The Limitations of Training Prescribers in Using ePrescribing Systems

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Introduction

- A key element of the implementation and on-going use of an ePrescribing system is ensuring that **users are, and remain, sufficiently trained and competent to use the system effectively**.

- The user training should be:
  - 1. **Comprehensive**
  - 2. **Highlight potential pitfalls and challenges**

- **Challenges in delivering effective training:**
  - large numbers of staff; staff resistance/availability; rotation between wards and specialties; and temporary/short term staff.
  - Range of users and expanding responsibilities

- Some studies suggest that **insufficient training is associated with suboptimal use of a system.**
  - Highlights the importance of training and education both in facilitating successful implementation of electronic systems and averting errors.

Aim

1. To describe the approaches used to train qualified prescribers on electronic prescribing systems; and if online methods were used

2. To identify whether this training covered the pitfalls and challenges of using these systems
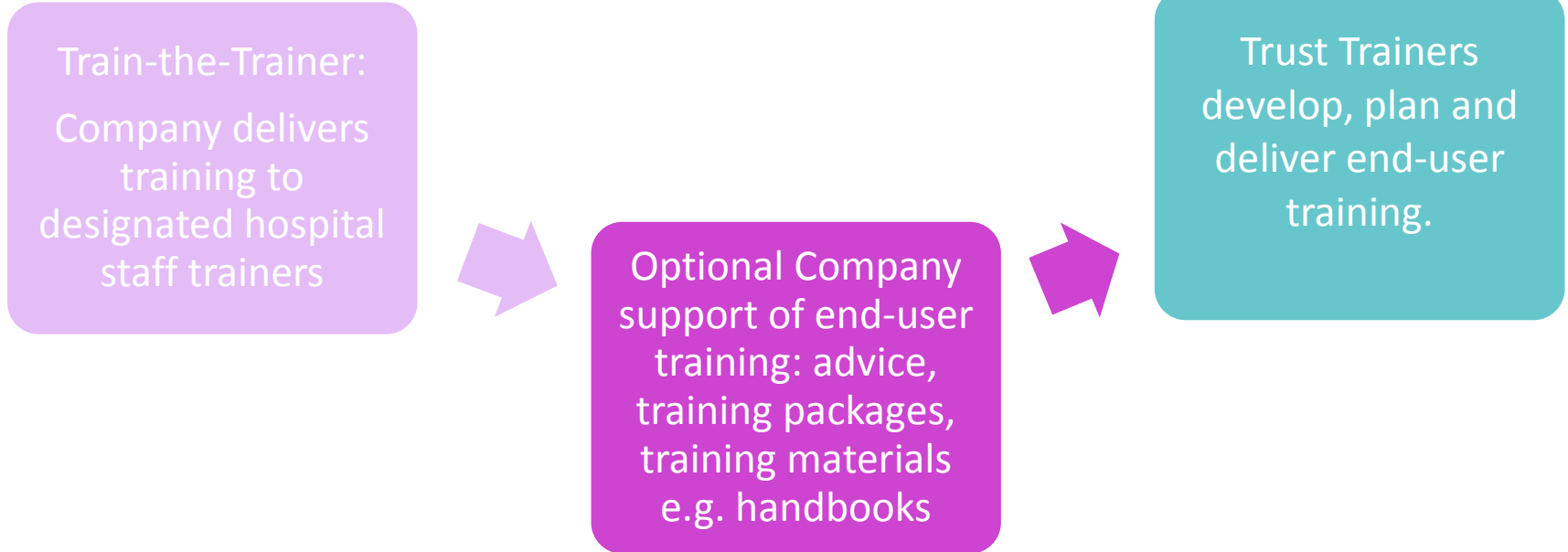
Methods

1. Contacted UK companies by email and telephone, and visited websites.

2. Literature review to determine what approaches are used to train qualified prescribers on ePrescribing systems in a hospital setting.
   - 8 publications included (6 full-text papers and 2 abstracts)

3. Semi-structured interviews
   - Representative from four hospital Trusts

1. Results

- Contacted UK companies by email and telephone, and visited websites

- Online training rarely provided.

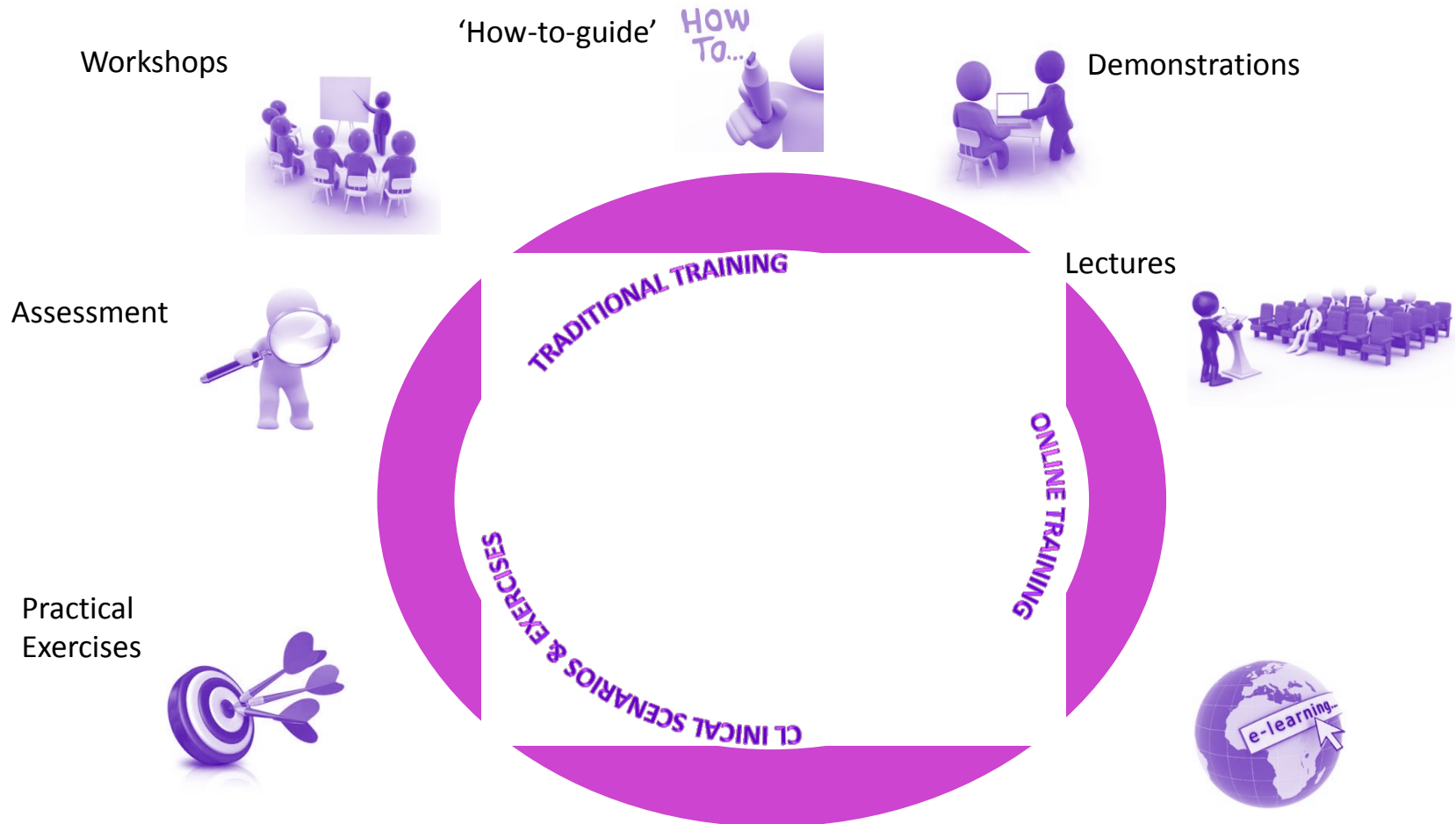- Range of training approaches offered by the companies

• Classroom-based sessions	• E-Learning
• Lectures	• Chat-forum (help desk)
• Workshops	• Patient scenario based examples
• Ward-based training	• Handbooks and 'quick-start' guides

1. Results

Train-the-Trainer:

Company delivers training to designated hospital staff trainers

Optional Company support of end-user training: advice, training packages, training materials e.g. handbooks

Trust Trainers develop, plan and deliver end-user training.

2. Results

- Literature review: 8 publications; 6 full text and 2 conference abstracts

Workshops

'How-to-guide'

Demonstrations

Assessment

Lectures

Practical Exercises

TRADITIONAL TRAINING

ONLINE TRAINING

CLINICAL SCENARIOS & EXERCISES

e-learning...

3. Results

Interviews: 4 Sites

1. **Is the training supported by the companies that provide the systems? If not, who provides the training?**
   - Company provided end-user training/ training material at implementation stage
   - Hospital informatics team and IT trainers, develop and deliver ongoing training
   - Clinically trained trainers

2. **How is the training facilitated**
   - Lectures
   - Classroom based sessions in a computer suite
   - Training domain
   - Clinical exercises- workflow orientated rather than procedural
   - Evening sessions
   - Assessment
   - Ward based training
   - E-learning modules- role specific
   - Summary session/Speed-date meeting
   - Ancillary materials, such as a handbook, 'how-to' guides, 'handy hints', web-based demonstrations.
   - Super-users
   - Help desk

3. Results

3.   Lessons learnt:

- **Planning Stage**
  - Mandatory training
  - Timing of sessions & Duration
  - Planning

- **Delivery**
  - Practical exercises
  - Super-users
  - Ward based training
  - Workflow orientated
  - Focus on 'problem areas'
  - Accessibility- e-Learning
  - 'Real-Life'
  - Consistency
  - Feedback

- **On-going Support**
  - Modernisation

3. Results

4. What common issues arise when training prescribers on induction?
- Logistical difficulties
- Technical issues
    - Set-up of accounts
    - E-Learning issues
- Updating the training to reflect system changes
- Training overload
- Challenging functions: rescheduling administration times, antibiotic review, insulin, fluids…
- Targeting training at the right level
- Staffing
- Staff resistance/ communication
- Locum staff
- Duration
- Trainer expertise

Take home messages…

- Range of methods used to train qualified prescribers

- Using combination of learning methods appeals to the learning styles of different users.

- eLearning material should be engaging, include scenarios and quizzes, simple, concise, informative and specify learning outcomes learning

- Specific recommendations include: (Sittig et al., van Stiphout et al.)
  - Adequate training opportunities to experience the system prior to implementation
  - Enforcing a minimum level of training before clinicians are authorised to use the system
  - Delivery of role-specific 'walk-throughs' of the different processes
  - Training should encompass both procedural tasks (e.g., prescribing a medicine) and cognitive tasks (e.g., interpreting a CDS alert)
  - Replicate 'real-life' issues e.g. interoperability

- Lack of the lack of data retrieved suggests a need for additional research

Thank you for Listening.

Any questions?