Evaluation of the Decontamination (LDU and EDU) e-learning programmes

Executive Summary

May 2014
1 The decontamination e-learning programmes

In response to the Glennie Report\(^1\), NHS Education for Scotland (NES), in conjunction with Health Protection Scotland (HPS), were tasked initially by the Scottish Executive Health Department with implementing a national decontamination education programme for primary care staff\(^2\) 3. NES and HPS were then requested to develop the decontamination programme further to provide a programme specifically for endoscopy personnel. The national e-learning programme for staff in local decontamination units (LDU) directly involved in the local decontamination of reusable invasive medical devices (RIMDs) was launched in July 2008. The Endoscopy Decontamination Unit (EDU) programme was launched in 2011 for staff undertaking decontamination of endoscopy equipment.

2 The evaluation

The evaluation of the decontamination e-learning programmes was designed\(^4\) to elicit information about:

1. Which staff disciplines/groups within primary care services are involved in local decontamination and to assess future numbers of potential users of the LDU programme.
2. Perceptions of the use and uptake of the LDU programme by dental undergraduate students and other staff groups.
3. Perceptions of the suitability and applicability of the current decontamination e-learning programmes for staff that undertake local decontamination of reusable invasive medical devices (RIMDs) or undertake decontamination of endoscopy equipment in relation to content, registration, mentorship.
4. Attitudes towards the programmes and whether participants feel existing resources should be further developed, customised or adapted for use or whether they would wish NES to explore alternative delivery options for the programmes.

The evaluation was also designed to provide ‘recommendations with a clear vision of what is required to meet the future education and training needs of staff performing decontamination within local decontamination and endoscopy units’.

The evaluation approach was one of mixed methods to allow for triangulated analysis (i.e. using more than one method to check findings). The evaluation fieldwork was undertaken between December 2013 and March 2014.

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\(^4\) Invitation to submit a competitive written quotation: Reference: C001093
3 Conclusions

3.1 Staff disciplines/groups involved in local decontamination

The ongoing re-structuring of the decontamination workforce means that there is significant local variation, and a lack of clear definition of workforce. In particular, some specialities in some Boards do not use LDUs as they use single use instruments or reprocess in CDUs. Some CDUs in some Boards do not currently use the programmes.

However, it is clear that the following staff groups are involved in local decontamination:

- Dental staff, including dentists, dental nurses, dental hygienists and dental technicians
- Podiatrists
- Staff working in endoscopy
- Staff working in local (and central) decontamination units

3.2 Potential users of the programmes

There is strong support, from both learners and wider stakeholders, for making education/training on decontamination mandatory – and that the programmes could provide for this.

Podiatry is a key area for the development of potential LDU learners – both at undergraduate level, and in practice (including support staff): only 1% of staff registered on the LDU programme to date are working in podiatry.

There is potential for the EDU programme to be used more comprehensively within the endoscopy workforce: only 8% of staff registered on the EDU programme to date are working in endoscopy.

If the programmes ceased to be provided, stakeholders considered that value for money, appropriate and consistent training would be lost. For HEIs delivering pre-registration dental education there would be a significant impact on workload, as the content delivered through the LDU programme would have to be delivered by lectures.

3.3 Programme use and uptake

3.3.1 Local Decontamination Units programme

More than half (59%) of the 1309 learners registered on the LDU programme to date were undergraduate dental students. Of the staff who had registered for the programme, more than two thirds (78%) were in the dental area of practice, mainly dental nurses; with fewest learners in podiatry (1%).

The majority (80%) of LDU registered learners had completed the e-learning aspects of the programme by the end of December 2013; however, whilst almost all (95%) undergraduates completed the programme, 58% of staff who registered for the programme completed it.
3.3.2  Endoscopy Decontamination Units programme

Around 400 people have registered for the EDU programme since it was launched in 2011, with 37% (88) staff completing all nine modules. Only 8% of staff registering for the EDU programme are in the endoscopy area of practice.

3.3.3  Both programmes

Three percent (43) of all learners completed both the LDU and the EDU programmes, of these 56% were undergraduates and 44% staff.

3.3.4  Programme uptake data

Programme uptake data are significantly unreliable, with considerable inconsistencies across datasets provided by NES and the platform host; and within the Intuition data. Notably:

- Although the online modules included self-assessment, no data on this was available
- Module completion data was not available for all registered learners
- Data on the discipline or NHS Board area of ‘undergraduate’ was not available
- Data on AfC banding levels of staff was not available
- Data on mentors was so unreliable as to allow no meaningful quantitative analysis

3.3.5  Factors affecting completion

The key factor in facilitating programme completion was identified by learners and stakeholders as time. There appears to be some confusion about whether the LDU programme is verifiable CPD for some staff groups – where it is understood to be verifiable CPD, the relevant staff groups appear to find it easier to get time at work to complete the programme.

3.4  Suitability and applicability of the programmes

3.4.1  Registration

Learners considered that the registration process was ‘easy’. However, when programme participation data are considered, it is clear that some learners were unclear which programme they should be registering on.

Managers play a key role in facilitating uptake of the programmes; and learners tend to be experienced in using computers for work-related activities, including learning.
3.4.2 Format

Stakeholder and learner views about the format of the programmes varied: some liking the e-learning format as attractive and easy to navigate; other considering that the programmes were not user-friendly. Whether or not a learner found the format easy to use was likely to be affected by whether or not they were experienced in using e-learning and IT generally.

The user-friendliness of the programme format was seen as a key factor in retaining learners and enabling them to complete the programmes.

3.4.3 Content

Both learners and wider stakeholders considered that the content of the programmes was relevant, but for AfC band 5 and above staff, rather than lower banded staff. Further, when considering ‘relevant’ to whom, stakeholders suggested that there could be greater clarification of the educational/learning level of the programmes, and relevance to specific job roles. The accuracy and currency of the programmes was generally regarded as good, although they would probably benefit from updating.

Both learners and wider stakeholders identified other ways of learning about decontamination, including manufacturer training, and formally assessed programmes, including those provided through City & Guilds training and Anglia Ruskin University. The provision of educational accreditation/certification related to established educational frameworks (i.e. the SCQF) was seen as an incentive for learners to complete training in decontamination: the LDU and EDU programmes do not provide educational recognition.

The microbiology module in both programmes was regarded as the most challenging module; however, programme participation data show that these modules were slightly more popular than other modules in each programme – in particular for staff (as opposed to undergraduates). Some stakeholders considered that the content of the microbiology modules was too complex for the target learner groups – pointing again to the need to clarify the relevance of the programmes to specific job roles.

Very significantly, some learners and stakeholders were unaware about the work based activities that learners are asked to undertake on completion of each module; or indeed of the folder of evidence that they are asked to collate to provide evidence that the work-based activity has been undertaken. No data were available on practice-based learning within the programme, but it may be assumed that some learners completed only the online modules.

3.4.4 Mentorship

Available data on mentors are very unreliable; however, it can be said with some certainty that there were relatively few mentors compared to the number of learners. Learners and stakeholders view having a supportive and available mentor as a key factor in enabling them to complete the programme(s). Stakeholders who had been a mentor on the programme(s) considered that they
were not provided with sufficient information about the role, or support to fulfil the role – including time.

3.4.5 Perceived impacts

Stakeholders were generally sceptical about the educational impacts of the programmes, in particular in the absence of formal assessment leading to a qualification. They also considered that it was important to link the programmes to the eKSF and PDPs.

Stakeholders were slightly less sceptical about the impacts on practice; with identified impacts being:

- Affirmation of current practice
- Staff confidence, greater awareness and skills development
- Improved and more consistent standards

When asked what would be the impact if the programme(s) were not available, stakeholders considered that relevant staff would

- Not have the opportunity to learn about decontamination principles and practice (77%)
- Not have a good understanding about the evidence base for decontamination (72%)
- Not be up to date on guidelines on decontamination (65%)

They also considered that decontamination practice would be less effective (65%)

3.5 Development, customisation or adaptation of the programmes

Both learners and stakeholders considered that the programmes would be enhanced if:

- Learners had time to undertake the programme at work
- Accurate guidance on the amount of time required to complete the programme was provided
- Supportive, accessible mentors were available – with clear guidance on the nature of the mentoring role, and time to fulfil the role
- The programme(s) were more user-friendly

Additionally, stakeholders considered that it would be helpful if:

- The relevance of the role to specific job roles was clarified.
- The programme(s) assessed competence.
4 Recommendations

1. Redevelopment
   It is recommended that NES redevelops both the LDU and the EDU programmes to:
   a. Ensure relevance to specific job roles
      i. Modularisation could facilitate flexibility of use across different staff groups,
         with clear guidance and mapping of specific modules to job roles and
         staff/learner level
      ii. The KSF provides a useful framework
   b. Ensure not only that the work/practice-based elements of the programmes are very
      clear, but also that learners are required to complete them
   c. Provide clear guidance on the time required to complete the programmes
   d. Clarify the status of the programme in relation to verifiable CPD for specific staff groups
   e. Ensure that the format is user-friendly
      Consider educational accreditation of the programmes.

2. The e-learning platform
   It is recommended that NES provides the programmes through an e-learning platform that:
   a. Is user-friendly
   b. Reliably collates programme participation, completion and assessment data – including
      on practice-based elements of the programmes
   c. Reliably collates data on mentor participation

3. Mentoring
   It is recommended that NES works with stakeholders in NHS Boards to address the needs to
   recruit and support mentors.

4. Promotion
   Once the programmes have been redeveloped, it is recommended that NES:
   a. Works to secure NHS Board management buy-in to the programmes, including by:
      ▪ The development of ongoing feedback on learner registration and completion;
         and on the provision of mentorship
   b. Targets the podiatry workforce (and undergraduate programmes) as a key source of
      potential LDU programme users
   c. Targets the endoscopy workforce as a key source of potential EDU programme users