Medical Laboratory Technician Program

The Medical Laboratory Technician (MLT) program is taught over a 64-week period or four semesters. Students are required to have a semester of pre-requisites prior to acceptance into the program. The student must have a GPA of 3.0 for acceptance into the program and maintain a 2.67 throughout the program. At the end of the first semester, students are required to complete a clinical externship. The USU Medical Laboratory Technician program aligns the didactic courses with the national core curriculum developed by the American Society for Clinical Laboratory Sciences (ASCLS). This is the national organization that governs certification in the field.

A strategic plan for learning along with a self-study initial evaluation and application for accreditation has been submitted to the National Accreditation Agency for Clinical Laboratory Sciences (NAACLS). Unlike our other accrediting bodies, wherein the program is considered under review once the application is submitted, NAACLS requires a self-study report and if approved, will arrange schedule for site visitation and review of the program for accreditation. The strategic plan is attached. The USU MLT program has submitted the required self-study and is currently awaiting a response. In order to obtain and maintain accreditation, required outcomes are set forth by NAACLS. Student assessments for required courses are embedded in the course and the program must track the students outcomes listed on the attached strategic plan.

The program learning objectives as set forth by core curriculum guidelines and requirements are as follows:

**Disciplinary Knowledge**

1. Apply the knowledge and skills of identifying and correcting laboratory errors during pre-analytical, analytical and post-analytical phase.
2. Demonstrate a working knowledge of state and federal laws pertaining to processing, handling and dispensing of medications including controlled substances.
3. Work independently and collaboratively, as well as being responsible for own actions.
4. Understand the regulatory agencies impacting health care and the laboratory.
Skills and Career Competencies

1. Conduct collection and preparation of clinical specimens for laboratory examination.
2. Practice and adhere to effective infection control procedures.
3. Determine commitment to the patient and profession by displaying ethical and moral attitudes required for interacting with patient, coworkers, and the community.
4. Demonstrate active and engaged listening skills.
5. Display appropriate communication through verbal, written, and electronic means.
6. Perform routine clinical laboratory tests (clinical chemistry, microbiology, immunohematology, immunology/serology, hematology, coagulation and urinalysis).

All courses for the program listed above have assessments embedded in the course. Not only does the program have a strategic plan, all health profession programs utilizes a living document known as the Program Effectiveness Plan (PEP) to track program outcomes and monitor the effectiveness of the programs. Program satisfaction is gauged through surveys sent to the following groups: current students, graduate students, clinical affiliates and employers. Responses are graded on a Likert scale of 1-5 (5 being the highest). The goal for program satisfaction is a 3 or above on a Likert scale on all surveys. Student responses as well as comments are taken seriously and reviewed by the faculty and Health Professions director. Any responses below a “3” on the Likert scale are evaluated and an action plan for correction is developed. Surveys are sent out the third week in February and the third week in October as Health Professions programs run fall and spring semesters. Once the surveys and outcomes are tabulated, and a correction plan is developed for student concerns and low satisfaction levels, the results are entered into the PEP and presented to the program’s advisory board for their review and recommendations. If a correction plan is agreed upon by the board, faculty and HP program director, then the plan is implemented and the results of the plan are reported on during the next advisory board meeting. This allows time for the plan to be evaluated after implementation for at least six months as the advisory board meetings are held bi-annually in the spring and fall.

The USU Medical Laboratory Technician Program PEP is attached.
Medical Laboratory Technician Program
Blanding and Eastern Campus
Strategic Plan
June 21, 2020

The Role of the Program Within the Community

San Juan County, UT, is the largest county in Utah. Health care here is classified as rural and frontier medicine. There are two major health care entities which include: SAN JUAN HEALTH CARE DISTRICT and UTAH NAVAJO HEALTH SYSTEMS, INC. San Juan Health Care District owns and operates a hospital in Monticello, UT that incorporates and visiting clinical specialties and operates clinic sites in Monticello, Blanding, and Dove Creek, CO. San Juan County Hospital in Monticello belonging to the San Juan Health Care District. Monticello hospital has surgical services and an in-house laboratory and serves as a preceptor site for USU Blanding MLT students.

Utah Navajo Health Systems is part owner of Blue Mountain Hospital in Blanding, UT. It owns and operates clinics in Navajo Mountain, Montezuma Creek, Monument Valley and Blanding, UT. The Montezuma Creek Clinic has just been rebuilt to include a modern, state-of-the-art 53,000 square foot facility that includes an in-house lab and the new Blanding Family Practice state-of-the-art 43,000 square foot facility included an in-house lab opened in August 2019. The Navajo Mountain and Monument Valley clinics are also expanding and the Monument Valley clinic has an onsite lab as well. Altogether Utah Navajo Health Systems, Inc. has three labs that preceptor USU Blanding MLT students.

Moab Regional Hospital, 70 miles north of Blanding, also employs a full-time laboratory personnel and has agreed to sponsor our students. Many of our students are Native American students. Historically, they do not wish to leave their families on the reservation and frequently return to their communities to serve their people.

USU Blanding also has clinical affiliation agreements with Sage Memorial Hospital in Ganado, Arizona and Southwest Memorial Hospital in Cortez, Colorado. Carbon and Emery Counties sit in the eastern part of the State of Utah and combined, the two counties have a population base of approximately 30,000 residents. Health care is classified as rural medicine in these counties. There is one hospital located in Price, UT, and several health care clinics in Price, Emery, Castle Dale, and Green River, Utah.

The Utah State University MLT Program is the only program located in the area with the next closest program located 155 miles to the north in Ogden, Utah. There is a need for medical laboratory technician in the area. There are also many job opportunities within the State of Utah, with many health care facilities calling the program to inquire about new graduates.

With the large number of healthcare facilities in the area and letters of support from all entities listed, students have not had any problems securing experiential training sites within these facilities. The program has received calls for graduates even before we started graduating students from the program.

Students are encouraged to be mindful of civic responsibilities and community service and opportunities for such activities are provided and required. Students participate in a community STEAM festival that is sponsored by Utah State University. Students provide tours of the Medical Laboratory Technician labs and classrooms and demonstrate techniques such as microscopic exam and explain the typical work day in the life of a medical laboratory technician in a laboratory setting. Activities that pertain to the MLT role are developed so that the public can participate.
MLT students also participate in the annual flu vaccine clinics when invited ensuring the stock is accounted for, recording lot numbers, expiration dates and suppliers. They help in screening patients and with patient flow.

The MLT students also participate with other programs in mock drills and disasters demonstrating how all health professions interact in the event of an emergency. This helps with training of all programs.

Medical laboratory technician students at USU participate in a clothing drive to support USU Global Health efforts while some volunteer to travel in the summer with the Global Health Practitioner Outreach Program on mobile health clinics providing health care and pharmacy services to some of the most impoverished countries in the world.

**Long-term Program Goals**

1. Develop a quality and sustainable program that is career focused and will fill the needs of the community with regards to medical laboratory technician jobs.
2. Utah State University (USU) Medical Laboratory Technician (MLT) Program will lead to employment of our graduates as entry-level medical laboratory technicians upon completion of the program.
3. The program will enhance the reputation of the University for learning, discovery and engagement.
4. The program will strengthen the recruitment, retention, graduation and placement of students and as part of that goal decrease the faculty to student ratio.
5. To foster new partnerships both internally and externally.

**Specific Measurable Objectives**

Utah State University Medical Laboratory Technician program uses the following required criteria as outcome measures of the effectiveness of the program:

- 70% of those entering the Medical Laboratory Technician Program will graduate from the program.
- 70% of graduates will find positive placement in employment as a MLT or in a related field.
- 75% of graduates sitting for the national certification exam will pass to become certified MLTs.
- 80% of graduate survey responders will "strongly agree" or "agree" when asked to rate the overall quality of their preparation as an MLT
- 80% of employers will "strongly agree" or "agree" when asked, "Overall is this graduate a well-prepared employee"?

**Strategies for Achieving the Goals and Objectives**

1. Create an advisory committee consisting of two community members, two medical lab technicians presenting an employed and certified MLT and an employer, a current MLT Program student, a graduate student of the MLT Program. Also included are: the USU Health Professions Programs Director, faculty members, MLT program director, a distance education specialist and the Health Professions Staff Assistant.

The purpose of this committee is to review specific objectives, address program outcomes, and advise as the need for MLTs in the community, as well as the response in the community to our program, and review curriculum so that it is current and in keeping with national standards.
2. USU MLT Program will develop strong and supportive working relationships with our clinical preceptors so that our students receive excellent training in the clinical and lab setting. Clinical Affiliation Agreements will be in place prior to our students starting their clinical preceptorship so there is no question as to the role of preceptor and student, and the goals are clearly defined. Faculty will make site visits prior to signing the Clinical Affiliation Agreements with the facility to ensure that the site is able to provide learning opportunities that meet the national requirements of skills competencies.

3. The program will utilize student surveys to evaluate student satisfaction with the program.

4. The program will utilize employer surveys to evaluate their satisfaction with our graduate students.

5. The program will track graduation rates and pass rates of our students taking the national certification exam.

Schedule for Analyzing and Evaluating the Plan

The reporting period for which all metrics are measured will be July 1 through June 30, in keeping with the current cycle of all of USUs Health Professions Program reviews. Surveys, graduation rates and certification pass rates will be analyzed. Curriculum review will also take place annually. The Medical Laboratory Technician Program under the direction of the program director, faculty and in conjunction with the advisory board will review the program effectiveness plan at the end of the annual reporting period, meeting minutes will be recorded and review items will include:

- Summary of data collected
- A discussion of the progress made over the past year
- Suggested changes and revisions
- Direction of program for the coming year

Information obtained through this review process will be shared with our advisory committee and placed on the agenda for the fall advisory board meeting.