

## Eastern Health SLE initiative for outer metropolitan and rural clinical sites

### Background

Eastern Health (EH) is the second largest metropolitan public health service within Victoria. It is positioned within the Eastern Metropolitan Clinical Placement Network (EMCPN) which comprises a diverse range of health care organisations particularly a large contingent of community and primary health services.

The region is geographically large spreading to the rural fringe of the Yarra Valley and covering in excess of 3000 square kilometres.

As the only public health service in the region, the majority of EH staff reside within the catchment. The health service provides care to the community across the age continuum with services in midwifery, acute, subacute, rehabilitation, community, ambulatory, mental health and aged care.

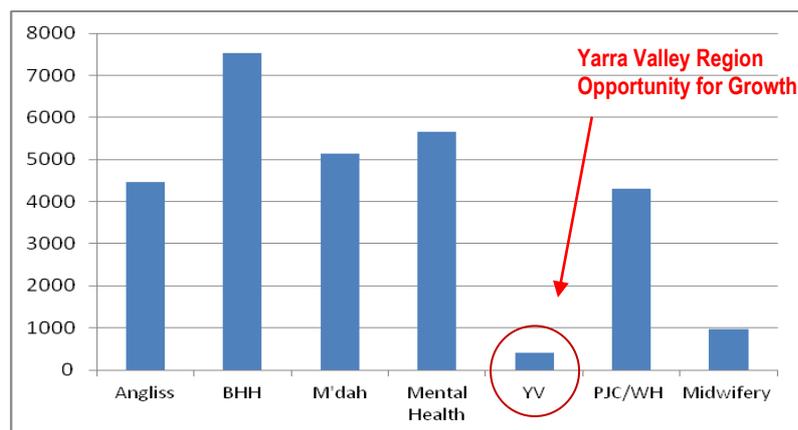
Providing quality education and training to all health disciplines, with applicability to local context and service, is a challenge when trying to balance resources and grow capacity of clinical supervisors to sustain growth in student placement opportunities. Through the EMCPN collaboration many organisations also identified a lack of education and training infrastructure, resources and educational personnel expertise.

### Problems and drivers

Within EH and the EMCPN there were a number of drivers informing this project:

- Underdeveloped partnerships between EH and the EMCPN clinical placement providers;
- Limited access to education and training equipment and resources which were predominantly located within the main acute sites (Box Hill and Maroondah Hospitals) of EH;
- Geographical spread creating professional isolation;
- Lack of systems and processes which facilitated interprofessional learning;
- Historical evidence that highlighted a reluctance of staff to undertake training outside or within close proximity to their base location of work;
- Limited capability of clinical educators/mentors to provide simulation-based education and training (SBET);
- Limited pre-registration student experiences and opportunity within the community and rural fringe of the catchment.

**Figure 1: 2011 nursing/midwifery pre-registration student clinical placement days across EH by site/service**



- Historical problems in recruiting suitably qualified and experience staff to the autonomous nature of community and primary health-based clinical roles;
- The requirement for EH to meet the new National Safety & Quality Health Standards (NSQHS) which incorporated training mandates for the clinical workforce;
- Changes in the EH service models from acute in-patient bed-based to an increased focus and service provision in community-based services (e.g. hospital in the home);
- The eastern region demographic data highlights the significant growth in the aged population across the outer east and rural fringe and therefore a changing need to focus upon chronic health conditions and enhancing training content to incorporate communication related to patient choices and chronic disease management.

## Arriving at a solution

EH representatives, in collaboration with other EMCPN committee members, explored the identified barriers with a solution-based approach. Benchmarking of simulation initiatives was undertaken to explore national and international projects, models and current research.

Just as health services are changing their focus and aiming to provide care for patients closer to their home setting, the key objective of this project was to provide a higher degree of flexibility to the current and future clinical workforce, which would meet their education and training needs. In addition, to support the pre-registration student with opportunities within the region and leverage on work being undertaken at a state level to enhance capability of clinical trainers/supervisors.

Mobile simulation services and models were referenced and included the South Australian Flinders University Rural Clinical School and the United States Ridgewater College model. As a component of the overarching Simulated Learning Environment Program submission to Health Workforce Australia (HWA), the proposal identified the benefits of a mobile simulation service; Sim Van.

The Sim Van carried core equipment e.g. resuscitation manikins, and training consumables and operated out of one the large EH acute hospitals. This ensured ready access to additional equipment as required by the end user or trainer and the ability to manage processes related to access. The Sim Van can also provide key personnel to conduct the training e.g. educator/trainers and/or the setup and management of equipment e.g. a simulation technician.

The decision was made not to conduct training within the van as training facilities were expanding across the network and where possible an in-situ model was a desired future goal, which also served to enhance accessibility.

## Implementation process

EH was the identified lead agency for the project. Organisational project management aligns with Lean methodology and supported this work by providing the framework to guide the timelines, communication strategies, quality management and risk identification.

An internal governance structure was established and included key stakeholders; EH Executive, EMCPN Project Manager and discipline education leads. Reporting was provided to the EMCPN Committee with local engagement of clinical leads within EH and the across the network.

The project team were established and started by scoping the requirements of the network.

The implementation process followed key milestones:

- Identification of training context, patient case mix, existing infrastructure and staff profile;
- Request to partners for identification of training priorities;
- Establishment of core equipment requirements within Sim Van;
- Costing and scoping of suitable vehicle and fit-out to house and secure equipment;
- Purchase of Sim Van and modification to ensure stretcher capacity and ease of loading/unloading;
- Purchase of equipment, including (but not limited to): SimMan 3G, multi-part task trainers, ALS/BLS equipment packs, ambulance gurney, associated consumables;
- Recruitment of the simulation team; technician, clinical educators and co-opted sessional educators and administrator;
- Completion of NHET-Sim training for core team and expanded to educators within EH;
- Development and sourcing of external clinical simulation scenarios and integration of simulation within current educational programs;
- Development of the equipment booking and asset tracking systems;
- Development and implementation of the communication strategy across the network, which included web-based advertising, local press, EMCPN stakeholder emails and signage of the Sim Van;
- Development and implementation of data collection tools and data analysis;
- Development of evaluation tools and exploration of research opportunities.

## Outcomes

The Sim Van initiative has been gradually recognised by the EH clinical workforce, and is starting to facilitate a higher degree of accessibility to equipment, technical support and educational staff capable of delivery programs on a simulation platform. The student population, as with most educational opportunities across the health service, has been incorporated into programs and given unique opportunities to learn at the location of their clinical placement.

The simulation lab is no longer viewed as the necessary component required to deliver educational simulation activities, as the stretcher set up within Sim Van allows manikins to be delivered directly into clinical units achieving the objective of an in-situ model for learning. Previously no simulation programs were available on site at Yarra Health, Healesville Hospital, Wantirna Health or the Peter James Centre. All these sites now provide SBET either within onsite facilities or in-situ as a direct result of the accessibility of resource through the Sim Van initiative (see Table 1).

Mobility of the simulation education service has increased the profile of simulation-based learning across the network with a growing focus towards interprofessional learning given the onsite ease of embedding clinical learning within the clinical working environment.

Enhanced support for clinical supervisors within the rural Yarra Valley fringe of the catchment has facilitated the growth in pre-registration student clinical placements. Clinical supervisors are afforded the opportunity to learn new teaching skills and access the educator expertise, which accompanies the Sim Van on request. This has improved confidence levels with anecdotal reports of increased satisfaction in the teaching role. The identification of learning outcomes for clinical supervisors as well as the pre-registration student has identified a

need for the vertical integration of educational methodologies. The Sim Van has proved to be an excellent tool in bringing educational resources and support to learners across all levels of clinical practice.

The provision of the mobile simulation services to the EH ambulatory and community sites and throughout the geographical spread of the eastern metropolitan region increases the capacity for clinical placements within expanded settings. Realisation of the full potential of this outcome will require further exploration and a collaborative focus. With this objective in mind the project team approached community stakeholders to garner support to ensure the expansion and sustainability of the service. The Lions Club has agreed to sponsor Sim Van for the next three years which will cover the running costs of the vehicle and the training equipment consumables.

**Table 1: SBET January–June 2013, utilising Sim Van resource**

Site	Learner profile	Hours
Maroondah Hospital	Pre-registration students	25
	Post-registration clinical workforce	397
Yarra Valley Health	Pre-registration students	18
	Post-registration clinical workforce	18
Healesville Hospital	Pre-registration students	28
	Post-registration clinical workforce	26
Angliss Hospital	Pre-registration students	10
	Post-registration clinical workforce	179
Wantirna Health	Pre-registration students	11
	Post-registration clinical workforce	97
Peter James Centre	Pre-registration students	34
	Post-registration clinical workforce	68

## Barriers

Implementation of the project was impacted by concurrent interprofessional clinical learning initiatives across EH. These included the capital build of an education precinct at Healesville Hospital and Wantirna Health, the development and integration of a new learning management system and audiovisual upgrade across the organisation, and the increase in pre-registration student numbers throughout EH.

## Capital and equipment

- Securing the Sim Van was hindered by a delay in the shipment of vans from overseas to the chosen supplier. The delay was significant enough that it forced a change in supplier and model of van. Once the van was delivered it required further modification and branding which also held up implementation of the strategy.
- Minor delays were experienced in the delivery of training equipment due to a shortage in available supply across Victoria. As an interim measure existing simulation equipment held at Box Hill Hospital was accessed where it was feasible and planned educational programs were modified.

## Staffing

- Recruitment of the interdisciplinary team of educators was delayed due to internal systems and processes combined with the increased clinical demand and financial adjustments required to release the successful applicants. As a contingency, staggered recruitment occurred before the team was fully formed. Whilst this impacted on the uptake of the initial work, significant ground was recovered as the project evolved.

## Stakeholder engagement

- The delays outlined above impacted the team's ability to market the Sim Van initiative and trial it in settings outside of EH within the context of the project timelines.
- Engagement of clinical supervisors was challenging due to a number of extraneous factors; exponential growth in student numbers, rationalisation of finances across the health service to meet the proposed mid-year budget cut, organisational wide preparation for NSQHS & EQUIP National accreditation, changes in service profiles and models of care. This hindered the implementation of SBET into existing and newly developed educational programs. This was partially overcome by an increased focus by the simulation team on implementation and support for clinical supervisors.

## Future directions

### Evaluation and research

- There is a requirement to modify educational programs to achieve vertical integration of all learners as opposed to focusing on one level only;
- Evaluation tools need further development with the ability to also analysis data relevant to the pre-registration student;
- Exploration of research opportunities that examine the impact of SBET on patient clinical outcomes;
- Continue to benchmark and reference the work of other health organisations across the state and nationally through networking and attendance at key forums.

### Engagement

- Enhance engagement of EMCPN stakeholders to increase access and utilisation across expanded settings in the region;
- Increase internal use of SBET by continuing to develop programs and capability of clinicians by engaging with 'champion' clinical supervisors and educators across the network;
- Engagement of higher education partners to align and incorporate SBET within core pre-registration curriculum to enhance the clinical placement experience and outcomes.

### Expansion of opportunities

- Scope the opportunities to utilise patient actors to enhance the SBET experience for clinical training in geographically isolated areas;
- Interface with other HWA initiatives, e.g. Clinical Supervision Support Program, to support the interprofessional learning experience.

## Further information

For further information please contact:

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