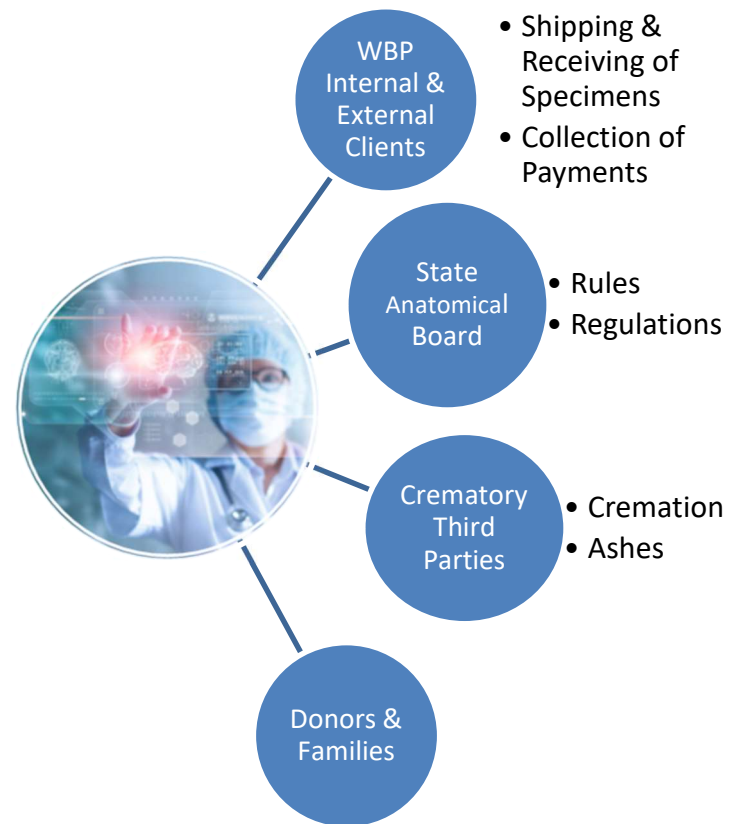**May 26, 2022**

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Executive Summary

Background

The UT Southwestern Medical Center (UT Southwestern) Willed Body Program (Program) assists UT Southwestern in its mission to use research to discover new methods for fighting diseases and to train future health care professionals. The Program's mission is to respectfully facilitate the wishes of donors and donor families regarding their desire to further medical education and research, while adhering to strict legal, moral, and ethical guidelines established by the University of Texas and the State Anatomical Board (SAB) of Texas. The Program is the largest Willed Body program in the state of Texas and one of the largest in the nation. The Program, reporting directly to the Office of the President comprises of twenty-one (21) employees, thirteen (13) full-time, and eight (8) temps, led by the Director of the Program.

The donation of willed bodies provides a vital tool for scientists to increase medical knowledge and improve skills. Donated bodies are used to teach anatomy to health science professionals on and off campus. Additionally, residents, practicing physicians, and other researchers review human anatomy in connection with specialized training for surgery or research.

Specimens are tagged with a serial number upon arrival to the UT Southwestern WBP. The tags are ordered through the SAB website and provided to the Program by batches. Once the Program tags a specimen, it is then logged into the SAB website. The Program uses an Access Database (Database) to enter the intake of specimens and to manually track the movement of the specimen. The Database is routinely reconciled to the SAB, as the SAB is providing the specimens' tag numbers and is considered the source of truth. The Database is also used to invoice external clients for specimens transferred and shipped.
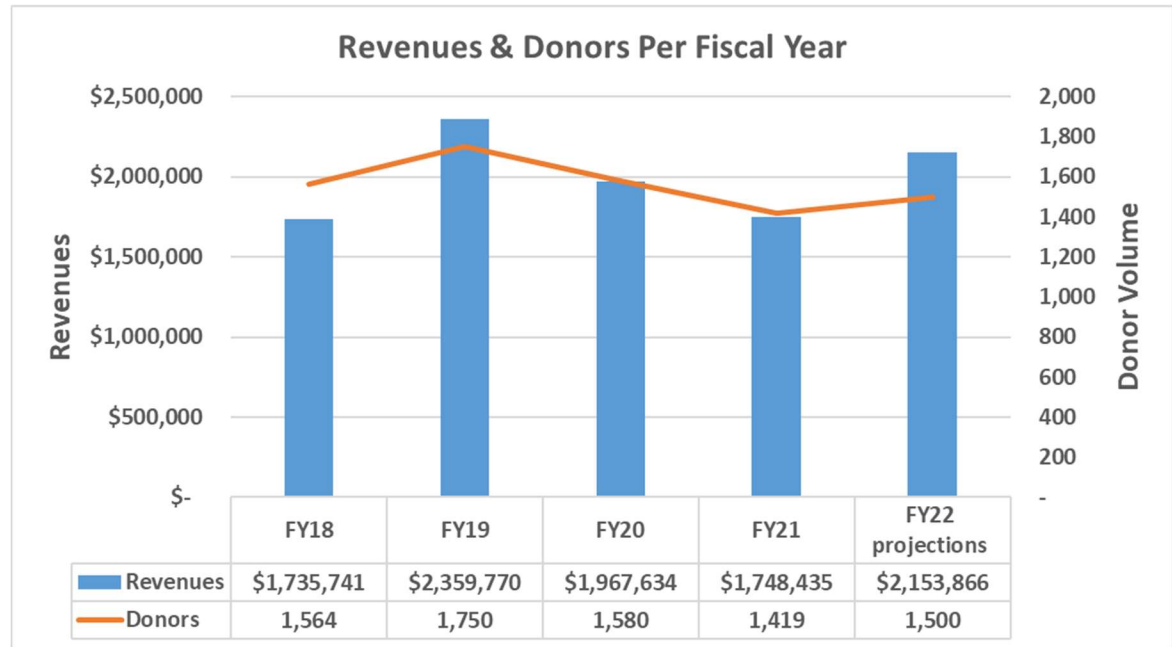
In addition, the Program contracts with third party crematories to perform cremations and deliver the ashes to the Program so that the remains can be returned to willed bodies subjects' families or are properly disposed. The graph on the right depicts key partners, responsibilities, and services at the Program. For the detailed Willed Body Program Process Flow please refer to Appendix B.

WBP Internal & External Clients
- Shipping & Receiving of Specimens
- Collection of Payments

State Anatomical Board
- Rules
- Regulations

Crematory Third Parties
- Cremation
- Ashes

Donors & Families

Executive Summary

The graph to the right depicts the following:

- Revenues have decreased 11% from FY20 to FY21, and 15% from FY19 to FY20.

- Donor volume has decreased 10% from FY20 to FY21 and decreased the same percentage from the previous year.

- The decrease in revenues and donors is primarily due to COVID-19.

- Revenues are projected to increase about 20% from FY21 to FY22, attributed to the latest adjustment and price increase of cost recovery for specimens.

Revenues & Donors Per Fiscal Year

	FY18	FY19	FY20	FY21	FY22 projections
Revenues	$1,735,741	$2,359,770	$1,967,634	$1,748,435	$2,153,866
Donors	1,564	1,750	1,580	1,419	1,500

Scope and Objectives

The Office of Internal Audit Services has completed its Willed Body Program audit. This audit is included in the fiscal year FY22 Internal Audit Plan and is required every five years under Texas Administrative Code 25 Part 4 Anatomical Board of the State of Texas.

The audit objectives include review and assessment of the Willed Body program operational processes and controls to ensure compliance with regulatory requirements and institutional policies including the following:

- Effective processes and controls for receipt, tracking and disposal of anatomical specimens

- Proper handling, transfers and shipments, and chain of command

- Effective controls for account billings and collections

- Adequacy of system controls to support the business operations

- Appropriate system security user access

Executive Summary

Audit procedures included interviews with stakeholders, reviews of policies and procedures and other documentation, substantive testing, and data analytics. We conducted our examination according to guidelines set forth by the Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing.

Conclusion

The Willed Body Program conducts its operations in accordance with the provisions and regulations set forth in the Texas Health and Safety Code Chapter 691-692A, and the stipulations of the Texas Administrative Code 25 Part 4 Anatomical Board of the State of Texas pertaining to the acquisition, use, and final disposition of anatomical materials. There is an opportunity to assess upgrading the Access Database to an automated software that can provide improved specimens tracking, billing, reporting, and increased capabilities for integration with PeopleSoft.

Included in the table below is a summary of the observations along with the respective disposition of these observations within the UT Southwestern internal audit risk definition and classification process. See Appendix A for Risk Rating Classifications and Definitions.

Priority (0)	High (0)	Medium (2)	Low (1)	Total (3)

Key observations are listed below.

- 🟡 **#1. Explore Alternative Automated Solutions to Support the Willed Body Program** - Manual tracking and the use of the current system increases the risk of human errors that lead to inefficiencies, incorrect tagging and data entries.

- 🟡 **#2. Implement Additional Controls Over the Willed Body Program Cremation Tracking Process** - The cremation tracking process is manual using an Excel spreadsheet and there were incomplete and missing data elements, increasing the risk for noncompliance with the SAB or reputational damage.

- 🟢 **#3. Improve Willed Body Program Database User Account Access Controls** - A periodic access review to ensure deletion of inactive user accounts is not currently in place. Absence of adequate user access management and administration controls increases the risk of inappropriate access to sensitive SAB and donors' data.

Executive Summary

We would like to take the opportunity to thank the individuals included in this audit for the courtesies extended to us and for their cooperation during our review.

Sincerely,

Valla F. Wilson, Vice President and Chief Audit Executive, Office of Internal Audit Services

Audit Team:

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Cameron Slocum, M.B.A., Vice President and Chief Operating Officer, Academic Affairs
Kennard Thomas, Director, Willed Body Program

Detailed Observation and Action Plans Matrix

Observation	Recommendation	Management Response
Risk Rating: Medium 🟡 **1. Explore Alternative Automated Solutions to Support the Willed Body Program** The Program utilizes an Access Database to enter the intake of specimens and is used to manually track the movement of specimens. Additionally, the Database is used to create invoices as it does not include capabilities for integration with PeopleSoft. Manual tracking and entering data into the system increases the risk of human errors and inefficiencies, incorrect data entries and tagging. For example: • The intake of specimens is manually tracked and entered into the Access Database, creating inefficiencies. • During inventory count, one specimen was incorrectly tagged with an SAB number that was assigned to another donor. Incorrect tag assignments can cause specimens inventory mismatch between the WBP database and the SAB website that is considered the source of truth for donors.	1. Identify the needs and assess the feasibility of an automated software alternative to the Access Database currently used. Identify the system needs and capabilities for providing improved specimens tracking, billing, reporting and functionality and the capability for integration with PeopleSoft. 2. Evaluate internal institutional system options and explore other available systems if needed. 3. If there is a need to explore external options to meet the needs of the institution, purchase the software once a new system is identified. 4. Coordinate with the vendor and IR Support resources to implement the system through appropriate lifecycle processes.	**Management Action Plans:** 1. We are currently working with the Provost Office to assess the feasibility of using iLabs to ensure it can provide automation and improved specimens tracking, billing, reporting and other functionality and the capability for integration with PeopleSoft. 2. We are considering and evaluating other available systems in case iLabs will not be feasible to the WBP. 3. We will coordinate with the Supply Chain Management team to complete the purchase of the new software once a new system is identified. 4. We will coordinate with the vendor and IR to ensure effective implementation of the new software. **Action Plan Owners:** Willed Body Program Director Willed Body Program Coordinator **Target Completion Dates:** 1. August 31, 2022 2. October 31, 2022 3. December 31, 2022 4. May 31, 2023

Detailed Observation and Action Plans Matrix

Observation	Recommendation	Management Response
Risk Rating: Medium 🟡 **2. Implement Additional Controls Over the Willed Body Program Cremation Tracking Process** The cremation tracking process is manual using an Excel spreadsheet. The main access database includes all the records for each specimen however a separate excel list is used for the cremation tracking process with the third parties. The crematory specialist manually enters the date specimens were sent to a contracted crematory third party, the date when the ashes were received back, and is also required to document the communication to families and next of kin to facilitate the transfer of ashes to family members. While the excel spreadsheet is not fully completed, the crematory specialist also enters the information to the Access Database and uploads the cremation sheets on case-by-case basis. The current process does not allow for monitoring, aging summaries, and cremation tracking reports for review by management, which may increase the risk of delays in the cremation process.	1. In conjunction with exploring new system options for willed body program inventory and billing, implement a periodic review of the cremation tracking process, where reports and aging summaries are reviewed and approved by the WBP management to ensure timely return of ashes to donors' families.	**Management Action Plans:** 1. As the effort to find and implement a new software is ongoing, and per the above recommendation, this is a temporary action plan until a new software is in place. We are coordinating with the Data Science Department to assess the current Database, and a periodic monthly review of the cremation tracking process will be implemented. **Action Plan Owner:** Data Science Department Manager Willed Body Program Director **Target Completion Dates:** 1. August 31, 2022

Detailed Observation and Action Plans Matrix

Observation	Recommendation	Management Response
Risk Rating: Low 🟢 **3. Improve Willed Body Program Database User Account Access Controls** A periodic access review to ensure all inappropriate user accounts with active access are removed, is not currently in place. A review of system access identified: • Seven terminated and one transferred employees with active user accounts. • Three active but unused or dormant user accounts. • Absence of formal periodic user access reviews by WBP management. While terminated employees do not have access to the Anatomical Services folder that allows access to the Database, absence of adequate user access management and administration controls increases the risk of inappropriate access to sensitive SAB and donors' data.	1. Remove the terminated and transferred employee accounts and close the three dormant user accounts. 2. Implement a periodic access review process to ensure terminated and transferred employees are removed from the Database.	**Management Action Plans:** 1. We coordinated with the Database administrator to remove the terminated and transferred employees, and to close the dormant user accounts. 2. A periodic access review is now in place and will be performed quarterly by the Database administrator. The active users report will be approved by the WBP director. **Action Plan Owner:** Willed Body Program Director **Target Completion Dates:** 1. Completed 2. Completed

Appendix A – Risk Classifications and Definitions

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As you review each observation within the Detailed Observations and Action Plans Matrix of this report, please note that we have included a color-coded depiction as to the perceived degree of risk represented by each of the observations identified during our review. The following chart is intended to provide information with respect to the applicable definitions and terms utilized as part of our risk ranking process:

Risk Definition- The degree of risk that exists based upon the identified deficiency combined with the subsequent priority of action to be undertaken by management.	Degree of Risk and Priority of Action	
	Priority	An issue identified by Internal Audit that, if not addressed immediately, has a high probability to directly impact achievement of a strategic or important operational objective of a UT institution or the UT System as a whole.
	High	A finding identified by Internal Audit that is considered to have a high probability of adverse effects to the UT institution either as a whole or to a significant college/school/unit level. As such, immediate action is required by management in order to address the noted concern and reduce risks to the organization.
	Medium	A finding identified by Internal Audit that is considered to have a medium probability of adverse effects to the UT institution either as a whole or to a college/school/unit level. As such, action is needed by management in order to address the noted concern and reduce the risk to a more desirable level.
	Low	A finding identified by Internal Audit that is considered to have minimal probability of adverse effects to the UT institution either as a whole or to a college/school/unit level. As such, action should be taken by management to address the noted concern and reduce risks to the organization.

It is important to note that considerable professional judgment is required in determining the overall ratings presented on the above pages of this report. Accordingly, others could evaluate the results differently and draw different conclusions. It is also important to note that this report provides management with information about the condition of risks and internal controls at one point in time. Future changes in environmental factors and actions by personnel may significantly and adversely impact these risks and controls in ways that this report did not and cannot anticipate.

Appendix B – Willed Body Program Process Flow

Willed Body Program Process Flow