



## BACKGROUND

Vascular Injury Pathway (VIP) established as part of global surgery implementation by Hospital Tuanku Ampuan Najihah (HTAN) to facilitate a prompt management and quick transfer of vascular injury patients from Hospital Jempol (HJEM). Prior to introduction of VIP, the mean time for a patient suspected of vascular injury to reach HTAN from HJEM was 180 minutes (3 hours). VIP is created to reduce mortality and morbidity following increased number of vascular injury cases in Jempol.

|      | Num of Vascular Injury | Amputation | Mortality |
|------|------------------------|------------|-----------|
| 2019 | 8                      | 2          | 1         |
| 2020 | 5                      | 1          | 1         |
| 2021 | 12                     | 5          | 2         |
| 2022 | 9                      | 3          | 2         |

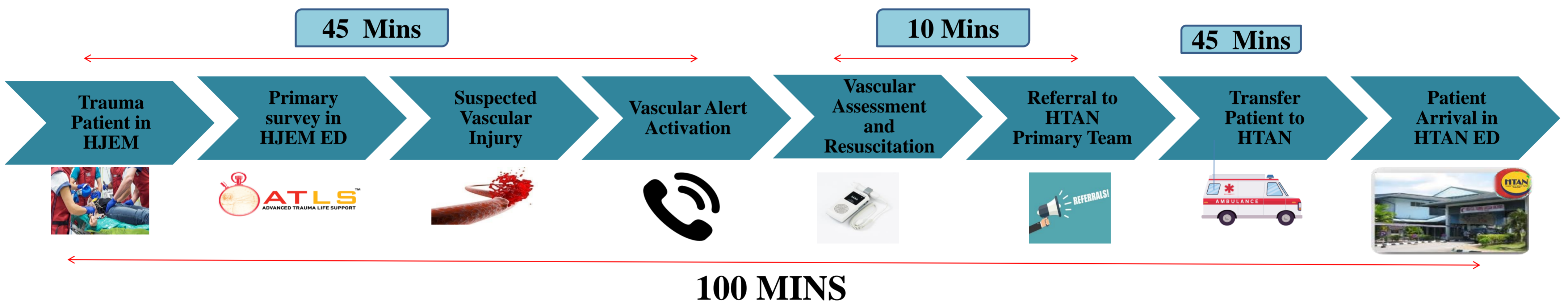


## METHODOLOGY

VIP is created through a team effort among general surgery, orthopedics, emergency, radiology and pathology departments. **VASCULAR ALERT** is the main component of VIP. Once vascular injury is suspected, Vascular Alert will be activated in HJEM.

- Team effort involving multiple departments
- Monitoring by top management
- Incorporation of supporting staffs from Medical Emergency Coordinating Centre (MECC)
- Expert opinion from hospital, state and national level to create pathway adherent to guidelines and local limitations
- Workshops for HJEM doctors
- Development of effective communication through VASCULAR ALERT
- Drill sessions to identify the pitfalls in implementation of VIP

- Alert HJEM doctors to help in resuscitation of vascular injury case in ED
- Alert HJEM radiographer to reach ED within 10 minutes
- Alert HJEM blood bank to standby blood products for resuscitation
- Alert MECC to standby for transportation
- Alert HTAN team to receive the patient



## RESULTS

Total Patients with Vascular Injury from HJEM

5



90 MINS



Mean Time of Transportation of Vascular Injury Cases from HJEM to HTAN

Outcome of Vascular Injury Cases Managed via VIP

- Revascularization in HTAN
- Revascularization in HTAN
- Revascularisation in Vascular Centre
- Revascularisation in Vascular Centre
- Amputation in HTAN

No Mortality

## CONCLUSION

Involvement of Vascular Centre in VIP

Introduce VIP in Hospital Tampin

The Way Forward

Continuation of Data Collection

Vascular Trauma Surgery in Hospital Jempol & Hospital Tampin

Access to timely and quality surgical care is the main goal of global surgery. We hope VIP will continuously help HTAN team to achieve this goal.