The Saab Health Knowledge System (HKS) provides a set of C2IS functions tailored towards the planning and operation of a medical treatment and evacuation system within the battlespace.

The HKS provides support to both the pre H-Hour planning as well as on-going operational activities of the battlespace medical system across a number of Operations. This is achieved through a set of visual planning tools and displays that provide the following functions.

**Area of Operations (AO) Medical Planning**

- 3D GIS visualisation using industry standard map data formats and WMS servers.
- Definitions of TACEVAC routes, transport routes and calculation of route lengths.
- Display of restricted air and land space areas for movement.
- Modelling of casualty flows over routes given associated transport assets.
- Display of epidemiological information in the battlespace.

**Site Facility Planning**

- Detailed planning of the modules that comprise a NATO Role 1, Role 2, Role 2e and Role 3 medical facility (based on tented and containerised modules).
- Facility templates can be defined that enables faster planning of similar facilities.
- Definition of module types that can be used in different Role configurations.
- Visual placement and connection of medical modules to obtain a plan view of the complete facility, including interconnection planning.
- Equipment per module can be customised to meet mission requirements.
- Calculation of module and facility patient care rates, including surge capacities and associated personnel staffing requirements.
- Modelling of facility capacity given the planned AO TACEVAC routes.
- Definition of support services required to sustain the facility.
- Dynamic changes to the site in any area during the operation.
- Design of patient & materiel flows within a site.
Transport, Logistics & Sustainment Calculations

- Calculation of start-up and steady-state electrical, water and waste disposal demands.
- Site preparations required to support consumable and normal and hazardous waste management.
- Site transfer limitations (for personnel and materiel) for each mode.
- Calculation of load sheets and order-of-march for the transport of modules and equipment to the deployed area.
- Storage of PM and calibration information for equipment types.
- Calculation of PM and calibration requirements for given equipment utilisation.
- Design of patient & materiel flows between sites in accordance with the AO transport plan.

Medical Capability Situational Awareness

- Display of military situational information in MIL-STD-2525 symbology when available from external systems.
- Display of individual module capability and impacts on overall facility patient care rates.
- Monitoring of key health and essential services equipment.

Maintenance & Calibration Support

- Tracking of maintenance intervals, specialist maintenance requirements and calibration needs for equipment.

EHR

- HKS will interface to eHealth record systems to provide patient information. Treatments applied by a TRT en-route can be downloaded and provide patient information (such as JeHDI).

Patient & Staff Tracking

- Interface to BMS or TMS to obtain patient location and status (where provided).
- Tracking of designated key personnel within sites.

Service Support

- Scheduling of resources, appointments, pathology, dispensing recording, admittance and discharge and general artefact management.

Telemedicine Support

- Integration of remote PTZ video systems with VSM telemetry transmission.

The degree to which clinical and other data can be transmitted between sites and on-the-move is limited by the communications services available. Where additional bandwidth is required Saab can provide a suite of communications products to augment a customer’s current capabilities.