

Delivering a Quality Skilled Workforce

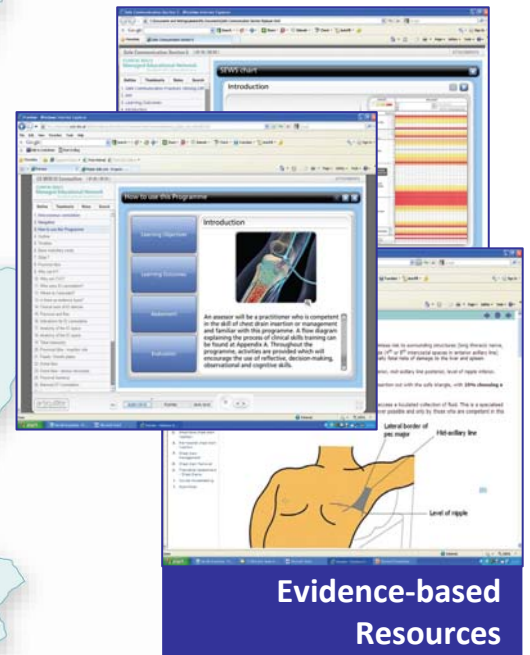
Report and Recommendations for Health Boards on Clinical Skills Education by CS MEN



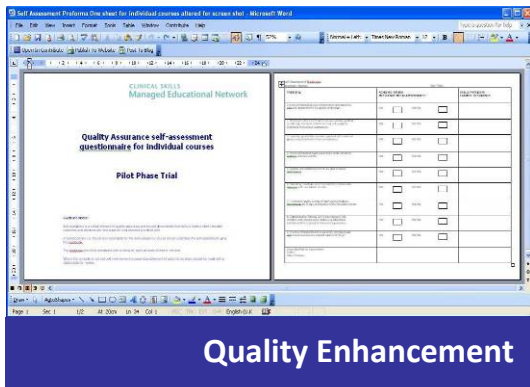
Mobile Clinical Skills Unit



Networks



Evidence-based Resources



Quality Enhancement



Research & Development

| Contents | Page |
|------------------------------------------------------------------------------------------------|-------------|
| Executive Summary | 2 |
| Introduction | 4 |
| Outcome 1: Provision of standard clinical skills learning resources | 5 |
| Outcome 2: Implementation of a national quality assurance system for clinical skills education | 9 |
| Outcome 3: Development of a network of clinical skills educators | 11 |
| Outcome 4: Pilot of a mobile clinical skills unit in remote and rural Scotland | 13 |
| Outcome 5: Delivery of better value for money in clinical skills education | 16 |
| Conclusion | 18 |

Executive Summary

It can be argued that, from the patient's perspective, the greatest determinant of their experience and quality of healthcare are the clinical skills of the staff caring for them – the 'touch point' of our service with the public.

For this reason, since 2008, NHS Education for Scotland (NES) and the Scottish Funding Council (SFC) in partnership have jointly funded the development and implementation of a unique, national approach to the skills education of your workforce: the Scottish Clinical Skills Strategy. The vision has been to implement consistent, high-quality clinical skills training, utilising state of the art educational theory and technologies, across all staff groups and geographic areas.

Using the established successful principles of Managed Clinical Networks in Scotland, a dedicated Clinical Skills Managed Educational Network (CS MEN) with over 900 members and a robust governance structure has been created.

Successful outcomes from the CS MEN in the last three years include the:

1. Provision of standard clinical skills learning resources (KSF-matched)
2. Implementation of a national quality assurance system for clinical skills education
3. Development of a network of clinical skills educators
4. Use of a mobile clinical skills unit to deliver education in remote & rural Scotland
5. Delivery of better value for money in clinical skills.

There is a clear synergy between the purpose and outputs of the Clinical Skills Strategy to date and the aspirations of the Scottish Government's Healthcare Quality Strategy for NHS Scotland: to implement changes that improve the safety and effectiveness of care while ensuring a person-centred approach. An associated Quality Alliance Board has been established and its infrastructure includes Ambitions Groups for Safety, Clinical Effectiveness and Person Centredness which will develop challenging targets for health boards on top of existing HEAT targets.

Following external review of these achievements during the period of the joint NES/SFC initiative, NES has made the decision to incorporate the CS MEN into its core business and support a sustainable programme for clinical skills excellence with recurrent funding. This move provides a further opportunity for the Scottish Clinical Skills community to firmly

establish that the performance of Clinical Skills education is core to the success of each health board's delivery of the Quality Strategy and its performance in terms of the standards of care delivered consistently to every patient every time.

This report highlights the need for a balance between national skills education provision to ensure expertise is disseminated, and local delivery to ensure relevance to staff and the population using the model and expertise identified by the CS MEN.

Recommendations of the Report

1. Reconfigure education and training in each health board region to link safe skills practice development with service organisation and workforce development
2. Embed use of simulation to develop high quality as norm of practice
3. Capture examples of good skills practice for dissemination through the CS MEN
4. Provide evidence of completion of a QA self-reporting process for clinical skills education as statutory requirement by health boards to promote flexibility of movement of staff
5. Establish clear leads for clinical skills and patient safety education from health board executive level to ward level.

Introduction

The Scottish Clinical Skills Strategy was launched in September 2007 following two years of consultation with regional workforce planners, patient safety and quality improvement leads, health boards, clinical skills educators, practitioners and patients. Its core purpose has been, and remains, support for workforce development in NHS Scotland to provide a reliable, first-class workforce through clinical skills education.

The aims of the Healthcare Quality Strategy are clinical excellence, patient safety and mutually beneficial partnerships with patients and their families which demonstrate compassion, continuity, clear communication and shared decision-making. Despite the current financial context, the education and training of healthcare professionals remains a key priority and the Scottish Clinical Skills Strategy provides a smart solution. Building on experience from other high reliability organisations, it identifies and supports the need for a reconfiguration of expectations of education and training for the healthcare workforce.

We all need to be assured that whoever is carrying out a clinical skill, it is being practised to the same safe and high standard, wherever and whenever it is performed. Therefore, having consistent and transferable standards of practice across a range of uni- and multi-professional skills, supported by an equally consistent and high standard educational process, provides the opportunity for greater flexibility in both access to appropriate, timely and high-quality clinical intervention and the distribution/mix of the workforce across NHS Scotland.

The Clinical Skills Managed Educational Network has been established using the principles of a managed clinical network to ensure appropriate, evidence-based standards are being practised and that there is equity of access to skills education and training across Scotland, adding value and flexibility in movement of healthcare personnel.

The Clinical Skills Managed Educational Network

The CS MEN team of Educational Projects Manager, Project Administrator, Mobile Unit Project Officer and Educational Resource Developer has been supported by three Regional Champions on one session per week and a Clinical Lead on two sessions a week over the past three years and has achieved the following:

Outcome 1: Provision of standard clinical skills learning resources

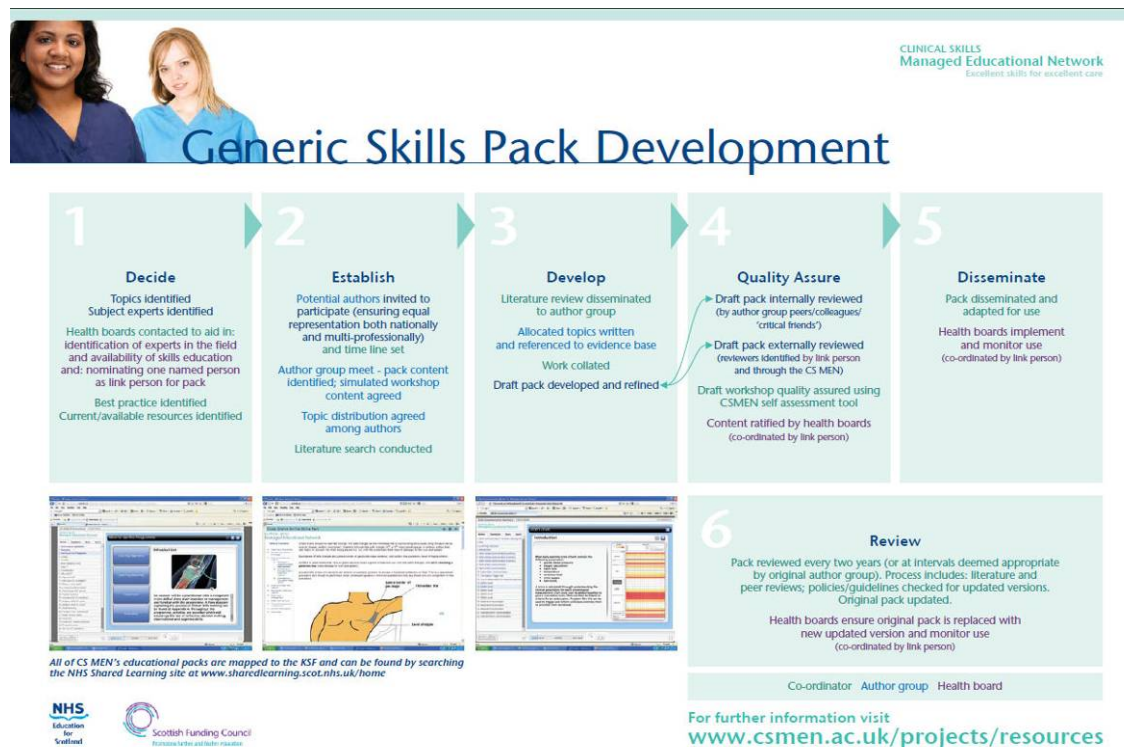


Fig. 1: Pack development process

Setting priorities for skills education

Four main data sources have been used to set priorities:

- a survey of 143 remote and rural practitioners including use of BASICS database
- an audit of available skills education in each geographic area
- a review of the skills priorities to meet the national patient safety agenda, and
- regional meetings chaired by the Regional Champions.

Quality Assurance process for development of learning resources

Educational resources developed by CS MEN aim to ensure that training is multi-professional with a consistency of standards. Staff from different professional backgrounds, in different health board regions should be taught the same skills to the same educational and clinical standards. A refined process for developing skills resources has been developed in consultation with a wide number of skills educators (Fig 1). There is an agreed "How to Guide" for development of resources.

Learning Resources

1. Packs

The educational resources are composed of three main areas:

- a theoretical online skills pack (targeted to both the learner and the trainer)
- a workshop or simulated session (these are for trainers and are available from CS MEN)
- supervised practice in the workplace.

The packs are written by experts within the field with representation from relevant professional groups from different geographical locations to enhance transferability and prevent duplication of effort. Resources are evidence-based with learning objectives mapped to KSF where appropriate. Completed resources are uploaded to the NHS Shared Learning site (see Table 1 for health board engagement).

2. Website development

The CS MEN administer the Scottish Clinical Decision Making Group website as well as providing advice on learning resources.

3 a) Commissioned resource

CS MEN have provided both the design and have participated in the development of a resource for those involved in managing pre-hospital Mental Health crises.

3 b) QA toolkit

The RRHEAL Quality Assurance Toolkit was developed jointly by CS MEN and the University of Dundee. The toolkit provides advice and support for producing high-quality distributed education programmes.

3 c) Aseptic Technique

The CS MEN was asked by NES to develop a pack on Aseptic Technique to address the Scottish Government's HEAT targets on SAB. This revealed the wealth of information that network members have as over 40 responded to our call. However, it also showed the wide variation in skills practice which may be a contributing factor to the SAB profile in different health boards.

The Recommendations to develop this outcome are:

1. Reconfigure education and training in each health board region to link safe skills practice development with service organisation and workforce development
2. Embed use of simulation to develop high quality as norm of practice
3. Capture examples of good skills practice for dissemination through the CS MEN.

| Title | Lead Stakeholder | Additional Stakeholder input | Stage |
|-----------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chest drains | NHS Lothian | NHS GGC NHS Grampian (BASICS) NHS Lothian Queen Margaret University | www.sharedlearning.scot.nhs.uk/home Review |
| IO Cannulation | NHS Lothian | NHS Grampian (BASICS) NHS Shetland NHS Tayside | www.sharedlearning.scot.nhs.uk/home Review |
| Scottish Clinical Decision Making | NHS Lothian / CS MEN | NES NHS Forth Valley NHS GGC NHS Grampian NHS Highland NHS Lanarkshire NHS Lothian NHS Tayside NHS 24 NHS QIS NSS SAS Stirling University University of Aberdeen University of Edinburgh University of West of Scotland University of Glasgow | http://www.knowledge.scot.nhs.uk/clinicaldecisionmaking.aspx Dissemination |
| Safe Communication Skills | NHS Tayside | NES NHS Fife NHS GGC NHS Lothian | http://elearning.scot.nhs.uk:8080/intralibrary/IntraLibrary?command=open-preview&learning_object_key=i369n883802t Dissemination |
| Suturing | NHS GGC NHS Grampian NHS Tayside | NHS Lothian NHS Borders | Development |
| Intravenous medicine | NHS GGC NHS Lothian NHS Tayside | NHS GGC NHS Lothian NHS Tayside | Quality assurance |
| How to Guide | NHS Tayside | NHS Fife NHS Lothian NHS Tayside University of Aberdeen University of Dundee | www.sharedlearning.scot.nhs.uk/home Dissemination |

| | | | |
|-------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | University of Glasgow | |
| Management of Pre-hospital Mental Health Crises | RRHEAL NHS Tayside | NHS Tayside STORM University of Dundee | www.healthscotland.com Quality assurance |
| Intra-muscular injections | NHS Fife | NHS D&G NHS Fife NHS Highland NHS Lanarkshire NHS Tayside University of Aberdeen University of Dundee | Development |
| ECG | NHS Lanarkshire | | Establish group |
| Aseptic Techniques | NHS Education for Scotland | NES NHS Fife NHS GGC NHS Grampian NHS Highland NHS Lanarkshire NHS Lothian NHS Tayside NHS 24 NHS Western Isles University of Aberdeen University of Edinburgh Glasgow Caledonian University University of Glasgow | Quality assurance |
| QA guide for remote and rural practitioners | NHS Tayside | NES NHS Highland NHS Orkney NHS Tayside NHS 24 Queen Margaret University University of Dundee University of Highlands & Islands | http://www.rrheal.scot.nhs.uk/resources/quality-assurance-(qa)-guide-for-distributed-education.aspx |
| Professional Development Workshops | University of Abertay University of Dundee University of St Andrews | | Development |

Table 1 - Health Board & Higher Education Institute Engagement for Educational Resources

Outcome 2: Implementation of a national quality assurance system for clinical skills education

The quality assurance process developed for clinical skills education needs to encompass educational governance and clinical and staff governance.

The common quality standards, educational resources and training programmes developed and delivered through the Scottish Clinical Skills Strategy are subject to an independent, robust and open quality assurance process. This gives the public and health service managers confidence in the quality of clinical skills education and delivery.

All clinical skills education delivered through the national strategy is referenced to UK and Scottish competency frameworks. This ensures transferability of the skills achieved by staff moving between different healthcare settings in the UK, as well as formal recognition of the training as contributing to the professional development of staff completing specific skills training programmes.

A simple self-assessment questionnaire for use with single skills sessions and course programmes that use simulation was developed by CS MEN using QAA workplace learning guidance principles; the HPC, NMC and GMC/PMETB guidance on QA was also utilised in structuring the form. (Fig 2)

The questionnaire was rolled out to all health boards in 2010 requesting their endorsement and adoption of it for training. It has also been disseminated to all the Medical and Nursing Schools in Scotland. The Regional Champions have been working with healthcare staff to support the use of this tool throughout each health board. So far, the questionnaire has been formally endorsed by:

- NHS Grampian, Tayside, Highland, Lothian, Dumfries & Galloway, Greater Glasgow & Clyde, Forth Valley.

The Recommendation to develop this outcome is:

4. Provide evidence of completion of QA self-reporting process for clinical skills education as statutory requirement by health boards to promote flexibility of movement of staff.

| PRINCIPLE | ACHIEVED RATING MET OR NOT MET AS APPROPRIATE ✓ | | | | SKILLS PROVIDERS EXAMPLE OF EVIDENCE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------|---------|--------------------------|-----------------------------------------|
| 1. Practice/simulated practice environments are supportive, safe and appropriate for the activity undertaken. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| 2. Mentors/Facilitators of Practice are appropriately qualified, provide high standards of skills teaching and engage in Continuing Professional Development. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| 3. Learning opportunities are well organised with a clear set of outcomes/objectives for the course/session. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| 4. Practice/Simulated practice teaching is under pinned by evidence and best practice. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| 5. Reliable and validated protocols are used to assess performance. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| 6. Debriefing - feedback are incorporated to promote safe rehearsal and consolidation of skills. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| 7. To enhance quality a range of multi-service feedback mechanisms are in place and used to refine the course/session. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| 8. Communication Systems are in place between skills providers and relevant stake-holders e.g. Educational Institutions/NHS Scotland/ Professional Organisations. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| 9. Practice/ Simulated Practice Learning is principle based and courses/sessions are mapped against KSF/SCQF/NOS/ Tomorrows Doctors or other national competencies. | Met | <input type="checkbox"/> | Not Met | <input type="checkbox"/> | |
| Areas Identified for improvement: Action: Date of Review: | | | | | |

Fig. 2: Example of one-page QA self-assessment questionnaire for clinical skills sessions

Outcome 3: Development of the network of clinical skills educators

CS MEN aims to engage with key stakeholders at international, national, regional, local levels and with the wider public (see Fig. 3) and has disseminated the outcomes of the network at conferences in the UK and abroad.

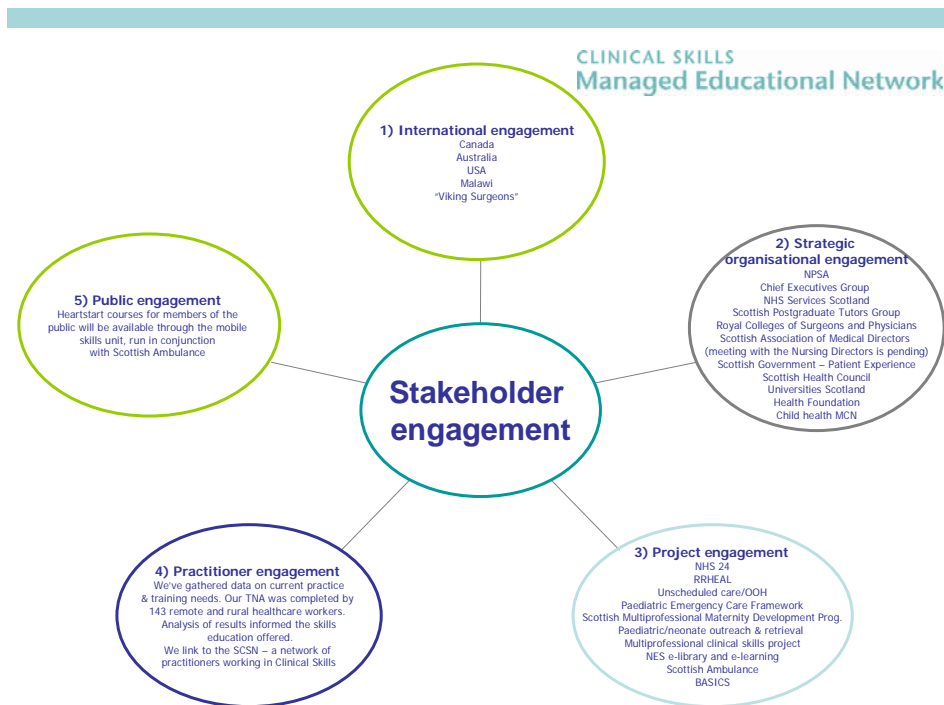


Fig. 3: Levels of engagement necessary for embedding the CS MEN

Those levels of particular relevance to health boards will be:

1. Strategic level

The Chief Executives of health boards have had two presentations, one on the CS MEN and one on the use of the mobile unit. Several CEOs have been visited by the Lead Clinician including the non-territorial health boards to maximize potential for collaboration and benefit and to minimise duplication. All Medical Directors, some Nursing Directors and AHP leads have also had presentations at strategic level about the goals of the CS MEN for NHS Scotland.

CS MEN does not seek to redesign current initiatives but to pull together different strands of activity, identify gaps in provision and to work with others involved in Clinical Skills education. In particular, we are coordinating our work with that of:

- The other national skills units, i.e.:
 - BASICS Scotland,
 - Cuschieri Skills Centre, University of Dundee
 - The Scottish Clinical Simulation Centre, Larbert
- NES special initiatives, e.g. Out of Hours and the Scottish Multiprofessional Maternity Development Programme
- Remote and Rural Health Education Alliance (RRHEAL)
- Scottish Clinical Skills Network (SCSN)
- The Royal Colleges in Scotland
- Scottish Ambulance Service.

2. Practitioner Level

There are over 900 healthcare skills educators and practitioners in Scotland who share CS MEN's practices and activities through a quarterly Newsletter as well as the website: www.csmen.ac.uk

In addition, the CS MEN have established Regional Clinical Skills 'Champion roles. The Champions have hosted regional meetings where members learnt more of the work of the CS MEN, shared examples of good practice, and publicised new facilities and skills developments in the region and nationally. The Regional Champions meet bi-monthly with the core CS MEN team in Dundee to supervise progress in the achievement of key performance indicators.

The Recommendations to develop this outcome are:

1. Reconfigure education and training in each health board region to link safe skills practice development with service organisation and workforce development
2. Embed use of simulation to develop high quality as norm of practice
3. Capture examples of good skills practice for dissemination through the CS MEN
5. Establish clear leads for clinical skills and patient safety education from health board executive level to ward level.

Outcome 4: Pilot of Mobile Clinical Skills Unit

A key element of the Scottish Clinical Skills Strategy was the development of a Mobile Clinical Skills Unit to be used for the delivery of multi-professional skills education in remote and rural areas of Scotland to update skills of all healthcare professionals, whether working in the primary or secondary care sector.

A two-year pilot was managed by the CS MEN. The mobile unit project is collaborative: the physical facility is funded entirely by NES, but the education is run in partnership with multi-professional education providers from across Scotland. The unit is equipped to enable delivery of clinical skills, according to local needs and it can also be used for training the public in resuscitation and other health promotion skills.

In the last two years the mobile unit has completed visits of between one and three weeks to 26 venues in remote and rural Scotland. Approximately 1750 healthcare practitioners took part in at least one session of education on the unit. The pilot has established that where a venue prepares well for the visit, approximately 150 people from a wide mix of professional backgrounds receive education over a two-week programme. Release of staff from clinical duties has still been a significant issue for managers, but because the cost of the pilot of the unit has been funded by NES, quality education has been more affordable and therefore has been opened up to greater numbers of healthcare practitioners.

Participants

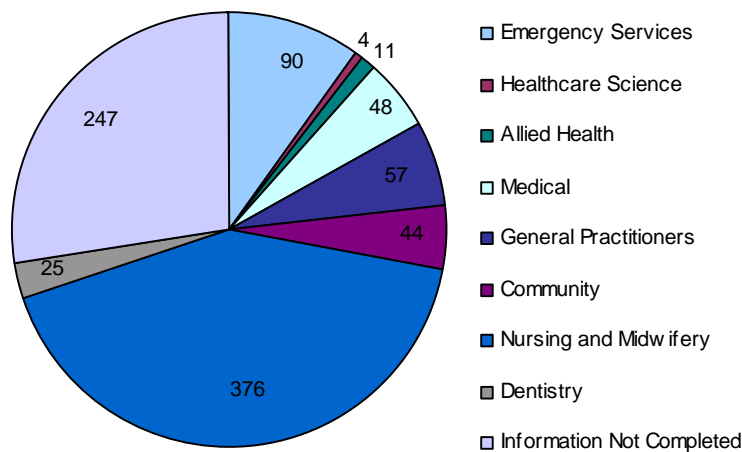


Fig 4: Summary of the professional groupings of people trained on the unit during the pilot period. Total number of completed evaluation forms: 902

The unit

The unit is essentially a lorry that has pods on each side that open out to create a classroom when it is parked at a venue. It is 10 metres long to enable it to fit on the ferries to some of the smaller islands, which allows a classroom space of approximately 25 sq m, suitable for groups of 8 to 16 people, depending on the activity.

The unit is equipped with a screen for using PowerPoint/watching videos, along with a comprehensive range of simulation equipment, including SimMan, SimBaby and Child Crisis Manikin. A wide selection of part-task trainers and a diverse assortment of skills kits are also available on the unit, including for communication and other non-technical skills. To enable video recording and debriefing, the smots™ audio-visual system has been installed.

"Excellent training facility" Consultant Physician, Caithness General Hospital

"Excellent. Invaluable source of education and communication, team building superb - need more and more, thank you" Staff Nurse, Isle of Islay

Faculty development

An important aspect of the pilot was the training of educators at each venue in order to build local capacity in the use of simulation to national quality-assured standards. The Scottish Clinical Simulation Centre (SCSC) developed a two-day faculty development course specifically for users of the unit. Where possible, the CS MEN required that at least two people from each venue complete that course before receiving the unit. Decisions are made by each venue regarding the appropriate people to attend.

In the pilot period, 51 people from nine health boards and a variety of professional backgrounds have attended the faculty development course. A 'Shared Space' has been created on the NHS Knowledge Network for the Mobile Clinical Skills Unit Faculty since the close of the pilot period, which is used for discussions, user guides for the equipment on the unit, sharing resources, information on faculty development courses, and practical support on troubleshooting common problems users have come across when using the unit.

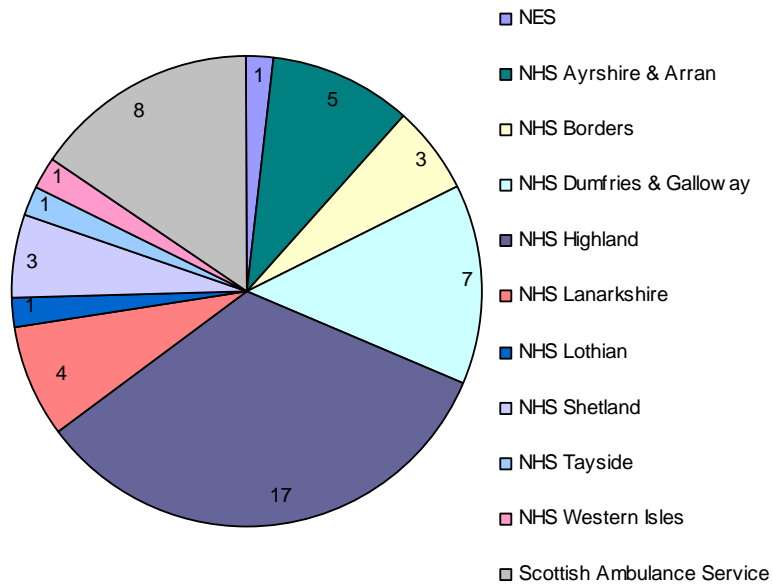


Fig. 5: Breakdown by health board of participants who attended the Mobile Unit Faculty Development course - Total number of participants: 51

The Recommendations to develop this outcome are:

1. Reconfigure education and training in each health board region to link safe skills practice development with service organisation and workforce development
2. Embed use of simulation to develop high quality as norm of practice
3. Capture examples of good skills practice for dissemination through the CS MEN.

Outcome 5: Deliver better value for money in clinical skills education

To achieve this outcome, CS MEN's approach has been to develop a coordinated national infrastructure which:

- Provides enhanced sharing of good practice through better communication systems:
 - Development of a mechanism for communication, information and resource-sharing between people developing packs in the same skills in different locations
 - Author groups have been established for several resources
 - NHS Knowledge Network 'Shared Spaces' are being used as the platform for remote collaboration around particular skills, e.g. IV Medicines and IM Injections administration
- Provides education and training where required:
 - The mobile unit has enabled many more staff to have access to education than would have been possible if they had needed to travel further for it, as confirmed by the local hosts
 - The cost of the pilot of the unit has opening it up to greater numbers of healthcare practitioners
 - local hosts and participants have particularly appreciated that the unit makes whole-team training possible, because it can be done on site
 - Travel to central facilities decreased
 - Accommodation costs reduced
- Provides regional meetings to share and develop local needs
 - Use of fixed and local facilities
- Identifies local expertise to develop national resources
- Provides infrastructure to develop new systems; for example:
 - An Interprofessional Clinical Skills Board has been set up in NHS Fife to coordinate clinical skills education for undergraduates from all healthcare professions in the region
 - Jean Ker (CS MEN Clinical Lead) chairs this pilot group and Janet Skinner (CS MEN Regional Champion for the South & East) is a member
 - A post funded by ACT for two years is scoping all the skills opportunities and current education in NHS Fife and piloting some IPE clinical skills sessions for students in both primary and secondary care

- Provides evidence base through research and development
 - CS MEN also seeks to encourage research and development in clinical skills education and in 2010, through a competitive bidding process, funded the following projects and Masters :
 - *“Evaluating the effectiveness of Podcasts in UG Practical Procedure Training” (University of Glasgow)*
 - *“Variation in Training of Simulated Patients across Scottish Medical Schools” (University of Edinburgh)*
 - *“Significant Event Analysis: A Reflective Tool for UG Medical Students” (University of Edinburgh & Scottish Clinical Simulation Centre)*
 - *“Role of Laparoscopic Simulation in Surgical Skills Acquisition: A Feasibility Study” (University of Dundee)*
 - *“Peer Teaching of Clinical Skills by UG Students for Medicine & Nursing” (Robert Gordon University)*
 - *“Identification of Insulin & Anti-diabetic Medication Error in Acute Hospital Setting” (University of Aberdeen)*
 - *“How can Newly-qualified Doctors be better prepared in Acute Care?” (University of Edinburgh)*
 - *“Development, Implementation & Evaluation of Online Video in Clinical Skills Education for UG Student Nurses” (Napier University)*
 - CS MEN has organised a national conference on 18th March 2011 in Stirling to showcase these projects. If you would like to attend, please contact Lynne Egan at: l.e.egan@dundee.ac.uk

The Recommendations to develop this outcome are:

1. Reconfigure education and training in each health board region to link safe skills practice development with service organisation and workforce development
2. Embed use of simulation to develop high quality as norm of practice
3. Capture examples of good skills practice for dissemination through the CS MEN.

Conclusion

The CS MEN has successfully delivered in the five outcome areas, creating a solid platform for clinical skills education. This will support the development of all healthcare professionals in both technical and non-technical skills with a national education infrastructure which includes standardised e-learning resources, workshops, purpose-built facilities and expert facilitators. A Quality Assurance framework and Research & Development programme provide both the flexibility for workforce deployment and the opportunity to test smarter ways of delivering the service using simulation.

The next phase for the CS MEN will be to provide a framework to support targeted skills education in a timely and evidence-based way to achieve the goals of the Quality Strategy.

Report compiled by CS MEN Team:

Andrea Baker, Educational Resources Developer

Felicity Garvie, CS MEN Project Administrator

Jean Ker, Clinical Lead

Jerry Morse, Regional Champion North of Scotland

Anna O'Neill, Regional Champion West of Scotland

Sarah Race, Project Officer – Mobile Skills Unit

Janet Skinner, Regional Champion South and East of Scotland