A methodology to design customized learning networks

How we designed a training toolbox to develop customized trainings in handover…

Centre for Learning Sciences and Technologies

Open Universiteit
celstec.org
What do we want to do in this workshop?

Show you how you can design a learning network to help training specialists develop a customized training
Take back home at least one interesting method or idea for your own research
Overview

- The HANDOVER project
- Methodology
- Next steps to be taken
The Handover project
The HANDOVER project

Shorter hospitalizations, more frequent patient transitions → high demands on the quality of clinical handovers

- **Referral** from a GP to a hospital
- **Discharge** from a hospital to GP

- Missing information
- Incomplete information
- Delay
- Wrong address
THIS REPORT SAYS MEDICAL ERRORS SUCH AS INDECIPHERABLE PRESCRIPTIONS CAUSE THE DEATHS OF 98 patients a YEAR, OR IS THAT 98,000? IT'S HARD TO READ THIS, IN ANY CASE, WE'RE SUPPOSED TO REPORT THEM, OR IS THAT REPEAT THEM?

[Cartoon image]

TOLES © 1999 The Buffalo News. Reprinted with permission of UNIVERSAL PRESS SYNDICATE. All rights reserved.
Failures in communication...

...AND THAT IS WHY WE LIFT ON THREE...
If handover is problematic, what is then the solution?
Methodology

Phase

1. The problem
2. The training
3. The toolbox
4. The Evaluation

Methods

- Interviews
- Focus group
- Proces mapping
- Literature review

- Training needs analysis
- Questionnaire
- Interviews

- Requirement analysis

- PMI – rating
Phase 1. Problem analysis and solution generation

**Question**
Why are handovers problematic and what could we do about it?

**Aim of this phase**
Identification of facilitators and barriers for effective handover
Methodology

Phase

1. The problem

Methods

Interviews
Focus group
Proces mapping
Literature review
Interviews and focus groups

- 222 interviews with medical professionals and with 92 patients
- Focus group with medical professionals
  - Experience with problematic handovers
  - Possible solutions

Qualitative analysis
- Categorisations
- Code-book
- Atlas.ti
- Open source: Weft QDA
Proces mapping

A process map visually depicts the sequence of events to build a product or produce an outcome.
Could you use the process mapping for your research / practical issues?

E.g., Why do (my) students not update their portfolio (regularly)
Systematic review – Ishikawa diagrams

Cause-and-effect diagrams of fishbone diagrams

Show the causes (i.e., factors) of a certain event. Causes are usually grouped into the following categories:

- People
- Methods
- Machines
- Materials
- Measurements
- Environment
Systematic review – Cognitive mapping

To identify emerging topics and thinking patterns in the literature about the topic of interest (i.e., teaching and learning aspects of handover)
Can these methods be useful for your research?

To whom were these methods new?
Conclusion phase 1

High diversity of
- handover practices
- problems
- solutions

Training is needed…but on what and how?

→ More insight into the training as a means to train the diverse solutions
Phase 2. Content and design of the training

Question
What are the needs and preferences of the trainees (i.e., medical professionals) regarding the content and the design of a training?

Aim
Gain insight into the training needs of the trainees
Methodology

Phase

1. The problem
2. The training

Methods

- Interviews
- Focus group
- Proces mapping
- Literature review
- Training needs analysis
- Questionnaire
- Interviews
Questionnaire on training

96 Medical professionals (prim/sec. care doctors/nurses)
Questions on content and design of the training (NL, ES, SE, PL)

CONTENT

• How important is it to include the following topics in the training?
  - Communication skills
  - Tool use
  - Awareness
  - Alertness
  - Other, namely..

• What factors contribute to the success of a training?
  Open question
## DESIGN

Would or wouldn't you advise the following design/delivery options

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<td>Examinations</td>
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Semi-structured interview

19 Training specialists in the medical domain (NL, ES, PL)

Questions pertained to

- Background
- Content of the training
- Design/delivery of the training
- Promotion to attend the training
- Evaluation of the training
- Preconditions / promoting transfer
Writing persona

Creation of an archetypal user of a website that represent the needs of larger groups of users, in terms of their goals and personal characteristics.

They help guide decisions about functionality and design.

Although personas are fictitious, they are based on knowledge of real users.
Maria, barcelona (ES)
Coordinator of continuous education institute

Maria does not need to be convinced that handover is a very important topic but although she has about 10 years experience in quality of care and safety patient, she has not got any experience in training handover.

She is not sure yet that handover should be a special subject for training. She thinks that the institute needs to put necessary structure, regulations, guidelines policy, and tools in place. A culture of safe handovers needs to be created.
What are the characteristics of your target group?

Could you use a writing persona for your research?
Conclusion phase 2

Diversity of training needs and solutions
→ A standardized training is not suitable

We will need something like a **TOOLBOX for training specialist**. So they can build the training themselves
Phase 3. Creation of the toolbox

Questions

• How should the toolbox look like?
• What should be its content?
• How should it be structured?
• How to meet the needs of the users?

Aim

Develop an environment in which training specialists can find all kinds of solutions to create themselves a training that fits the needs of their trainees.
Methodology

Phase

1. The problem

2. The training

3. The toolbox

Methods

- Interviews
- Focus group
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- Requirement analysis
Requirement analysis

1. Writing personas
2. List of functionalities
3. Comparison of potential online environments
4. Customization of the selected environment
Conclusion phase 3

A toolbox is also not fully adequate...
→ it does not address the awareness of the target group for the diversity of the problem.

A learning network is more suitable to reach this aim.
Features of a learning network

- Distributed learning environment
- Emerging content
- User-created content → Prosumers: Producers and consumers
- Users blog, rate, annotate, tag, and share
- Support of informal and professional learning
- Information filtering

Most important features of this LN
- the sharing of knowledge and experiences
- customizing solutions for problematic handovers to local needs and conditions
Result phase 3

The European Handover Learning Network (a.k.a. Handover toolbox)

...which we will show you in a minute
Who is involved in a learning network?

Why aren’t you involved in a learning network?
Phase 4. Evaluation

Question
What is the first impression of the toolbox of experts in the medical domain?

Aim
Gather feedback to further improve the handover learning network
Methodology

1. The problem
   - Interviews
   - Focus group
   - Proces mapping
   - Literature review

2. The training
   - Training needs analysis
   - Questionnaire
   - Interviews

3. The toolbox
   - Requirement analysis

4. Evaluation
   - PMI – rating
Plus Minus Interesting rating

Look at and listen to the presentation of the Handover learning network

Meanwhile…create notes on

P:    Plus
M:    Minus
I:    Interesting

Write down everything that comes to your mind, generate as many ideas as possible, do not filter your ideas
Conclusions

• Work in progress…
And then now…the toolbox

Please apply the PMI-rating

P: Plus
M: Minus
I: Interesting
Use Case scenario

Role: Training expert on patient safety unit in Heerlen Hospital

Task: Create a training for handover for the GPs

Subtasks:
1. Explore possible interventions
2. Create a training outline with topics and activities

Deadline: YESTERDAY!

Hint: Look at the Handover Training Toolbox
Welcome to HandOver toolbox in which you can find all kind of information and support to help you develop, design and deliver a training in handover or to maximize its impact. The toolbox is funded by the European FP7 project HandOver.

The toolbox is not just a box with static information on handover training. It is a dynamic, ever changing box because it is part of a ever growing learning network. In this network people can search for information, comment on available products, add product and discuss with others who are also interested in training of handover.

We truly believe that learning can make a difference for handovers and want to encourage you to register and share your knowledge on handover training with others, comment on products and contribute to ongoing discussions. If you share our believe, please do not hesitate and join us today!

Latest activity

1 2 3  Next »

Funny cartoon on how communication is also about interpretation
Maria Persona 9 minutes ago

How to communicate effectively - Lardner
Maria Persona 19 minutes ago

How to communicate effectively
Last updated 24 minutes ago by Maria Persona

Link to website on protocol HAND ME OVER THE ISOBAR
Dirk 3 days ago

Vignettes database
Last updated 3 days ago by Wendy Kicken

Guidelines on how to use the SBAR acronym during communication with physicians
Wendy Kicken 3 days ago
Users of the Handover Toolbox portal can search for site members by tags or names. The page displays 54 site members, with the current view showing Marcel van de Klink, who sends good luck wishes for the Handover preparation. Other members listed include Wendy Kicken, Slavi, Giulio Toccafondi, Hendrik (preparing for the Handover meeting tomorrow), Oliver Groene, and Peter Sloep.
Welcome Hendrik

Hendrik has started a new discussion topic titled: Cultural differences in EU countries (3 minutes ago)
Hendrik has posted a new comment on this discussion topic | How can we improve the discussion on handovers problems at our local ward? (7 minutes ago)
Gjís Hesselin has posted a new comment on this discussion topic | How can we improve the discussion on handovers problems at our local ward? (15 minutes ago)
Gjís Hesselin has started a new discussion topic titled: How can we improve the discussion on handovers problems at our local ward? (19 minutes ago)
Hendrik posted a comment on this file Levels of culture (20 minutes ago)
Hendrik posted a comment on this file HANDOVER Report: cultural barriers and facilitators in clinical handover (21 minutes ago)
Hendrik posted a comment on this file Article on the development of a discharge checklist (28 minutes ago)
Gjís Hesselin uploaded a file (29 minutes ago)
Gjís Hesselin uploaded a file (31 minutes ago)
Hendrik is now a member of Handover en Grupos minoritarios (38 minutes ago)
Hendrik is now a member of Culture and clinical handover (39 minutes ago)
Thomad Minestrador is now a member of How to improve the HandOver toolbox (40 minutes ago)
Thomad Minestrador is now a member of Content of the training: What to train? (41 minutes ago)
Thomad Minestrador is now a member of How to train: training activities (41 minutes ago)
Thomad Minestrador is now a member of Culture and clinical handover (42 minutes ago)
Thomad Minestrador is now a member of Handover en Grupos minoritarios (42 minutes ago)
Gjís Hesselin is now a friend with Slavi (50 minutes ago)
Gjís Hesselin is now a friend with Marcel van de Klink (50 minutes ago)
Gjís Hesselin is now a friend with Wendy Kicken (50 minutes ago)
### Culture and clinical handover

There is the assumption that culture (norms, believes, attitudes et cetera) influences handover in daily practice. However, this is often difficult to identify and assess. In het HANDOVER project we looked at cultural barriers and facilitators to effective and safe handover. Main findings were that more awareness among care providers is needed for the handover process (communication, information exchange and coordination of care), to ensure continuity of care at referral as well as discharge.

### Handover en Grupos minoritarios

Este grupo ha sido creado para colaborar en la formacion de profesionales sanitarios sobre posibles estrategias para mejorar la comunicacion con pacientes pertenecientes a grupos minoritarios.

Desde la perspectiva de la comunicacion, entendemos grupos minoritarios, personas que entren en contacto con el entorno sanitario y que puedan tener dificultades para comprender la informacion otorgada por los profesionales sanitarios:

### How to train: training activities

The content of the training can be delivered by means of several training activities. However, the effectiveness of these training activities differs per situation. For instance, for large groups a lecture-based training with interactive elements is most appropriate, whereas for small groups role play or co-creation of handover procedures can be used. Because all training activities have their advantages and disadvantages, combining training activities improves the effectiveness of the training. This variation is not only motivating, it also takes into account different learning preferences of the participants.

### Content of the training: What to train?

The content of the training strongly depends on the interventions that have been selected to improve handover practices of the medical and care professionals. These interventions can globally be divided into the following...
Article on the development of a discharge checklist

Wendy Kicken
3 days ago

In this article (Transition of care for hospitalized elderly patients - development of a discharge checklist for hospitalist, by Halasyamani et al.) it is explained how a discharge checklist can be developed by taking into account the needs of the organization. Although the development is not explicitly based on co-creation, the principles and the process of the development also apply to co-creation.

Download this

Hi Wendy that is a very interesting article! Many thanks for sharing it, it perfectly fits to the challenges I'm facing at the moment by taking into account the needs of our organisation.

Hendrik just now
Culture and clinical handover

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Handover en Grupos minoritarios

Limitaciones en la comunicación con personas que pertenecen a grupos minoritarios

Owner: Carola Orrego
Group members: 3

Description:
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Desde la perspectiva de la comunicación, entendemos grupos minoritarios, personas que entran en contacto con el entorno sanitario y que puedan tener dificultades para comprender la información otorgada por los profesionales sanitarios:

- Personas con barreras idiomáticas
- Personas con bajo nivel de educación
- Personas con problemáticas sociales y limitaciones culturales

Bienvenidos a este espacio y todas vuestras aportaciones serán bien recibidas!!!!

Brief description: Limitaciones en la comunicación con personas que pertenecen a grupos minoritarios

Interests: desfavorecidos sociales, barreras idiomáticas, comunicación, Transferencia de información

Website: http://www.faq.org

Latest discussion
No topics have been created.
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<tr>
<th>Group Name</th>
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<td>Content of the training: What to train?</td>
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The content of the training strongly depends on the interventions that have been selected to improve handover practices of the medical and care professionals. These interventions can globally be divided into the following
How can we improve the discussion on handovers problems at our local ward?

Several hospital nurses also described the benefits of working at a ward where it is appreciated and encouraged to speak out frustrations or to correct each other (e.g. in staff meetings), to put forward suggestions for improvement, to compliment and to support each other. Some expressed that such a ‘learning culture’ motivates one another in doing things in handover practice better the next day. But how can we stimulate this at wards where such a culture is absent?

Hi Gijs,

We apply in our institute a kind of tandemship model. Where always two collegues (senior and a junior) can exchange their experiences in a safe environment. An environment where mistakes are not a problem rather than a source for improvement. That works quite fine and improves quality for our domain at least. Maybe, a solution for your target group as well.

Best,

Thanks Hendrik! While reading this I recall a colleague talking about this. We also have a lot of seniors and juniors here...so it might also work over here I guess...I will let you know!
Group notifications

To receive notifications when new content is added to a group you are a member of, find it below and select the notification method you would like to use.

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<th>Group</th>
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Save
Use Case scenario

Deadline: YESTERDAY!

Result: Peter found enough information for his task. In addition, he extended his professional network and started his own group on handover training for GPs. In this way he extended his reputation in the field.

Hint: Look at the Handover Training Toolbox
Next step to be taken

How to structure the handover learning network toolbox…
OBRIGADO
for your attention ;-)