Minnesota Dual-Training Pipeline Competency Model for Health Care Services Occupation: Surgical Technologist

Employer	Occurrentian Specific Competencies*
Requirements	Occupation-Specific Competencies*
	 Application of aseptic and sterile technique Prepare patients for surgery Maintain accuracy of surgical counts Preoperative preparation for surgical procedure Provide technical assistance to surgeons and medical personnel during operation Complete cleaning and turnover of operating rooms Teamwork and strong communication skills Knowledge of medication safety, laser and ESU safety and sharps safety Maintain environmental practices Maintain supply of fluids and medications for use during operations Knowledge of decontamination and sterilization processes
	ndustry-Sector Technical Competencies*
Strong oral and writte	n communication Patient and family-centered care Disease
Practice ethical responsi	ibility Surgical pharmacology Medication Infection control
Operating room techniq	ues Sterile processing Health and safety promotion Diagnostic procedures
	Industry-Wide Technical Competencies
lealth care Heal delivery informa	ation industry ethics regulations conditions systems
	Workplace Competencies
I leamwork I	Workplace undamentalsPlanning and organizingWorking with toolsChecking, examining to detailProblem examining and to detailWorkplace with toolsAttention and to detailexamining and decision recordingsolving and decision making
	Academic Competencies
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ling Information d literacy	MathematicsScience and technologyCommunication: listening and speakingCritical and
d literacy	MathematicsScience and technologyCommunication: listening and speakingCritical and analytic thinkingBasic computer skills
d literacy	Mathematics Science and Communication: Critical and Basic listening and analytic computer

Based on: Health: Allied Health Competency Model Employment and Training Administration, United States Department of Labor, December 2011.

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*Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job training opportunities.

DUAL-TRAINING PIPELINE

Competency Model for Surgical Technologist

Surgical Technologist – An individual who assists in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. This person may help set up operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeon assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and other instruments.

Industry-Sector Technical Competencies

Related Instruction for dual training means the organized and systematic form of education resulting in the enhancement of skills and competencies related to the dual trainee's current or intended occupation.

- **Strong oral and written communication** Ability to exchange information in writing, speaking, and listening, cognizance of both verbal and non-verbal communication.
- **Patient and family-centered care** Understand the human values necessary to implement patient and family-centered care.
- **Disease** Understand any deviation from or interruption of the normal structure or function of anybody part, organ, or system.
- Infection control Understand and practice infection control to ensure a sanitary environment for clients. Knowledge of gowning and gloving, waste disposal and infection containment procedures.
- **Medication** Understanding of medication classifications, usages, and side effects.
- **Surgical pharmacology** Knowledge of how drugs and medications used in surgery treat patients and the effects of these substances.
- **Practice ethical responsibility** Understand principles of medical ethics and how they apply in professional standards.
- **Operating room techniques** Ability to provide technical assistance to surgeons, surgical nurses, anesthesiologists, and other medical team during surgery.

- Sterile processing Ability to clean and sterilize devices used in medical procedures.
- Health and safety promotion Proficiency with what constitutes good health, and knowledge of how to access support and services to maintain/return good health.
- **Diagnostic procedures** Knowledge of medical tests performed to detect, diagnose, or monitor diseases and determine a course of treatment.

Occupation-Specific Competencies

On-the-Job Training (OJT) is hands-on instruction completed at work to learn the core competencies necessary to succeed in an occupation. Common types of OJT include job shadowing, mentorship, cohort-based training, assignment-based project evaluation and discussion-based training.

- Application of aseptic and sterile technique Ability to maintain a proper sterile field during surgical procedures.
- **Prepare patients for surgery** Ability to correctly identify patients, surgical site, and procedure.
- Maintain accuracy of surgical counts Understand how to prepare necessary instrumentation and equipment for surgical case. Proper care, handling and use of instrumentation.
- **Preoperative preparation for surgical procedures** Ability to assist surgical team to gown and glove. Perform in scrub and first assistant role.
- **Provide technical assistance to surgeons and medical personnel during operation** Understand how to facilitate the safe and effective application of technologies.
- **Complete cleaning and turnover of operating rooms** Understand the complex task where numerous resources must be synchronized in order to achieve efficiency in cleaning and turnover.
- **Teamwork and strong communication skills** Ability to work closely and cooperatively with peers while communicating effectively to produce positive results.
- Knowledge of medication safety, laser and ESU safety and sharps safety Ability to utilize the latest technology and clinical guidelines for safe usage.

- **Maintain environmental practices** Understand how to implement steps to reduce the impact of surgery on the environment while not compromising quality of care.
- Maintain supply of fluids and medications for use during operations Understand the importance of having available fluids and medications while maintaining a proper sterile field during surgical procedures.
- Knowledge of decontamination and sterilization processes Ability to clean and disinfect surgical instruments according to established healthcare facility protocols.

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