Internal Audit Department

CERT: Conduct, Ethics, Reporting, and Transparency

May 13, 2022
Report Number FY 21-03

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This report is intended for the information and use of the Arizona Board of Regents, NAU administration, the Arizona Office of the Auditor General, and federal awarding agencies and subrecipients.
Audit of Conduct, Ethics, Reporting, and Transparency Program (CERT) is in the Annual Audit Plan for Fiscal Year 2021, as approved by the Audit Committee of the Arizona Board of Regents. This audit supports all Northern Arizona University’s (NAU / university) strategic goals by assessing the existence of policy, procedure, processes, or other activities that support NAU’s identification and mitigation of conflicts of commitment and interest that may impact NAU’s reputation, which can impact achievement of one or more of NAU’s strategic goals.

Background: NAU, as a public institution, seeks to ensure that its faculty, staff, and administrators, fulfill their responsibilities with integrity and demonstrate the ethical behavior expected of public employees. NAU expects its administrative officers, employees, and other members of the NAU community to be independent and impartial in all actions involving the use of public resources, that public office or employment is not used for private gain, and that there be complete public confidence in the integrity of the university. Arizona laws prohibit participation by university employees in any decision where the employee has a substantial interest in the university decision being made. Specifically, the NAU CERT Standards and Expectations of Conduct states that “…all members of the university community, while acting in the course and scope of their employment, are responsible for maintaining the highest ethical standards of conduct. These Standards address the conduct of those acting on behalf of the university, including administrators, faculty, staff, and student employees, as well as authorized volunteers and representatives acting as agents of the university (the "university community"). Members of the university community must be cognizant of and comply with all relevant policies, procedures, standards, laws, and regulations, and must be accountable for their own actions. Conduct guidelines expected of members of the university community include:

- **Integrity** by maintaining honesty and responsibility in all their dealings, and *by avoiding conflicts of interest*;
- **Trustworthiness** by acting in a reliable and dependable manner;
- **Respect** by treating others with fairness, civility, and decency;
- **Stewardship** by protecting and safeguarding university property and resources;
- **Compliance** by following local, state, and federal laws and regulations and Arizona Board of Regents (ABOR) and university policies and procedures;
- **Confidentiality** by protecting the security, and privacy of university information such as student records, employee files, patient records, and contract negotiation documents; and,
- **Responsibility** by being accountable and fulfilling all obligations to the university.

NAU implemented a formal CERT Program (supported by related policy, procedures, and guidelines) for identifying, reviewing, and managing potential perceived or real conflicts of commitment and interest in 2012. The CERT Program includes an in-house developed database and web-based process (known as eCERT) that allows for data input from university community members who are required to disclose, automated follow-up to ensure at least annual disclosures are made, automated notification to supervisor personnel for review and approval of disclosures, and some limited reporting capabilities. The eCERT web-based process covers the majority of required disclosures and related reviews. However, to support specific regulatory requirements (e.g., significant financial conflicts of interest in research as defined by the US Department of Health and Human Services) and specific types of conflicts (e.g., faculty / student relationships), the CERT Program is also supported by other automated and manual processes.
Employees are required to submit eCERT disclosures annually or within 15 days of when circumstances change (such as relationship status). Newly hired employees must also complete eCERT disclosures within 30 days of hire. Supervisors are prompted to review those disclosures and to confirm review via the eCERT web interface. As such, the eCERT process electronically collects employees' disclosures using a survey approach, their supervisors' review and follow-up results, and input from other departments that are involved in the review and mitigation process. Further, the eCERT process routes the information collected to NAU officials and teams required to facilitate appropriate conflict mitigation processes, including but not limited to creating conflict management plans as required by the CERT policy. The Human Resources department runs multiple reports to ensure disclosures are submitted timely, supervisory review of disclosures is prompted and documented, and information is delivered to appropriate NAU officials and teams as needed.

Given the variety and complexity of situations regarding ethical conduct that may arise within the university community, NAU’s conduct guidelines do not define specifically what each individual should and should not do, but rather communicate the university's expectations of proper conduct and provide guidance regarding what conduct the university values. And thereby, what information should be disclosed to help NAU identify and address perceived and real conflicts of commitment and interest. Through the eCERT survey process, university community members respond to closed and open-ended questions requesting disclosures related to common conflict of commitment and interest situations that include but are not limited to outside employment, public office or board membership, relationships (professional and personal), substantial financial interest, and research activity.

Because of the complexity of the CERT Program, several departments assist in managing potential conflicts. These departments include:

- Center for International Education (CIE)
- Contracts, Purchasing and Risk Management (CPRM)
- Equity and Access Office (EAO)
- Office of the General Counsel (OGC)
- Human Resources (HR)
- Information Technology Services (ITS)
- Research, Office of Sponsored Projects (OSP)

Audit Objective: The primary audit objectives were to assess:

- internal controls to ensure conflicts of commitment and interest are identified and addressed, management plans implemented when applicable, and management plan oversight assured; and,
- the adequacy of compliance with the NAU CERT Program and compare NAU’s process to available best practices for enhancement considerations.

Scope: The scope of this audit included a review of current policies, procedures, and process supporting management of the CERT Program as well as addressing internal controls designed to ensure NAU complies with related laws, regulations, policies, and best practices, especially in the departments noted above in the report Background. We focused primarily on review and analysis of the processes and otherwise conducted such analysis, tests, and other procedures as we deemed necessary to address the audit objectives. Our scope excluded assessment of the information system in general and application controls related to the eCERT database and web process since they are maintained by NAU's central Information Technology Services Department.

Methodology: The following procedures were performed to accomplish the audit objectives:

- Obtained and analyzed relevant data that appeared applicable to NAU using resources available from other professional associations (e.g., the Association of College and University Auditors), information gleaned from past audits, internet searches, and discussion with professional peers.
• Analyzed applicable rules and regulation to determine applicability to NAU, including consultation with NAU General Counsel and applicable NAU compliance specialists.
• Reviewed ABOR and NAU policies, procedures, and guidelines related to oversight of conflicts of commitment and interest, and the CERT Program.
• Interviewed management and staff of departments responsible for managing the CERT Program including HR, EAO, CIE, the Graduate College, CPRM, and the Research Compliance Office and OSP to document and analyze the entire CERT process.
• Interviewed the OSP staff to understand existing Cayuse, the research pre-award system, functionality used by NAU Research as it relates to identifying significant financial conflicts of interest in research and to grant opportunities with financial aid implications.
• Queried NAU’s official peer universities to understand how they oversee and manage conflicts of commitment and interest.

The audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* promulgated by the Institute of Internal Auditors and accordingly, included such tests considered necessary under the circumstances.

**Conclusion:**
NAU has a formal CERT Program that provides assurance that the majority of university community members respond to conflict of commitment and interest disclosure requests upon hire and at least annually. The process has resulted in the implementation of various conflict management plans to help mitigate conflict of commitment, conflict of interest, and related risks. However, the overall process has not been subject to oversight and periodic review to ensure it remains up-to-date in addressing all related risks. Also, the supporting eCERT database and web process were built on a platform for which the vendor is no longer supporting NAU's current version, and for which limited programming resources are available internally. This report identifies opportunities to help mature the CERT program.

**Observations:** We noted the following observations:
• Like many higher education institutions, NAU has limited resources and must thereby balance its strategic priorities and address risks with the CERT Program and supporting eCERT process to implement efficient and effective improvements from a cost-benefit perspective.
• As noted in the report Background, the CERT Program and eCERT process were implemented in 2012. At that time, a cross-divisional working group was formed to develop the process, but once implemented, the group disbanded. While certain changes have been made since implementation, the overall CERT Program is not centrally managed but is instead made up of several processes managed by various functional areas.
• The eCERT database and web process is written in Hypertext Preprocessor (PHP) programming language using the Laravel framework and currently running on PHP 7.1.33, which is several versions behind the current PHP 8.0.16 version. PHP 7.1.33 is no longer receiving security updates as this version is generally at the “end of life” stage making upgrading existing processes challenging. See related Improvement Opportunity (IO# 2).
• To ensure supervisory relationships are consistent for review purposes, the PeopleSoft HR system reporting structure feeds the eCERT database to ensure alignment. The current version of PeopleSoft HR implemented at NAU does not support dual or bifurcated reporting relationships that exist in many areas of NAU, especially research. To ensure proper disclosure review and related
conflict identification and management, NAU must develop a solution to resolve supervisory reporting relationship issues that impact NAU’s ability to effectively ensure that all reported conflicts of interest and commitment are properly vetted and addressed. See related Improvement Opportunity (IO# 1).

We identified improvement opportunities related to policy and procedure improvement and implementation, enhanced use of existing information systems and/or replacement, and directed use of staff resources, for which management is implementing solutions as outlined in this report.

The control standards considered, related control environment assessment, and any related improvement opportunities identified are summarized in the following table.

<table>
<thead>
<tr>
<th>General Control Standard</th>
<th>Control Environment/Assessment</th>
<th>IO No.</th>
<th>Page No.</th>
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<tbody>
<tr>
<td>Reliability and Integrity of Financial and Operational Information:</td>
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<td>• The conflict process includes appropriate oversight to ensure the process remains up</td>
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<td>to date, is working as intended, and conflict management efforts are consistent.</td>
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<td>• Supervisors are trained to ensure the propriety of their disclosure reviews.</td>
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<td>• All individuals required to disclose are identified and tracked to ensure required</td>
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<td>disclosures are made.</td>
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<td>• Supervisors are required to review all the disclosures made by all employees in their areas of responsibility.</td>
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<td>• Questionnaire design is subject to periodic review by applicable experts to ensure</td>
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<td>6, 13</td>
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<td>questionnaires remain current, are easy to understand and complete by all required,</td>
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<td>and thereby collect necessary disclosure information.</td>
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<td>• Conflict management plans are documented for applicable disclosed conflicts.</td>
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<td>• Conflict management plans are assigned for supervisory review and related follow-up actions are taken and documented.</td>
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<td>Safeguarding of Assets:</td>
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<td>• The eCERT system used for documenting disclosures and review of disclosures limits</td>
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<td>user access to ensure and maintain the propriety of individual disclosures, any</td>
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<td>updates to those disclosures, and the supervisory review of those disclosures.</td>
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<td>• The eCERT system and other supporting systems are maintained and supported by</td>
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<td>6, 9</td>
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<td>NAU Information Technology Services to ensure applicable information systems general controls are addressed.</td>
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<td>Effectiveness and Efficiency of Operations:</td>
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<td>• A centralized conflict identification management process and system are in place to</td>
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<td>ensure collection and review of all disclosure information.</td>
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<td>• A formal escalation process exists to address process or system issues and supervisory need for assistance in completing disclosure reviews.</td>
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<td>1, 4</td>
<td>6, 12</td>
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<tr>
<td>• Complex and / or certain types of disclosures are reviewed by individuals with related expertise, in addition to the supervisory review process, to ensure conflicts are properly identified and addressed.</td>
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<td>6, 12</td>
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<tr>
<td>• To improve efficiency, processes are automated wherever possible including</td>
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<td>6, 9, 12</td>
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<td>disclosure collecting processes, supervisory review processes, information sharing</td>
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<td>processes and reporting processes.</td>
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<td>General Control Standard</td>
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<td>(The bulleted items are internal control objectives that apply to the general control</td>
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<td>standards and will differ for each audit.)</td>
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<td>Compliance with Laws and Regulations:</td>
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<td> The conflict process is supported by appropriate, current policies, procedures, and</td>
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<td>guidelines. The nature of all notable conflict of commitment and interest matters are</td>
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<td>addressed through appropriate policy, procedure, and guidelines.</td>
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<td> The processes and systems supporting conflict identification and management are</td>
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<td>maintained in accordance with applicable ABOR and NAU Information Technology policies,</td>
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<td>procedures, standards, and guidelines.</td>
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<td> The processes and systems supporting conflict identification and management for</td>
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<td>research purposes are maintained in accordance with applicable federal and state</td>
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<td>laws, rules, and regulations.</td>
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<td> The conflict identification and review process is independently reviewed where</td>
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<td>required.</td>
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<td> Disclosures are required regarding involvement with foreign entities and reviewed in</td>
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<td>relation to specific types of NAU employees / Community members.</td>
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<td> Individuals responsible for the review of research conduct, such as Institutional</td>
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<td>Review Boards, should be made aware of potential and real conflicts prior to or at the</td>
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<td>time their review is conducted.</td>
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</table>

**Legend:**

- Reasonably Strong Controls in Place
- Opportunity for Improvement
- Significant Opportunity for Improvement

We appreciate the assistance and input from the staff of the following departments, who were crucial in effectively analyzing and addressing the key opportunities for maturing the processes supporting identification and management of conflicts of commitment and interest:

Center for International Education
General Counsel
Graduate Studies
Human Resources, including the Equity & Access Office and HR Information Systems
Purchasing
Research, including the Office of Sponsored Projects and Research Compliance
Student Employment Office

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Audit Results: Improvement Opportunities & Solutions

In reviewing the improvement opportunity detail, note that references to “CERT Program” describe the entirety of the policies, procedures, and practices currently in place to identify and manage conflicts of commitment and interest at NAU. References to the “eCERT process” or “eCERT system” relate to the primary process used by NAU for collecting disclosures from individuals to determine if real or perceived conflicts of commitment and / or interest exist. The CERT Program also includes the use of the Research Department’s Cayuse system for identifying researcher conflicts related to specific research projects at the time a project is submitted for approval, along with are other automated tools used to address various other aspects and types of conflict matters.

1. Identification and management of conflicts of commitment and / or interest could be improved by ongoing coordinated oversight by personnel familiar with and knowledgeable of conflict of commitment and interest issues and with authority to initiate necessary improvements when applicable.

Solution: An oversight function will be established with input from key university officials who have knowledge and responsibility for management of conflict of commitment and interest matters. Once created, this oversight function will prioritize the next steps for CERT maturation to ensure the CERT Program and supporting eCERT process remains effective and consistent in identifying and managing conflict matters. The oversight function will assess related risk to ensure policy and procedure remain current and effective.

Responsible Parties:
- SVP and Chief Financial Officer
- Provost / EVP Academic Affairs
- VP Enrollment Management
- VP Human Resources
- VP Research
- VP Student Affairs

Implementation Date: July 31, 2022

DETAILS:

Condition: We noted the following challenges after performing walkthroughs with the various decentralized groups responsible for various aspects of the CERT Program and supporting processes. These groups include the Human Resources Information Systems Management Office and Equity and Access Office (EAO), Research Office of Sponsored Projects (OSP) and Research Compliance Office, Human Resources, and Purchasing:

- A lack of an overarching group (e.g., CERT Program Committee, periodic task force, etc.) responsible for periodic assessment to provide oversight and direction regarding effective conflict of commitment and interest management processes, review of conflict management consistency, and other pertinent related matters. While a group was formed to develop the original eCERT process, that group disbanded after the process was established. Oversight is now bifurcated among multiple departments in addition to input from NAU general counsel for executive level review and certain types of conflicts. There is no single department or function with knowledge of all aspects of the processes and process needs who can authorize NAU-wide change when necessary.

- All employees, regardless of their job specification, are required to answer the same questions, which may cause confusion amongst employees and create unnecessary disclosure volume for reviewers. Since all NAU employees are required to complete an eCERT, requiring the same questions across all employee populations can result in the waste of time resources for both employees and reviewers. In this regard, there is also a lack of a periodic and coordinated review of eCERT questionnaire to ensure relevance and adequacy of each question. See IO #5 for details.
Audit Results: Improvement Opportunities & Solutions

- The current eCERT notification for review process is aligned to only one supervisor for each employee (including full-time, part-time and individuals employed on a contract-basis) based on the reporting structures maintained in PeopleSoft HR, which currently allows for only singular reporting lines. However, the assigned supervisor may not be always suitable to make determinations on whether reported conflicts can be properly mitigated due to multiple reporting relationships (i.e., administrative and academic) as detailed below but not limited to the following examples:
  o There are Faculty under contract who perform activities for the Center for International Education (CIE) but report directly to someone outside CIE.
  o Researchers (including graduate students) are assigned to their administrative supervisors in eCERT but are generally not reporting to their administrative supervisors relative to their assigned research, where conflicts of commitment and interest often pose the most concern.
  o When an employee is assigned to a new supervisor for various reasons, there is not a process in place to notify the new supervisor regarding conflict management plans that are currently in place. As a result, conflict management plans may become dormant and useless in mitigating related conflicts where oversight is severed as a result of supervisory changes.
  o Processes are not in place to ensure the chain of command remains current, such as by periodically reviewing or having departments periodically review areas and functions of employee/contractor responsibility to determine if multiple reporting relationships are needed to be established and documented for eCERT submission review and related processes.
  o Formal training is not required. Employees and supervisors are encouraged to reference applicable policy documents and related web site information. Supervisors should be required to complete specific training upon hire or promotion to ensure they understand their responsibilities when reviewing disclosures. This training should be periodically updated when applicable and supervisors trained accordingly to ensure they understand the impact of the process changes.
  o The eCERT system does not include the capability to group questions when doing so would enhance the clarity of questions. Lack of clarity may result in inaccurate determination of the nature of the conflict related to employee disclosure (e.g., Procurement vs Outside Employment vs OSP). For example, by adding the following note: “If you own a business that may provide equipment, material, supplies, or services to the university, see Contracting and Purchasing Disclosure of Substantial Interest section.”
  o When eCERT disclosures and / or conflict management information are routed to a wrong group for review (e.g., OSP vs Purchasing), a formal process is not in place to ensure the submitted information is ultimately routed to the correct group.

- Many graduate students and undergraduate student workers are compensated for their actual work performed outside of wage payments and are thereby not identified as having an active job in the PeopleSoft HR system. This compensation is provided in the form of tuition waivers, additional financial aid, and various benefits like student-athlete funding packages and participating in research without maintaining an actual employee status. As such, any conflicts that may exist in relation to their research-related, are not being identified through the existing processes.

- Only research Principal Investigators (PI) and co-PI are currently required to report conflicts of interest through the Research Department Cayuse system. While all other researchers are required as employed Faculty to report through eCERT, not all students supporting research can be captured through the PeopleSoft employee identification process and thereby are not completing a conflict disclosure questionnaire in eCERT. For example, other research collaborators not listed as a PI may become a PI at some point, however, they are not required to disclose a financial conflict of interest in Cayuse and may not opt to disclose in eCERT while not a PI. The rationale for this requirement is that the collaborator is not making decisions about the grant. However, this may result in a problem during the project as the collaborator impacts existing related research and transitions into PI status.
Audit Results: Improvement Opportunities & Solutions

- Research subrecipients (who can be also unknown upfront) do not go through the eCERT or Cayuse conflict disclosure identification processes; however, subrecipients can present conflict of interests related to the research they support. Generally, OSP requires research subrecipients to adhere to their own compatible policy with the federal financial conflict of interest policy if such policies exist. If they do not have a policy, they are supposed to adhere to NAU’s COI processes. OSP performs oversight of NAU policy as related to research conflicts of interest, however, there is no follow-up on research subrecipients who indicate a need to follow NAU policy and thereby those research subrecipients have not likely made COI disclosures.

- There is no current NAU policy or procedure addressing institutional conflicts of interest. NAU performs high-level gap analysis services with evaluations and advice that result in directing government subcontractors to perform certain activities, implement programs, set up instructional classes, etc. (e.g., NAU entered into a non-research contract with the state of Missouri to provide evaluation and continuing education, leadership, coordination, and content development for K-12 teachers in Missouri school districts. This is one of many contracts with the state of Missouri or Missouri agencies without any review to ensure there are no conflicts created across the various contracts and subcontracts). If one of these entities later hires NAU for other or related work, an institutional conflict may result. Institutional conflicts of interest are also commonly identified in relation to clinical trials research involving human subjects whereby the institution can benefit from the outcome of the clinical trials research (e.g., additional grant funding, patents, etc.) While NAU currently has approximately twenty (20) clinical trials research projects in play, given its expansion of Research in recent years, the existence of institutional conflicts should be evaluated, and policy and procedure developed to ensure a more proactive approach to identifying and addressing them.

- While there is a Comptroller’s Office Gift policy that references a Purchasing Policy addressing Gifts and Gratuities, that policy has not been reviewed and updated since 1996. However, there did not appear to be general knowledge of the gift policy and requirements among staff managing the various aspects of the CERT Program. Gifts can be especially troublesome among researchers where such gifts are intended or appear to be intended at directly influencing NAU decisions. Updated gift policies are needed to address COI situations involving gift exchange between NAU employees and /or other institutions that seek and offer gifts or grants to NAU (e.g., an entity offers a gift of an endowed university chair or a grant for a professional society to develop research practice guidelines).

- The Research Institutional Review Board (IRB) is not able to review researcher disclosures and mitigate any perceived or real conflicts of commitment or interest as such information it not routinely provided to the IRB through a formal process. A lack of alternative See IO #4 below for details.

Criteria: Good business practices support clearly articulated policies and procedures to ensure consistency in the application of key processes and internal controls used to support and maintain them. Such practices and internal controls also provide assurance that all external or public reporting is identified, managed, and validated to protect the reputation of the university.

Cause: While various groups support the CERT review process, there is no periodic, coordinated centralized effort across these groups to ensure the CERT Program remains current in addressing related and changing risks. The original group developing the process may have believed that once the disclosure collection and review process was established with the eCERT system, there was no longer need for continued and coordinated centralized oversight. As such, while changes have been made as requested by individual areas, there has been insufficient attention to the overall process and risks involved.
Audit Results: Improvement Opportunities & Solutions

Effect / Impact:

Effective coordinated processing of disclosure information is key to improving the likelihood that all pertinent disclosures and related information is provided by those answering the questionnaire and those reviewing and opining on the disclosures. Identifying applicable conflicts of commitment and interest and managing or eliminating those conflicts can only occur if the right information is disclosed. Leaving conflictual arrangements unmitigated can potentially lead to Title IX violations and violations of EEOC laws, asset misappropriation, and fraud resulting in government fines, lawsuits, damage to university reputation, etc.

2. A centralized, up-to-date enterprise-wide conflict of interest management system can improve security over related data and help NAU facilitate effective and efficient conflict management processes by providing a coordinated approach that ensures those who need to know have all the right information at their disposal when making decisions, thereby improving policy and procedure compliance.

Solution: As noted in IO 1, an NAU oversight structure will be created, and that oversight structure will analyze the best approach to addressing current eCERT system needs and security issues. This will include addressing possible continued and updated use of PHP and identifying and analyzing third-party conflict management systems for possible eCERT replacement in line with existing NAU information systems resources and priorities. Among other updates, the following interfaces to related systems and process updates will be addressed after consideration by the oversight structure:

- Notify multiple supervisory parties when applicable for certain types of disclosures or when an individual has multiple reporting relationships / chains of command.
- Route specific types of conflicts for review beyond direct supervisory reports to groups like research compliance, EAO, OSP, etc.
- Generate reports for higher level analysis, such as conflict by type, to determine consistent treatment.
- Facilitate the development of a data repository in a centralized location that can be easily accessible yet limited to those who need to know.
- Provide security for sensitive information collected throughout the process.
- Set and update systems configurations, without the need for coders or other advanced technical skills, for various aspects including:
  - Auto-generation of conflict related to follow-up communications when eCERT forms are not completed as required, conflict management plans require updates, etc.
  - Modifying reporting relationships when necessary.
- Updating / customizing reporting capabilities as and when needed, including generating conflict summaries by reporting unit, conflict type, etc.

In the meantime, the current eCERT system security concerns will be addressed through PHP updates and / or other adjustments.
Northern Arizona University
CERT: Conduct, Ethics, Reporting, and Transparency
Internal Audit Report
May 3, 2022

Audit Results: Improvement Opportunities & Solutions

<table>
<thead>
<tr>
<th>Responsible Parties</th>
<th>Implementation Date</th>
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<tbody>
<tr>
<td>VP Human Resources</td>
<td>Address PHP Security – 9/30/2022</td>
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<tr>
<td>VP Information Technology and Chief Officer</td>
<td>Remaining System Updates – 7/31/2023</td>
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DETAILS:

Condition: Multiple departments including HR, EAO, Legal, OSP, and Purchasing, utilize various systems and processes for COI management purposes for which there is no system interface helping to ensure availability, accuracy, and consistency of disclosure information and review of these results. Systems used include the in-house developed eCERT Database, Cayuse (corporate research system), Legal Files (used by EAO for managing related confidential information), and Microsoft Excel (for sharing disclosure analysis). Additionally, documentation supporting conflict oversight actions are not centrally stored and / or linked to individuals and cases or other attributes to help ensure oversight and management of conflicts is complete and consistent. Supporting documentation such as conflict approvals, eCERT related meeting minutes, review actions, and conflict management plans are stored in various separate data repositories (i.e., the aforementioned systems – eCERT database, Cayuse, and Legal Files as well as in email communications, computer hard drives and share drives, and restricted SharePoint sites). When making pertinent decisions regarding the existence of conflicts related to disclosed information, this data may or may not be readily available to the supervisory and other personnel who must understand and manage related conflicts of commitment and interest.

Due to the utilization of the aforementioned systems and record management processes, various disconnects, that are not limited to the below examples, between reviewers may occur and negatively impact the ability to understand, address, and manage any subsequent conflicts.

The eCERT application is written in Hypertext Preprocessor (PHP) programming language using the Laravel framework and currently running on PHP 7.1.33, which is several versions behind the current PHP 8.0.16. PHP 7.1.33 is no longer receiving security updates as this version is generally at the “end of life” stage making eCERT upgrades and related process improvements challenging. Additionally, NAU ITS does not have a lot of PHP expertise on staff thereby exacerbating this challenge.

As an alternative, there are third party systems available that could be analyzed for possible eCERT replacement:

- COI-SMART
- Convercent
- GAN’s Integrated Compliance Management platform
- SAI360 is the leading provider of GRC, Learning, EHS, and Sustainability software
- Steele & Galvanize (Governance, Risk & Compliance In One Platform)
- Workday (Brown University facilitates its process using WorkDay)

Criteria: Business process automation results in better use of employee time; reduction of repetitive effort, manual workflows; reduction of data entry errors; and improvement of internal controls. To best manage potential conflicts, the individuals responsible for analyzing and / or managing conflicts and the employees to which they apply should have knowledge of all disclosure and related information, including conflict concerns that might be relevant to areas of the organization for which a real or potential conflict may have an impact.
Audit Results: Improvement Opportunities & Solutions

**Cause:** Identifying and managing potential and real conflicts at a complex organization like NAU is challenging given the various operations for which critical conflicts may arise (e.g., employee / faculty / student relations, procurement, and research). Each of these areas develops the processes needed to achieve their goals, not always with consideration for how that may or may not affect other areas of the university. Understanding and addressing the impact on other operations may not always be the top priority, especially given the time and effort necessary from departments with limited resources. Additionally, as related to the in-house developed eCERT system, NAU has struggled to maintain the expertise to program the PHP system and resource limitations impact the ability to prioritize either upgrading or replacing the system.

<table>
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<tr>
<th>DEPT</th>
<th>DISCONNECT</th>
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<tr>
<td>OSP</td>
<td>There is no interface (batch or otherwise) that updates disclosures made in Cayuse to eCERT or vice versa to ensure all research conflict-related disclosures are available to appropriate supervisors in one central place and when needed. A notable challenge with this interface is that Cayuse collected disclosures are for every grant proposal submitted by a researcher, whereas the eCERT is an annual cycle for all employees. This results in researchers completing disclosures multiple times in some cases in both Cayuse and eCERT. The research compliance officer currently attempts to manually identify disclosure matters that require update and informs applicable faculty when updates are required.</td>
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<tr>
<td>EAO</td>
<td>Monthly, HR team members generate an Excel spreadsheet and deliver it to the EAO office for review via email. However, the EAO office team members do not utilize it because they have established their own process accessing the eCERT database subset directly. EAO addresses more personnel-specific conflicts like consensual adult relationships between faculty and students and a variety of other personnel-specific issues. While keeping this information separate supports certain regulatory compliance requirements, the nature of such identified and managed conflicts might be important in the context of reviewing other disclosures for the same individuals. Currently, EAO analysis is completely separate from other eCERT disclosures - system updates could allow for the sharing of generalized EAO analysis so supervisors analyzing disclosures would know if they needed to update EAO or otherwise see conflicts more readily. For example, two employees report their relationship and related issues to EAO but not in their eCERT or a supervisor is aware of employee relationships in their department and adds notes to a conflict management plan; however, since the employees did not disclose it EAO is not aware. Another example might include a supervisor not being aware of a consensual relationship whereby the employee is having a relationship with an individual whose family owns a large research sponsor that might represent a conflict that otherwise goes unidentified.</td>
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**Effect / Impact:** Manual process hand-offs where a single system or system interfaces are not evident include paper printing, routing, and approvals, which can contribute excess burden on support staff responsible for COI-related tasks, result in unintended errors, and lack audit trail for subsequent verification. This can be inefficient, time consuming, and lead to loss of information in the process resulting in poor COI management processes that can further lead to Title IX violations and violations of EEOC laws, asset misappropriation, and fraud resulting in government fines, lawsuits, damage to university reputation, etc.

**3. Updating the NAU Conditions of Faculty Service to be better aligned with conflict of commitment and interest related policies and procedures can improve compliance with NAU conflict disclosure requirements and help reduce the likelihood of significant conflicts of interest.**

**Solution:** The Conditions of Faculty Service (COFS) will be reviewed and updated in the coming fiscal year 2023, and these improvements will be addressed accordingly.
Audit Results: Improvement Opportunities & Solutions

Responsible Parties:
Provost, EVP Academic Affairs
VP Human Resources
VP Research

Implementation Date:
June 30, 2023

DETAILS:

Condition: The following section from the NAU Conditions of Faculty Service “ABOR 6-705 and other NAU policies referring to Conflict of Interest or Commitment apply to all periods of time under contract when full-time service is expected and excludes holidays, and periods between contracts (i.e., summers for academic year faculty.)” is providing an opportunity to not disclose receiving funds in the summer from a vendor or subcontractor that NAU provides funds to on a sponsored project overseen by the same faculty member. This section is conflicting with the general purpose of eCERT reporting objectives and general NAU’s Standards and Expectations of Conduct guidelines. While faculty and certain other positions are able to maintain these other than full-time year-round work schedules and even compensation schedules, what they do on their off time is no different than what an employee might do on their off time on weekends and vacation. While it may be acceptable to do, it should be disclosed since if there is a conflict it will need to be managed up to and including no longer permitting the employee to continue in that relationship, activity, etc.

Criteria: Policies that involve complex sets of goals and the means to achieve them should be precise, clear, and free of conflict to promote uniformity across the organization.

Cause: Conflicting policies related to conflict management processes across various parts of the organization can hinder the ability to successfully mitigate conflicts of interest leaving them unaddressed. See also IO 2 regarding improving CERT oversight, which could have previously identified this issue.

Effect / Impact: Conflicting policies related to conflict management processes across NAU can hinder the ability to successfully mitigate conflicts and leaving them unaddressed can potentially lead to Title IX violations and Violation of EEOC Laws, loss of research funds, asset misappropriation, and fraud resulting in government fines, lawsuits, damage to university reputation, etc.

4. Providing access to applicable conflict of interest disclosures and conflict management plans by NAU’s Institutional Review Boards who provide oversight for research projects would enhance NAU’s ability to mitigate conflicts in research activity.

Solution: The eCERT management team and Research Compliance Office will create reporting to the NAU Institutional Review Board (IRB) and the Institutional Animal Care and Use Committee (IACUC), detailing the latest disclosures and conflict management plans related to researchers to ensure IRB/IACUC awareness of the latest conflicts when reviewing proposed and ongoing research.
### Audit Results: Improvement Opportunities & Solutions

**Responsible Parties:**
- VP Human Resources
- VP Information Technology and Chief Information Officer
- AVP Research Compliance

**Implementation Date:**
- 12/31/2022

**DETAILS:**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Financial disclosures of PI’s that require a review by the IRB or IACUC are not being placed in the Cayuse file or otherwise formally and consistently communicated to the IRB and/or IACUC.</th>
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<tbody>
<tr>
<td>Criteria</td>
<td>According the US Department of Health &amp; Human Services, Office for Human Research Protections, Financial Conflict of Interest: HHS Guidance (2004), “IRBs are also responsible for ensuring that members who review research have no conflicting interest.” Source URL: <a href="https://www.hhs.gov/ohrp/regulations-and-policy/guidance/financial-conflict-of-interest/index.html">https://www.hhs.gov/ohrp/regulations-and-policy/guidance/financial-conflict-of-interest/index.html</a></td>
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<tr>
<td>Cause</td>
<td>The eCERT process has not yet matured to this level. IRB is not able to review/mitigate the COI disclosures submitted by research faculty due to a lack of alternative processes to deliver COI related information to IRB.</td>
</tr>
<tr>
<td>Effect / Impact</td>
<td>Unaddressed COI disclosures of research faculty can potentially lead to regulatory compliance lapses, loss of research funds, asset misappropriation, and fraud resulting in government fines, lawsuits, and damage to university reputation.</td>
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5. Designing effective eCERT questionnaires and ensuring these questions are updated timely to warrant relevance and clarity can be essential when capturing events that conflict with NAU policies and standards to achieve appropriate conflict mitigation processes.

**Solution:** Periodic review and modification of eCERT questions based on organizational changes and learning experiences, and for applicable industry changes, on predetermined intervals will be included in these periodic reviews.

**Responsible Parties:**
- VP Human Resources
- AVP Research Compliance

**Implementation Date:**
- 12/31/2022
Audit Results: Improvement Opportunities & Solutions

**Condition.** We performed a review of each eCERT question and documented the following recommendations in additional documents available upon request (see also Exhibit A at the bottom of this report for a more detailed analysis of the current eCERT questions):

- The definition of “relatives” for eCERT purposes appears incomplete / out of date.
- Question focus is primarily on individuals with traditional employment relationships to NAU and may thereby exclude individuals paid in-kind or otherwise who might also pose the potential for detrimental conflicts of commitment or interest, such as students paid via tuition waiver to perform duties that otherwise warrant their need to complete annual eCERT disclosures.
- Research definitions for PI and CO-PI may require updates to ensure all applicable researchers are completing eCERT and / or Cayuse system disclosures.
- There may be benefit to adding additional questions to capture other relationships or interests not addressed in the existing questions but also not easily confined to a specific disclosure request.
- Due to recent National Security Memo 33 NAU should consider how to make sure people are disclosing events that can influence their organizational input (e.g., travel to foreign country for a meeting, etc.).

**Criteria:** According to the University of Wisconsin Best Practices in Survey Design regardless of their subject matter or objective, survey questions should be structured in a way that facilitates a respondent’s ability to properly comprehend and respond to the questions. A survey designer should aim to create a survey that is easy for the respondent to both understand and complete. Survey questions that are poorly worded, confusing, or contradictory are likely to generate unreliable data and suffer from low response rates, thus undermining the effort associated with designing and administering the survey. To that end, the respondent’s perspective should always be preeminent in survey design.

**Cause:** While there are various groups involved in the eCERT review process, there is no periodic, coordinated effort across these groups to ensure the eCERT process remains current in addressing related risks.

**Effect / Impact:** Omitted/Incorrectly presented information due to poorly designed questionnaires during eCERT submission limits NAU’s ability to facilitate a proper conflict mitigation process leaving conflictual arrangements unmitigated which can potentially lead to Title IX violations and violations of EEOC laws, asset misappropriation, and fraud resulting in government fines, lawsuits, damage to university reputation, etc.
Exhibit A
Potential Disclosure Survey Questionnaire Improvements

I. Additional questions to consider:

- Adding questions regarding disclosing events that can influence their organizational input as it relates to recent National Security Memo 33 (e.g., travel to foreign country for a meeting, etc.).
- A question to collect information regarding unpaid commitment (unpaid internship, volunteering activities, etc.) with unrelated entities that are providing services or goods to NAU.
- Adding a separate question regarding ownership or interest by the person disclosing or any relatives in a company and requiring entering a company’s name and contact information, nature of business, and any affiliation with NAU or any NAU Affiliate.
- Adding a question to inquire whether gifts or gift cards were received from NAU service or good providers or NAU Affiliates to the employee disclosing or their relatives.
- A question allowing NAU employees, contractors, etc. to anonymously report prohibited activities performed by other NAU employees. To accomplish this, a list of prohibited activities should be created for reference. The following examples were obtained from Brown University of Rhode Island:
  - Hiring/supervising a family member as an employee
  - Receiving remuneration from the university and an outside source for identical services or activities without approval from your supervisor
  - Using privileged university information for personal gain, or assisting an outside organization in obtaining a preferred position with respect to such information
  - Authorizing a consulting contract for a family member
  - Advocating for or requesting employment at NAU for a family member
  - Advocating for a family member to do business with a staff member who you directly or indirectly supervise
  - Soliciting personal gifts from a donor, prospective or former student or parent, or others with whom there is a potential or existing business or professional relationship
  - Authorizing university-paid travel for a family member
  - Voting on the award of university business to a vendor in which you have a significant financial interest or by which you are employed
  - Authorizing a donation to or purchase from an organization on which board you serve
  - Using the university name, likeness, or logo other than in the context of university responsibilities
  - Using university resources, including the nau.edu email account, when conducting political activities or while holding public office
  - Receiving and keeping personal gifts in excess of an undetermined value
  - Investing via personally owned stock in a privately held business venture of a subordinate, student, or trainee
Exhibit A
Potential Disclosure Survey Questionnaire Improvements

II. Evaluate/revise the following questions:
   a. Public Office or Board Membership:
      o Add specifications and examples as this question currently requires reporting of any Board
        relation (e.g., parent-teacher association).
      o Add separate requirement for researchers to include examples (i.e., scientific advisory
        boards, etc.)
      o Expand this question to inquire if relatives also provide such service or direct consultative
        services.
   b. Relatives at NAU:
      o The current wording defining relatives does not cover domestic partner, stepparents,
        stepchildren, guardian and ward, or another member of one’s household.
   c. Sponsored Projects:
      o The definition of Significant Financial Interest (SFI) does not include the following types of
        financial interests that can be important for NAU to consider salary, royalties or other
        remuneration paid to an investigator from an institution by which the investigator is
        currently employed or otherwise appointed. This includes:
          ▪ Intellectual property rights assigned to the institution and agreements to share in
            royalties related to such rights
          ▪ Any ownership interest in the institution held by the investigator if the institution is a
            commercial or for-profit organization
          ▪ Income from investment vehicles such as mutual funds and retirement accounts, as
            long as the investigator does not directly control the investment decisions made in
            these vehicles
          ▪ Income from seminars, lectures or teaching engagements sponsored by a federal,
            state or local government agency; an institution of higher education as currently
            defined at 20 U.S.C. 1001(a); an academic teaching hospital; a medical center; or a
            research institute that is affiliated with an institution of higher education
          ▪ Income from service on advisory committees or review panels for a federal, state or
            local government agency; an institution of higher education as defined at 20 U.S.C.
            1001(a); an academic teaching hospital; a medical center; or a research institute that
            is affiliated with an institution of higher education
      o In addition to a PI or CO-PI mentioned in the question, an NAU Administrator can also
        submit and obtain grant support regardless of being a PhD. Submitting a grant proposal
        and winning an award could technically make this individual a PI without requiring a
        disclosure.
      o This question appears lengthy and difficult to follow due to the massive amount of
        information condensed within it.
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