Abstract title: A cost effective innovation to enable hybrid and high fidelity simulation in haemodialysis.

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**Aim:** The overriding aim was to provide a safe, controlled environment for renal clinicians to practice and upskill both routine and emergency haemodialysis specific patient scenarios. This mastery of skills can be practiced and repeated in a realistic simulated work environment. The opportunity to master these renal skills are imperative to the delivery of evidenced based patient care and patient safety.

**Background:** The published benefits of incorporating high fidelity simulation training for health care professionals is in abundance, but no literature existed for the combination of high fidelity simulation training and haemodialysis.

After consultation and experimentation, a high fidelity haemodialysis simulation training program was developed. Encompassing patient and staff safety principles, this program has promising results in relation to a new and evolving renal specific method of teaching.

**Methods:** Enhancement of a long standing manikin renal based simulation method by development of a cost effective innovation to adapt a part task trainer IV Arm skin and manikin chest skin to create a realistic haemodialysis fistula access and central line access which can be worn by a standardized patient or applied to a manikin.

This innovation provides a viable and sustainable method to deliver either hybrid haemodialysis scenarios as well as manikin based simulation.

**Results:** Evaluations during the past 5 years reveal a high level of participant intention to change clinical practice as a result of attending this scenario based
technique. Participants also indicated a high level of satisfaction and confidence in the delivery of safe haemodialysis interventions in a no risk learning environment.

**Conclusion:** The genesis of a cost effective renal specific hybrid and manikin based simulations is an innovative sustainable way to deliver renal training, mastery of competencies, and an opportunity for staff to debrief and learn in a risk free environment that is crucial to the delivery of safe patient care.

**References:**


Kneebone R; Nestel D; Wetzel C; Black S; Jacklin R; Aggarwal R; Yadollahi F; Wolfe J; et al. (Oct 2006). The human face of simulation: patient-focused simulation training. Acad Med. 81:919-924.


