

Bridging the gap between the economic evaluation literature and occupational health: a qualitative study among decision-makers in the healthcare sector

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Introduction

- Organizations invest in OHS interventions for legal, **financial** and moral reasons
 - Economic evaluations
- A growing number of articles has been published about the financial implications of OHS interventions
- However, the use of such articles is likely to be limited among occupational health decision-makers



Introduction

- Continued improvement in occupational health can only be established if (implementation) decisions are based on the best available evidence
- To ensure that this is the case:
 - Scientific evidence should meet the needs of decision-makers
 - Decision-makers should be equipped with the necessary skill set

Aim

The present study aimed to explore three issues:

- 1) The process by which occupational health decisions are made
- 2) The importance given to the financial implications of OHS interventions
- 3) The decision-makers' knowledge on economic evaluation methods

Methods

- In-depth and structured telephone interviews
- Purposeful sample of occupational health decision-makers in the Ontario healthcare sector
- Inclusion criteria:
 - Employees of an Ontario-based hospital or LTC facility
 - Responsible for daily occupational health operations or senior managers

Methods: in-depth interviews

- 18 interviews (2-3 researchers)
- Interview protocol:
 - Short questions (e.g. job description, facility size)
 - Open-ended questions to explore the occupational health decision-making process and importance financial implications
 - Examples:
 - *“How does your organization go about starting and implementing and OHS intervention?”*
 - *“How does cost-benefit/cost-effectiveness fit into the decision-making process?”*
- Analyses: Constant comparative method

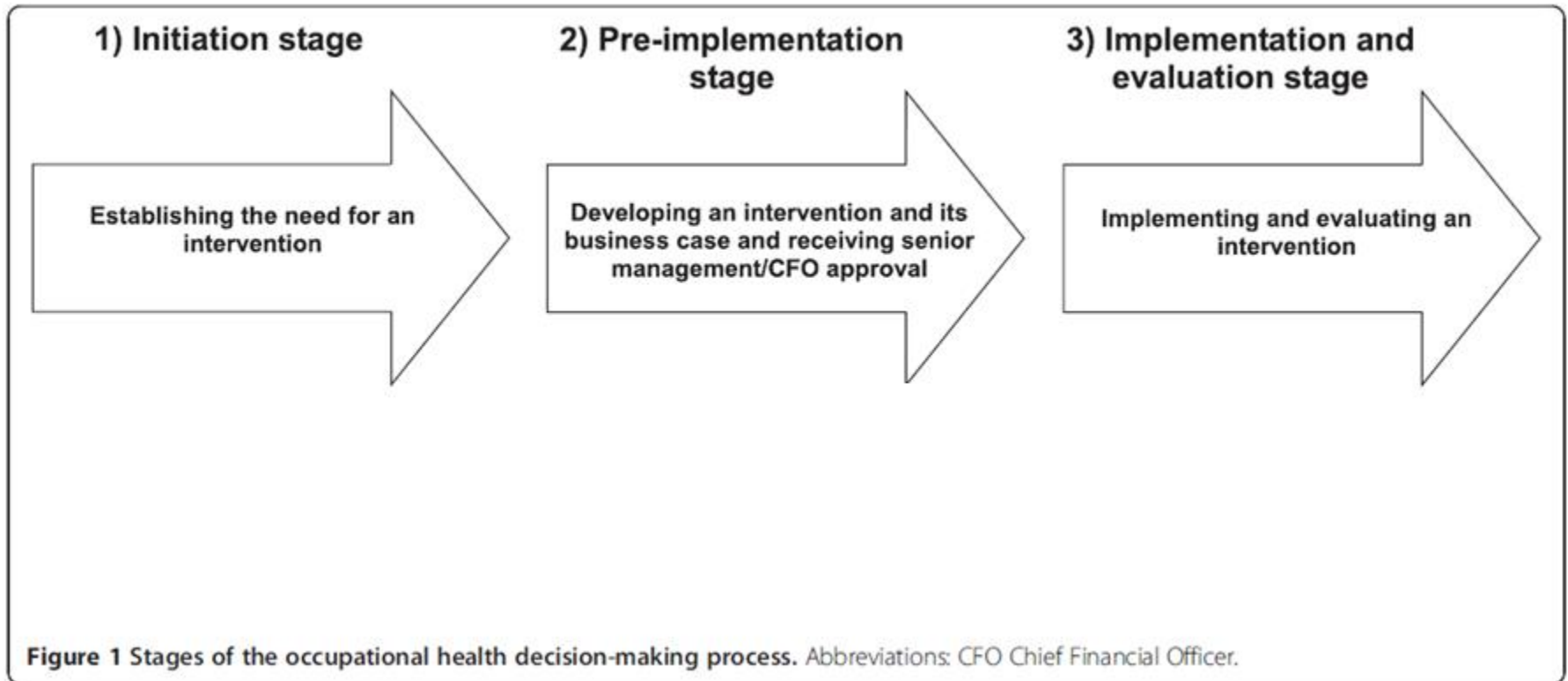
Methods: structured telephone interviews

- 25 structured telephone interviews (1 researcher)
- Interview protocol:
 - Short questions (e.g. job description, facility size)
 - Structured questions to explore:
 - Familiarity with CBA/CEA/CUA
 - If so, please define them?
- Analyses: Summary statistics
 - Economic evaluation designs (correct/incorrect)
 - CBA: Costs versus benefits (expressed in monetary values)
 - CEA: costs versus effects
 - CUA: costs versus utilities

Results: participants in-depth interviews

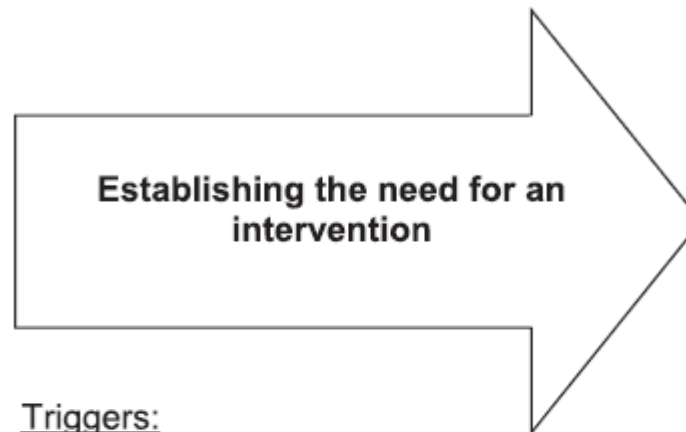
	In-depth interviews	Structured telephone interviews
Participants [n.]	19	28
LTC [n. (%)]	8 (42)	1 (4)
Female [n. (%)]	7 (88)	1 (100)
Job description [n. (%)]		
OHS operations	6 (75)	1 (100)
Senior staff	2 (25)	0 (0)
Hospital [n. (%)]	11 (58)	27 (96)
Female [n. (%)]	5 (46)	21 (78)
Job description [n. (%)]		
OHS operations	9 (81)	26 (96)
Senior staff	2 (19)	1 (4)

Results: occupational health decision-making process



Results: occupational health decision-making process

1) Initiation stage

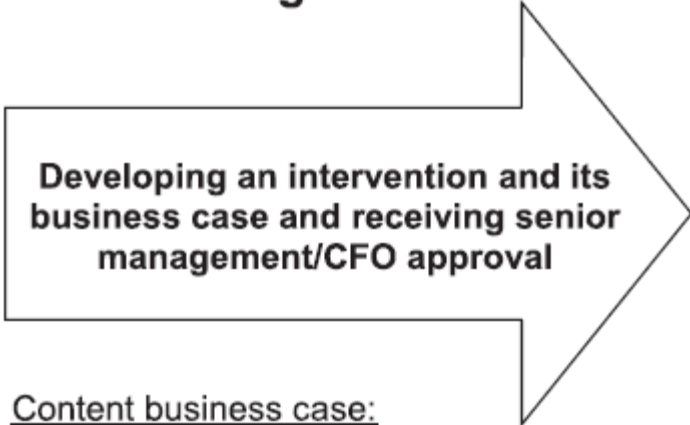


Triggers:

- Legislation
- Potentially high cost issues
- Specific incident or injury
- Funding opportunities
- Peer support program
- Accreditation
- Audits

Results: occupational health decision-making process

2) Pre-implementation stage



Developing an intervention and its business case and receiving senior management/CFO approval

Content business case:

- Description program (costs)
- Implementation plan
- Rationale for the investment
 - Mandated/ordered
 - Added (financial) value:
Anticipated effects/costs and cost-benefit
 - Moral
 - Relationship to core business

Results: occupational health decision-making process

3) Implementation and evaluation stage



Implementing and evaluating an intervention

Evaluation methods

- Process evaluation
- Trend analysis

Results: importance financial implications

- Information on the financial implications of great importance
- Particularly the employer's costs and benefits
- Reasons:
 - Tight budget
 - Occupational health and safety expenses have to come out patient care budget
 - Public money

Results: Participants structured telephone interviews

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Results: Economic evaluation designs

- Most participants (93%) were familiar with CBA and many (72%) were able to give a correct definition

“It’s where you factor in all the costs of the intervention ... Direct costs associated with whatever it is that you are trying to purchase ... On the benefit side you would still put it into dollars, but it would be attributing things like reduced sick time and reduced injury costs. So both sides of the equation and then you would come out with ... a positive or negative return on your investment.”

Results: Economic evaluation designs

- Most participants (71%) indicated that they were familiar with CEA, but few (11%) were able to give a correct definition

“Cost-effectiveness is looking at how effective an initiative is in terms of ... is the outcome what we anticipated it to be.”

“Is the investment of money and time worth the effort and that we will have a return on investment.”

Results: Economic evaluation designs

- Most participants were not familiar with the concept of CUA; only one indicated that he had heard of it, but was not able give a correct definition

“Well utility is utilization, so I guess.... if we spent 25,000 Dollars..... We want to know whether they [the new equipment] are actually being used.”

Conclusion

- The occupational health decision-making process can be subdivided into three stages
 - Initiation stage
 - Pre-implementation stage
 - Implementation and evaluation stage
- Organizations invest in OHS interventions for legal, financial and moral reasons
- Information on the financial implications of OHS interventions is of great importance

Conclusion

- Occupational health decisions are currently not being made in an evidence-based manner
- There is a need to advance the economic evaluation skill set of decision-makers

Possible ways to improve evidence-based practice

- Scientific evidence should be in line with the needs of decision-makers
 - CBAs
- Provide busy decision-makers with critical summaries of published studies
 - Transmit them in easy-to-use formats (e.g. review fact sheets)

Possible ways to improve evidence-based practice

- Educate decision-makers in economic evaluation methods as well as the importance of integrating scientific evidence in day-to-day decision-making
- Provide decision-makers with software tools so that they can conduct their own ex-ante or ex-post economic evaluations