



STARS Prehospital and Transport
Medicine Advanced Learning
Program Curriculum, Academic
and Rotational Requirements



 **STARS**[®] 40

Overview

The STARS PTM ALP is an intensive six- to nine-month program designed to provide trainees an avenue to learn and experience in depth the prehospital aeromedical environment while working with highly trained teams across the STARS organization. A minimum experience of six months is required. Extension to nine months including senior PTM rotations has been found to be of high value to learners to help consolidate transport and logistical skills.

Trainees predominantly complete rotary flight shifts with STARS and our Air Medical Crew in addition to fielding transport calls under direct supervision of Transport Physicians. There are opportunities to complete fixed wing and ground missions as appropriate as well as work at different bases across the organization to provide a fulsome experience.

Academic sessions are held to work through common prehospital cases and best practices. Trainees also have access to STARS world-class training programs such as Advanced Skills Institute, Ventilation and Airway courses, Human Patient Simulation, online Moodle learning, Rural Simulation Outreach, and more.

Schedule

3 Blocks	Home Base PTM Rotations 10 - 12 Flight shifts 2 - 4 ED shifts
2 Blocks	Alternate Site PTM Rotations Work at any of the other STARS Bases. Flight shifts only.
1 Block	2 weeks Fixed Wing / Ground EMS 2 weeks Elective / Flex Time
3 Blocks	Senior PTM Rotations ~6 Flight shifts, ~30 hours home call ~6 ED shifts

An example schedule for a trainee in Edmonton:

- Block 1 – EDM PTM
- Block 2 – EDM PTM
- Block 3 – 2 weeks Grande Prairie, 2 weeks Saskatoon
- Block 4 – EDM PTM
- Block 5 – 2 weeks Regina, 2 weeks Winnipeg
- Block 6 – EDM PTM Senior Block
- Block 7 – Holiday block, home program
- Block 8 – 2 weeks FW / GEMS, 2 weeks elective
- Block 9 – EDM PTM Senior Block
- Block 10 – EDM PTM Senior Block
- Blocks 11 – 13 – Back to home program

This is the average experience for our trainees; however, flexibility is possible, and an exact schedule can be created and agreed upon by a successful applicant, the PTM ALP leadership team, and the applicant's home program leadership.

Rotation objectives

1. Home and alternate site PTM

- a. Medical Expert
 - i. Exposure to scene call patient management and stabilization, responding to various medical emergencies as required
 - ii. Develop an approach and expertise in prehospital traumatic injury management
 - iii. Gain exposure to working in austere and limited resource conditions
 - iv. Exposure to various interfacility transportations responding to rural hospitals to help with management, stabilization and transport of critically unwell patients
 - v. Gain intimate understanding of the medical capabilities that STARS offers, including the host of medications and equipment available
 - vi. Understand different medical capabilities of various prehospital providers (Fire, BLS, ALS, etc.)
 - vii. Understand the Critical Care Medical Control Protocols that STARS AMC are guided by
 - viii. Understand the capabilities and use of the STARS transport ventilator, Hamilton T1, as well as STARS ventilation protocols
 - ix. Gain exposure and expertise with the STARS airway protocols as well as use of the transport C-MAC and fiberoptic scope where available
 - x. Understand the use of prehospital blood transfusions and STARS massive hemorrhage protocol
 - xi. Understand aeromedical physiology and its potential effects on transport patients depending on the modality utilized
- b. Communicator
 - i. Begin call-taking to provide expert advice both for logistics of scene calls as well as interfacility transports
 1. We expect most trainees will “listen in” to calls for the first 2-4 weeks and then transition into being the primary on the call always with Transport Physician oversight
 - ii. Work closely with both Air Medical Crew (AMC) and other healthcare providers to establish good CRM principles
 - iii. Learn the process and benefit of radio communication in transport, and how this is utilized by different organizations to aid in logistics and patient care
 - iv. Document clinical encounters using STARS ePCR/written records in an accurate, complete, timely and accessible manner
- c. Collaborator
 - i. Integration as a valued member of the STARS team by working closely with our AMC and Pilots.
 - ii. Gain a deeper understanding of transport logistics and how ground, fixed wing, and rotary aeromedical resources are utilized
 - iii. Aid in the decision-making process regarding dispatch of appropriate resources collaborating with 911 dispatch, EMS, and the Emergency Link Centre (or MTCC in Winnipeg)
 - iv. Work closely with sending facilities both online as well as in person when responding to interfacility requests

- v. Work closely with resources involved with scene response such as local Fire Departments, Search and Rescue, Royal Canadian Mounted Police, Emergency Medical Services among others
- vi. Demonstrate safe and timely handover of care using both verbal and written communication during patient transition to a different health care professional, setting, or stage of care.
- d. Health Advocate
 - i. Understand the differences in available prehospital support depending on location within the province as well as inter-province differences and how this may affect health outcomes
 - ii. Advocate for timely and appropriate use of resources depending on patient condition
- e. Leader
 - i. Understand the STARS administrative, research and educational structure by being involved in local projects
 - ii. Understand potential differences in administrative and educational structures at each STARS base by meeting with local leadership teams
- f. Scholar
 - i. Take part in PTM academic sessions working through common prehospital scenarios and best practices
 - ii. Required to complete both the STARS Ventilator course as well as Airway course
 - iii. Expectation to facilitate simulation sessions for AMC as well as occasional educational rounds as opportunities arise
 - iv. Exposure to regular STARS educational sessions such as Advanced Skills Institute, Outreach Simulation, and Online Educational Rounds
- g. Professional
 - i. Represent STARS as a leader in the prehospital setting
 - ii. Take leadership in a local STARS project in an area of interest
 - iii. Involvement in administrative committees as appropriate
 - iv. Adopt strategies that promote patient and crew safety, and understand reporting structure for safety events should these occur

2. Fixed Wing / Ground EMS

- a. Medical Expert
 - i. Gain an understanding of fixed wing and ground medical capabilities, as well as differences between BLS and ALS providers
 - ii. Assist management of ground and fixed wing transports
- b. Communicator
 - i. Opportunity to work in conjunction with 9-1-1 dispatch centers or Online Medical Control (OLMC) depending on the site
- c. Collaborator
 - i. Work closely with ground and fixed wing paramedics to understand their scope of practice

- d. Health Advocate
 - i. Continue to build knowledge on available resources and their capabilities for distribution of most appropriate resources
- e. Leader
 - i. Exposure to EMS leadership, and meetings where appropriate, to understand differences in administrative structure
- f. Scholar
 - i. Opportunity to be involved in paramedic teachings and/or simulation activities depending on the site
 - ii. Inclusion in ongoing medical control protocol development and refinement where appropriate
- g. Professional
 - i. Continue to represent STARS as a leader in prehospital medicine

3. Senior PTM

- a. Medical Expert
 - i. Build on existing expertise in prehospital resuscitation
 - ii. Refine ability to triage multiple simultaneous requests for HEMS services
- b. Communicator
 - i. Higher proportion of transport call-taking
 - ii. Develop aptitude in efficient communication to manage complex transport calls
 - iii. Develop skills to assist/coach other physicians or providers through resuscitation or procedures remotely
 - iv. Continuous development of skills regarding complex social interactions and conflict resolution
- c. Collaborator
 - i. Work intricately with rural/sending physicians to provide care prior and during transport
- d. Health Advocate
 - i. Continue to build knowledge and expertise on scene call triaging, interfacility requests, as well as transport capabilities to advocate for the most appropriate use of resources
- e. Leader
 - i. Involvement in STARS executive leadership meetings as required such as ePCR development, Quality Assurance Committee, Medical Operations Management, etc.
- f. Scholar
 - i. Participate in Quality Assurance initiatives through the review of ePCR (mission charts) under supervision of Transport Physicians
- g. Professional
 - i. Further integrate into STARS administrative, educational or research capabilities with project work depending on each individual trainees' interests and expertise

Academic Requirements

1. PTM ALP Trainees will be expected to attend weekly academic sessions that are facilitated by attending Transport Physicians, with regular attendance from AMC and rotating STARS learners
 - a. The exact schedule will be released closer to PTM ALP start date after rotation schedules have been made
 - b. These sessions cover the STARS PTM Case Book. In addition, each week one PTM ALP trainee will be required to present a recent case for discussion with the group.
2. Each trainee will also be expected to contribute within STARS on a PTM project based on each trainees' interests. This can be along the lines of research, administration / leadership, or educational initiatives and the exact framework can be developed by each trainee and the PTM ALP leadership team.
3. Trainees are expected to complete STARS Ventilation and Airway courses during their training.
4. Trainees will have the option of completing other STARS Advanced Skills Institute (ASI) courses.
5. During Home Base PTM rotations trainees can be expected to complete a minimum of 2 academic teaching or simulation sessions throughout their training.
6. During Alternate Site PTM rotations each trainee is expected to work with local base educators to be involved in either a didactic teaching session for AMC, simulation sessions, or both depending on the circumstance and availability