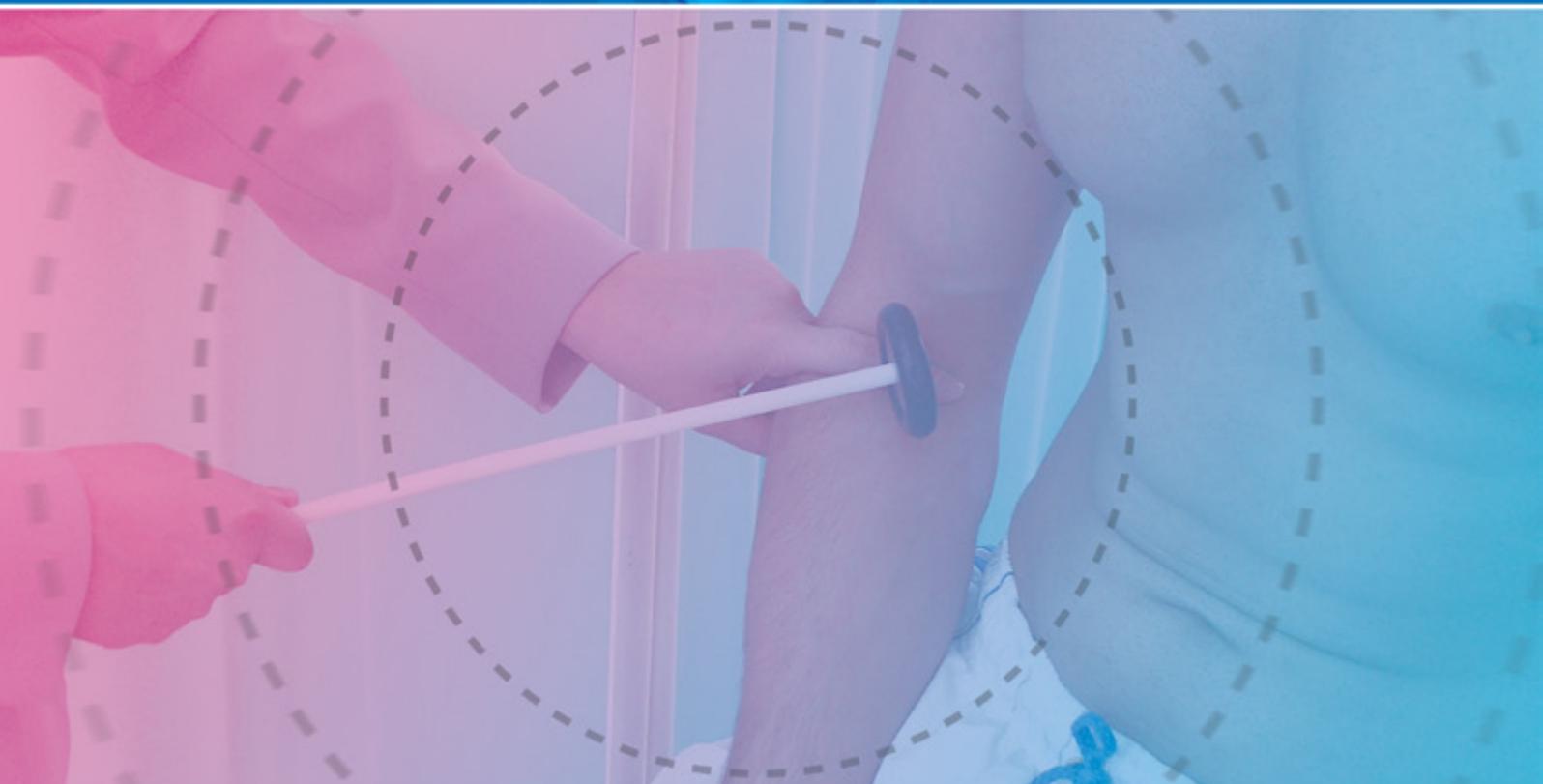


# INTERNATIONAL JOURNAL OF CLINICAL SKILLS



**A Peer Reviewed International Journal for the Advancement of Clinical Skills**  
*- 'docendo ac discendo' - 'by teaching and learning'*



In this issue:

With proceedings from  
**The 8th International ePortfolio Conference**

Clinical Training Associates & Pelvic Examinations  
WHO 'Five Moments for Hand Hygiene'  
Holistic approach to resuscitation  
Cranial nerve examination



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Congratulations to Mr Ronak Ved of Cardiff Medical School (UK) on successfully winning The IJOCS Award 2010 - presented for creativity and excellence in the field of Clinical Skills.

The International Journal of Clinical Skills looks forward to contributing positively towards the training of all members of the healthcare profession.

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# Foreword

## We want raw ePortfolio data, and we want the data now

Patients trust that healthcare professionals will possess the clinical skills to provide safe and effective treatment. Serious failures of medical care, through the actions of individuals and the inaction of organisations, have shaken that trust and led to a re-examination of the process of registration. In many countries and disciplines, continued registration now depends on the documentation of continuing professional development. Some jurisdictions, such as the UK, have gone further and are planning more comprehensive evaluation of clinical performance for revalidation. In all cases, assessment is based on some form of ePortfolio.

*“An e-portfolio is a purposeful aggregation of digital items – ideas, evidence, reflections, feedback etc, which ‘presents’ a selected audience with evidence of a person’s learning and/or ability.”*  
Sutherland and Powell (2007)

Presenters in the healthcare ePortfolio track at the 8th International ePortfolio Conference, London (July 2010) described a wide range of ePortfolios being used or being developed for allied health, dental surgeons, surgeons, physicians, nurses, medical education, foundation medical graduates. ePortfolios are used by students to evidence acquisition of clinical skills for initial registration, by new graduates to collect evidence of competence for credentialing and by trained staff for evidence of consistent expert performance. As Stuart Cable from the Royal College of Nursing (UK) explained:

*“[the ePortfolio] enables nurses to demonstrate their competence in different areas of nursing practice. They are able to capture ‘just-in-time’ reflections on their practice or a learning experience and then re-present this evidence for different purposes, for example, personal development planning, competence demonstration and educational accreditation of prior learning.”* (Stuart Cable, Proceedings of the ePortfolio Conference, Maastricht, 2007)

The need for repurposing the same set of collected data across time was confirmed by many of the International ePortfolio Conference presenters: as their careers develop, healthcare professionals will be required to transition across several ePortfolio systems, from those used during initial training, continuing professional development, quality assurance procedures and, at regular intervals, to support reaccreditation processes.

To support evidence of informed and reflective practice, healthcare professionals collect evidence from a variety of sources and data systems, such as patient personal health records, laboratory test analysis, clinical diaries, feedback from peers and patients. Unfortunately, all these different pieces of information are usually stored in independent information silos, making the work of ePortfolio construction and assessment more difficult, notwithstanding that silos make data errors more likely to occur and less likely to be corrected. As most individual ePortfolios also create their own data silos, it reduces the ability to share relevant and critical information across a profession to advance professional practice.

While the initial idea of repurposing ePortfolio data rests on the editing work of an individual compiling a new document, there is an alternative and more radical way of exploiting ePortfolio data: data freedom, i.e. allowing a wide range of online services to exploit raw ePortfolio data.

Imagine a world in which all data created by a healthcare professional when interacting with patients, teachers, colleagues and organisations is securely stored in a Personal Data Store (PDS), creating a ‘life log’. Imagine that patients in the healthcare ecosystem have their own personal data stores and can share

the contents, under their control, with the people and services they trust. Imagine a world where everyone would be able to choose any health ePortfolio services while being fully interoperable with those used by various institutions with which healthcare professionals interact.

Imagine a world where the performance of students at several medical schools could be confidentially mined to identify best practice for teaching clinical skills. Imagine a service collecting data from the personal data stores of all the staff of a hospital to conduct audit procedures. Imagine another service identifying the need for training and linking it to workshops on particular topics at a conference or a review in a journal. Imagine a service mining anonymous healthcare data collected in personal data stores by a patient’s support group. What Amazon® and Google® can do with their global data stores to identify patterns and trends and target advertising, we can do, with personal data stores for the benefit of healthcare, professional education, patient safety and society in general.

Such a world is possible. It was presented by EIfEL at the launch of the Internet of Subjects ([www.iosf.org](http://www.iosf.org)) during the 8th International ePortfolio Conference. The Internet of Subjects supports the programme that Sir Tim Berners-Lee, the inventor of the Internet, called for: “we want the data raw, and we want the data now!” To achieve that goal, which is to facilitate reuse, repurposing and exchange of data, we need to achieve the separation of data from the applications and services producing and exploiting it; applications and online services must remain the servants, not the masters, of our personal data.

In the near future institutions will not have to select the ePortfolio platform for their students or professionals; it will be an individual choice. On the other hand, educational institutions, professional communities and public healthcare authorities will have the opportunity to develop a number of innovative services, based on the exploitation of the raw data contained in personal data stores. For example, with an Internet of Subjects, data collected by students and trainees for assessment of progress or by trained staff for revalidation could be used, with permission, for other useful purposes such as quality assurance, needs analysis and career planning.

By providing access to raw data in personal data stores (anonymised and under the full control of individuals) to the services of their choice, healthcare professionals and communities would have the foundations to support the development of lively learning communities, for the benefits of their members, patients and society at large. Data collected whilst compiling an ePortfolio is too rich to be limited to a unique usage. We want raw ePortfolio data, we want it now, to contribute amongst other things, to the improvement of the continuing education of healthcare professionals.



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# Teaching to suture: an innovative training tool

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Education

### Abstract

With the advent of the 48 hour working week in the UK, time at the operating table for surgical trainees has diminished. Junior doctors are finding themselves transferred from elective operating, the traditional environment for acquiring the basic surgical skills, to providing service commitment.

We present a quick and easy way to assemble a realistic training conduit using surgical gloves. The model allows the junior trainee or medical student to practise interrupted, subcuticular and mattress suturing. Our technique is quickly assembled in almost any clinical area to allow for trainees to practise and demonstrate technique, as well as for opportunistic surgical teaching.

## Introduction

With the advent of the 48 hour working week in the UK, time at the operating table for surgical trainees has diminished. Junior doctors are finding themselves transferred from elective operating, the traditional environment for acquiring the basic surgical skills, to providing service commitment.

This squeeze on training time means developing basic skills and learning to operate requires practice outside theatre and innovative ways to achieve surgical competencies.

We present a quick and easy way to assemble a realistic training conduit using latex gloves. This model allows the trainee to practise interrupted, subcuticular and mattress suturing.

## Method

Figure 1: A latex glove is filled using ordinary paper towels



Figure 2: Over this glove, a second coloured (e.g. non-latex glove) is passed



Figure 3: Two further latex gloves are opposed over this model to form a 'wound' in the centre of the conduit



Figure 4: The model can be fixed to a surface using simple tape



Figure 5: Interrupted and mattress suturing can be practised by opposing the two glove ends



Figure 6: Subcuticular suturing can be practised through the rolled cuff ends of the gloves, which act as the subcuticular layer



## Discussion

The use of latex gloves to practise surgical skills has been described previously for surgical knots [1], however, not to our knowledge for simple suturing. Surgical glove models have been developed for acquiring skills such as micro-anastomosis and graft placement [2]. In microsurgery non-living simulators with latex are considered as a good alternative to more costly educational tools such as laboratory animals [3].

Synthetic suture board access is often limited and if available they are kept well away from clinical areas where teaching is not possible.

In light of changes in working practices, new and innovative ways to learn have to be developed to ensure trainees acquire the necessary skills to progress as practitioners. Although the technique described in this paper may appear simplistic, it gives the trainee an opportunity to be taught and practice this core skill without leaving theatre or the clinical environment.

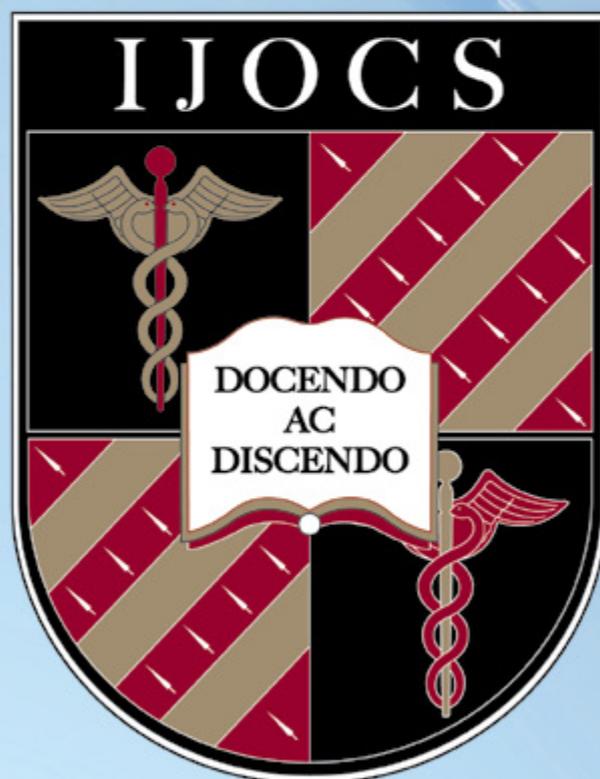
Our technique is quickly assembled in almost any clinical area to allow opportunistic teaching and practise of surgical technique, in a realistic and safe manner.

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