

# De-implementation

Implementation of evidence-based practice by stopping practices

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# Conceptual confusion at the next level?


- Implementation
- Knowledge translation
- Adoption
- Innovation
- **De-implementation**
- Knowledge **encryption**
- **De-adoption**
- **De-innovation**

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# Implementation of evidence-based practice **by stopping practices**


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- Evidence that a practice is not effective, not safe or not efficient

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- Examples:

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- Long-term use of benzodiazepine
  - Ambulatory geriatric assessment
  - PSA testing in men with LUTS

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- None or little evidence of effectiveness, but risk, costs or distress involved

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- Examples:

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- Management of traumatic head injury
  - Planned follow up after hospital treatment
  - New oral anticoagulants

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# Outline of presentation

1. Clinical research and guidelines
2. Understand practices that should be stopped
3. Tailored de-implementation strategies
4. Evaluation of de-implementation strategies

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# Clinical research: “preventive de-implementation” (Prasad & Ionnadis 2014)

- Many practices are largely untested or have insufficient evidence
- Systematic assessment is required, ideally by non-conflicted bodies
- Key point:
  - Take pre-emptive steps that would allow efficient de-implementation if the intervention eventually proves inefficient and harmful
  - **What could these steps be?**

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# Do (and should) clinical guidelines recommend to stop practices?

- Examples:
  - Avoid bed rest in acute (uncomplicated) low back pain
  - Avoid X-ray if Ottawa ankle rule indicates low risk of fracture
  - Stop routine monitoring in users of oral contraceptives
- Such recommendations reflect an “implementation perspective” on clinical guidelines as they reflect (implicit) knowledge of current practice
- I did not identify research or published reflection on the topic: is this an underdeveloped item in guideline development?

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# What exactly is “stopping a practice”?

- Do nothing
- Watchful waiting
- Offer counseling
- Enhance patient self-management
- Less intense/invasive/risky intervention
- Apply practice that was common previously

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# What is special about stopping?

**Does not any change imply that you stop some practice?**

For instance:

- replace antibioticum A for B
- replace surgical procedure A by B



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# Some ideas from psychology

- Dual processing (Presseau 2014):
  - Reflective process: cognitions, motivation, regulation
  - Impulsive process: default mode, based on cognitive schemata

➔ Target both specific cognitions and cognitive schemata
- Habits are crucial in clinical practice (Nilsen 2012):
  - Developed by repetition into automatic behaviors
  - Little internal control, largely triggered by contextual cues

➔ Modify opportunities by regulation or structuring

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# Some ideas from sociology

- Change agency: knowledge brokers, opinion leaders, facilitators (McCormack 2013)
  - ➔ change message or messengers
- “Impression management”- importance of backstage , unofficial and offstage communication for change (Lewin 2011)
  - ➔ target communication more broadly than at official frontstage
- Organisational readiness (Weiner 2009)
  - ➔ also for de-implementation?

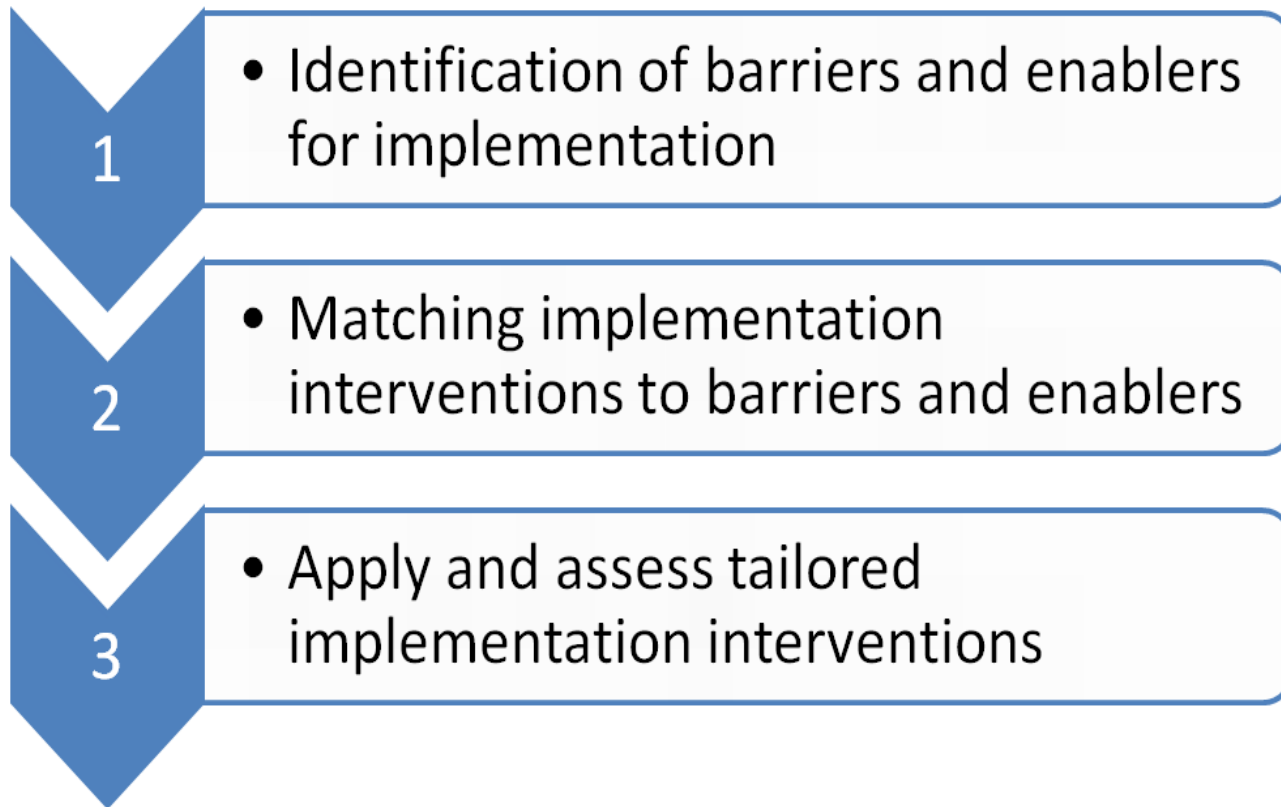
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# Some ideas from economics

- Many production sources (staff, facilities) are non-divisible, thus not flexible in the short run
  - ➔ Reimburse transaction costs, or wait for window of opportunity
- Old debate in economy: does competition enhances or prevents innovation (Schumpeter: “creative destruction”)
  - ➔ Stimulate competition between healthcare providers?
  - ➔ Or reduce competition?

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# Tailored **de**-implementation strategies



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# Exercise

1. Chose a practice that you want to stop, e.g. chronic benzodiazepine use
2. What are the main barriers for stopping, do you think?
3. What study do you propose to identify determinants of stopping?
4. Any ideas on a tailored de-implementation strategy?

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# Evaluation of de-implementation

- Baseline performance: high, potentially 100% implementation  
→ what are the implications for statistics ?
- Crucial to monitor start of alternative activities after stopping X  
→ how can this be done?
- If patient outcomes are measured in a trial on stopping a practice  
→ By definition an equivalence trial?

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# Final points

- More questions than answers
- Is stopping different from stop+start?
- Submit your papers on de-implementation to Implementation Science