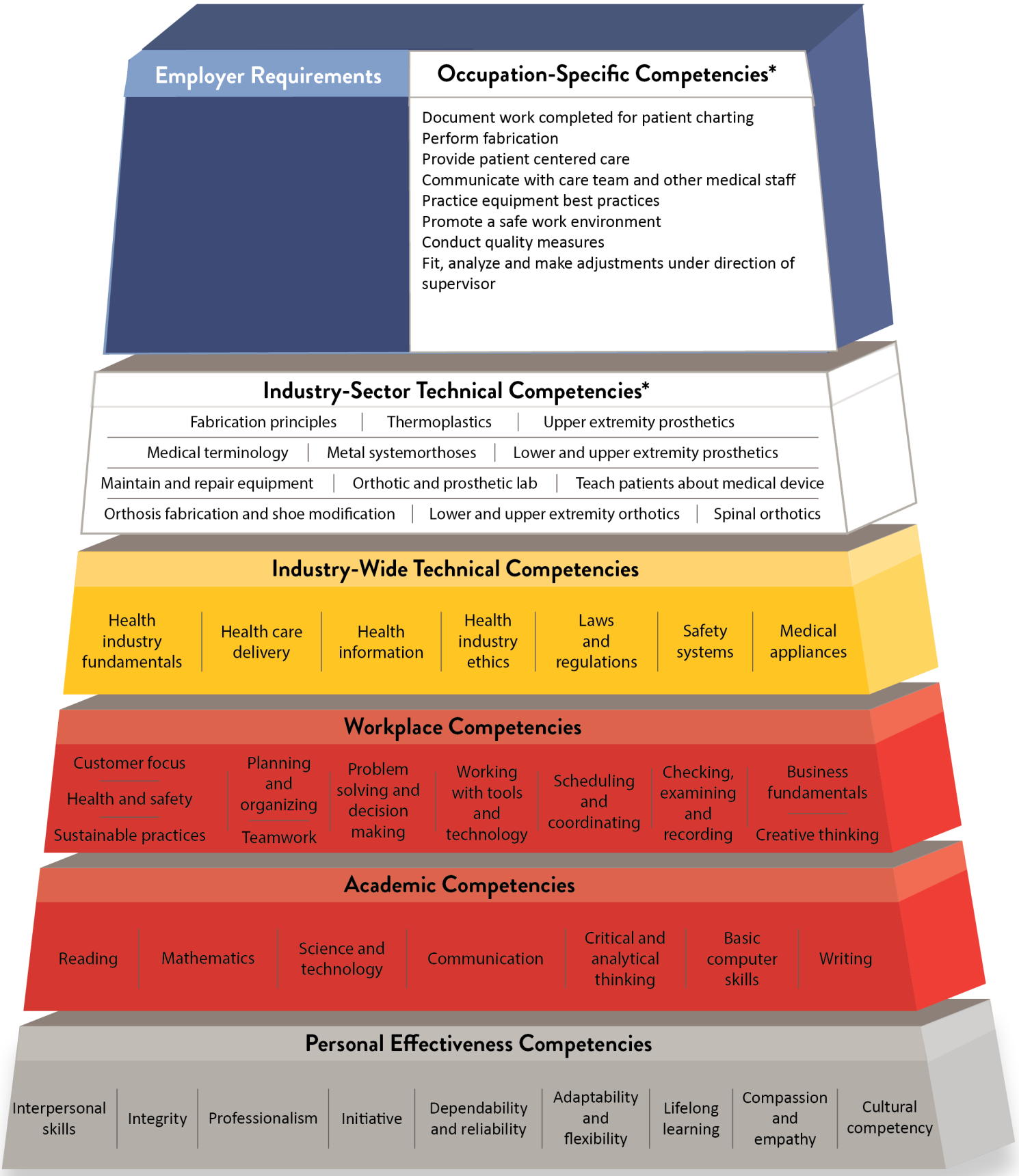
Minnesota Dual-Training Pipeline
Competency Model for Health Care Services
Occupation: Orthotic and Prosthetic Technician



Based on: Fundamentals of Health Care Competency Model, Employment and Training Administration, United States Department of Labor, September 2018. For more detailed information about competency model creation and sources, visit dli.mn.gov/business/workforce/health-care-services.

Competency Model for Orthotic and Prosthetic Technician

Orthotic and Prosthetic Technician – An individual who works at a health care facility and provides technical support by fabricating, repairing, and maintaining orthotic and prosthetic devices.

*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.

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.

- **Medical terminology** – Knowledge of medical terms.
- **Teach patients about medical device** – Understand how to inform patients about best practices for their medical device.
- **Orthotic and prosthetic lab** – Understanding of how to operate safely in an orthotic and prosthetic lab to be able to create medical equipment. Knowledge of tools, equipment, and materials most often used in orthotic and prosthetic fabrication and fitting.
- **Maintain and repair equipment** – Know how to properly maintain and / or repair the medical device to ensure optimal success for the patient.
- **Orthosis fabrication and shoe modification** – Understand how to do orthosis fabrication for many parts of the body. Understand how shoe modification and external forces generated by use of an orthotic device can impact the patient.
- **Metal systemorthoses** – Understand the theories and skills required for the fabrication and fitting of metal system orthoses for things such as ankle-foot orthoses. Understand how to account for deformities and torsion.

- **Lower and upper extremity prosthetics** – Understand the medical specialty that focuses on design, fabrication, and fitting of limb-loss and limb-difference components.

- **Thermoplastics** – Understand how to vacuum form thermoplastic materials over a variety of models to create orthoses.

- **Lower and upper extremity orthotics** – Understand the medical specialty that focuses on the design and application of orthoses which support or correct the function of a limb or the torso.

- **Fabrication principles** – Understand how to create and fabricate orthotic and prosthetic medical equipment.

- **Upper extremity prosthetics** – Understand upper extremity amputations, prosthetic measurement, and design approaches for patients with these amputation levels.

- **Spinal orthotics** – Understand the design and application of devices used to relieve back pain and to maintain spine support to treat varying spinal conditions.

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.

- **Document work completed for patient charting** – Able to complete workflow section of the fabrication form to indicate ownership and completion of a specific portion of the work order process.

- **Perform fabrication** – Understand fabrication of various orthotic and/or prosthetic devices according to company standards with the expectation of keeping abreast of all new fabricating techniques.

- **Communicate with care team and other medical staff** – Ability to communicate directly with orthotist, prosthetist and other staff to clarify information provided and/or lacking on the fabrication form.

- **Practice equipment best practices** – Understand how best to utilize proper materials, equipment, and methods in a safe and efficient manner to complete projects on time.

- **Promote a safe work environment** – Ensure lab and individual work area are regularly cleaned and kept orderly to promote a safe and efficient workplace while adhering to Occupational Safety and Health Administration (OSHA) requirements.

- **Conduct quality measures** – Understand the measures required for orthoses to be functional, safe, cosmetically pleasing and matching the fabrication criteria provided on the fabrication form.

- **Fit, analyze, and make adjustments under direction of supervisor** – Understand how to help fit a device for a patient as well as assess how it is working and if necessary, make adjustments to the device per supervisor direction.

- **Provide patient centered care** – Demonstrate a friendly approach in the evaluation, repair and adjustment of orthoses and prostheses.

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