



# Promoting Influenza Vaccination in Health Care Workers: An Intervention Mapping Approach

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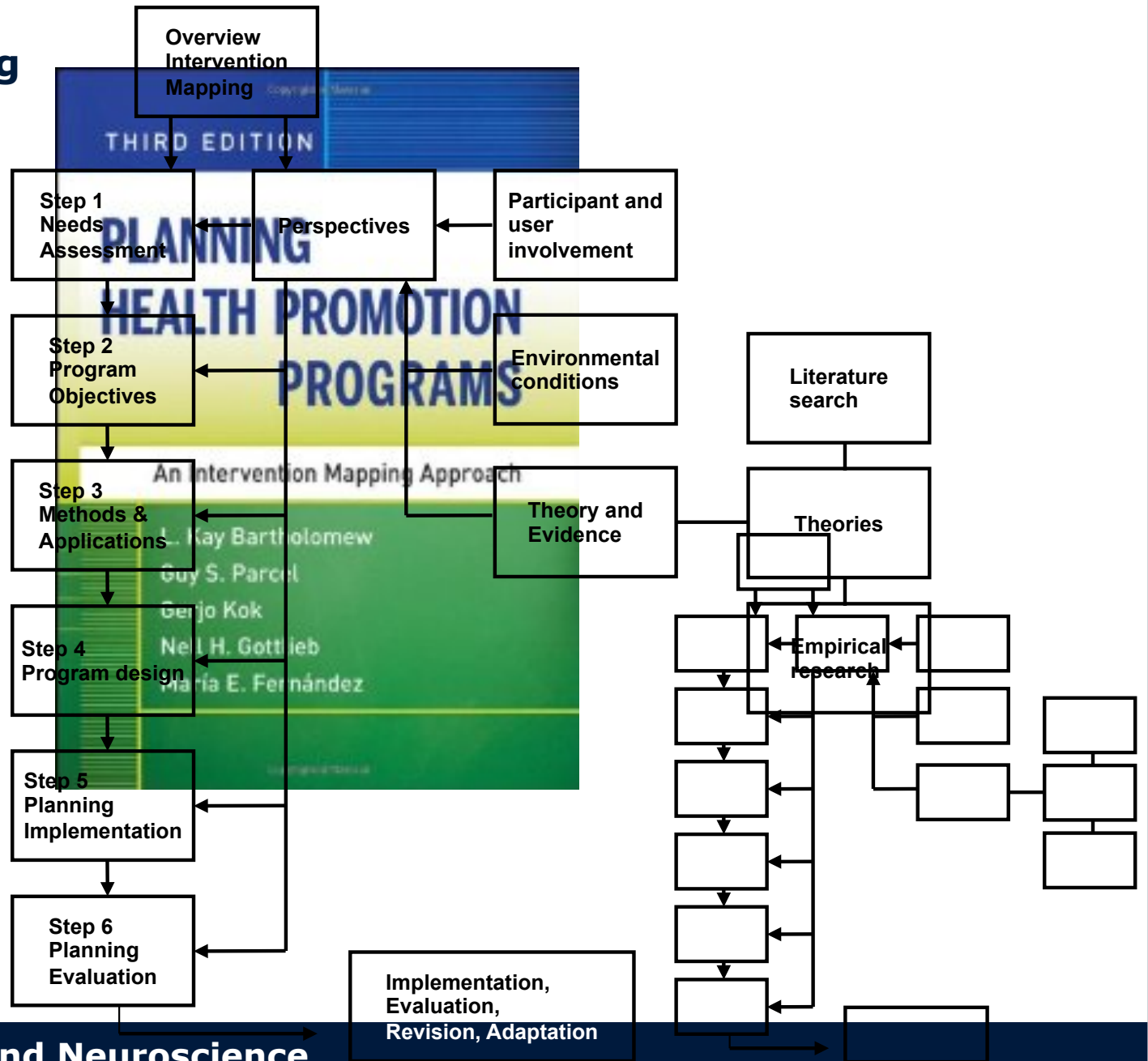
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08.07.2014



# Intervention Mapping



# 1. Reasons and underlying beliefs of HCWs (NL vs. BE vs. DE)

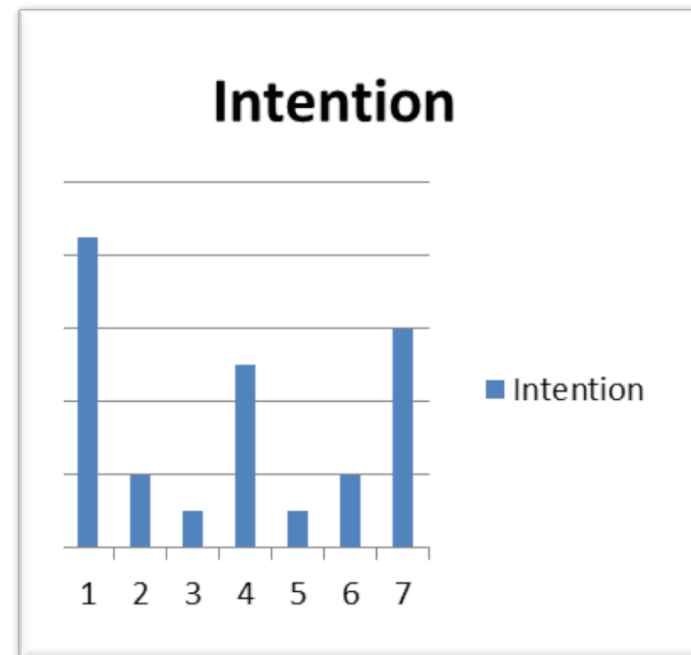
Qualitative, semi-structured interviews

- *Results:*
  - Immunizers:
    - self-protection, patient and family protection
  - Non-immunizers:
    - Fear of side-effects
    - Low risk-perception
    - Disbelief in effectiveness
    - Organizational barriers
    - Misconceptions
    - Undefined negative emotions

➤ Additional beliefs

## 2. Social-cognitive predictors of HCWs' intention (NL vs. BE vs. DE)

- Cross-sectional study
- 3 groups of HCWs
  - No intention
  - Unsure
  - High intention



## 2. Social-cognitive predictors of HCWs' intention (NL vs. BE vs. DE)

- No intention (1) vs. no clear decision (0)
  - Attitude (-)
  - Subjective norm (-)
  - Moral norm (-)
  - Omission bias (+)
  - Past vaccination uptake (-)
- High intention (1) vs. no clear decision (0)
  - Attitude (+)
  - Risk-perception (+)
  - Naturalistic views (-)
  - Self-protection motive (-)
  - Past vaccination uptake (+)

## 2. Social-cognitive predictors of HCWs' intention (NL vs. BE vs. DE)

- Prediction of intention (82%)
  - Prediction through attitude(73%)
- Some differences between countries
  - Same influence of attitude on intention

### **3. Social-cognitive predictors of HCWs' intention and behaviour**

- Longitudinal study (NL)
  - Baseline (intention)
  - Follow-up (behaviour)
- 3 groups

## 3. Social-cognitive predictors of HCWs' intention and behaviour

### Predictors of intention (80%)

- No intention (1) vs. no clear decision (0)
  - Attitude (-)
  - Moral norm (-)
  - Autonomy (+)
  - Omission bias (+)
  - Self-protection motive (+)
  - Past vaccination uptake (-)
  
- High intention (1) vs. no clear intention (0)
  - Attitude (+)
  - *Moral norm*
  - Past vaccination uptake (+)

### **3. Social-cognitive predictors of HCWs' intention and behaviour**

- Prediction of behaviour (58%)
  - 20% high intention, 74% vaccinated
  - 28% unsure, 15% vaccinated

# Conclusions

- Some differences between countries
- Most influential determinant: Attitude
  - Predicted by underlying beliefs
- Intention – behaviour
- Educational intervention
  - However, has been done before with only small effects!

# Pilot Intervention

## GOALS

1. Increase knowledge and counteract misconceptions
2. Raise awareness of the social norm
3. Regulate behaviour through default procedure
4. Increase visibility of vaccination status

# 1. Increase knowledge and counteract misconceptions

Determinant	Method (Theory)	Parameters for use	Application
Knowledge Attitude	Persuasive Communication (Persuasion Communication Matrix, Elaboration Likelihood Method, Social Cognitive Theory, Diffusion of Innovations Theory)	Messages need to be relevant and not too discrepant from the beliefs of the individual; can be stimulated by surprise and repetition. Will include arguments.	Scheduled Master classes Posters No-reply emails  (relevance for patient protection, effectiveness and safety vaccination, etc.)
	Belief selection (Theory of Planned Behavior/ Theory of Reasoned Action)	Requires investigation of the current attitudinal, normative and efficacy beliefs of the individual before choosing the beliefs on which to intervene.	

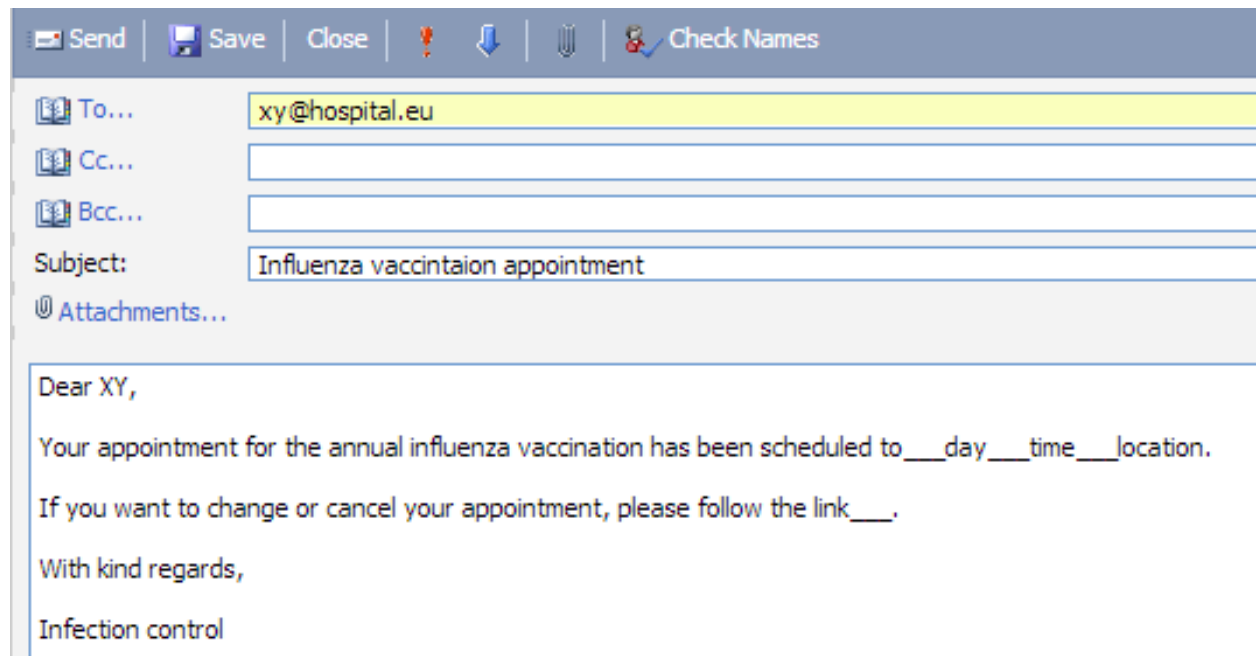
## 2. Raise awareness of the social norm

Determinant	Method (Theory)	Parameters for use	Application
Social norm	Framing to shift perspectives (Models of Community Organization)	Match with culture.	Social norm messages on posters

“The majority of HCWs in this hospital think that the flu shot is important to protect patients. Join them in getting a flu shot!”

### 3. Regulate behaviour through default procedure

- Intention – behaviour relationship
- Default/ opt-out procedure (Chapman et al., 2010)



## 4. Increase visibility of vaccination status

Determinant: moral/ social norm



- The Netherlands (Riphagen-Dalhuisen et al., 2013)
  - “Consciously vaccinated for you.”
- Switzerland (Iten et al., 2013)
  - “I am vaccinated against the flu to protect you.”
  - “I wear a mask to protect you.”

# References

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