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# L2:Using **behavioural insights** to strengthen your change theory

Practical applications for improvement



Bispebjerg og Frederiksberg  
Hospital

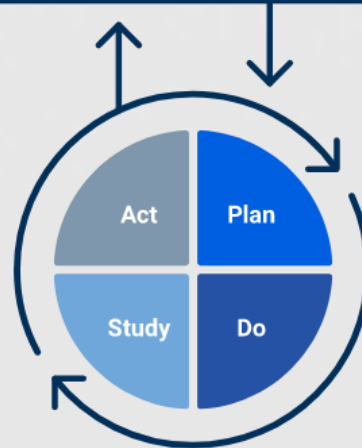
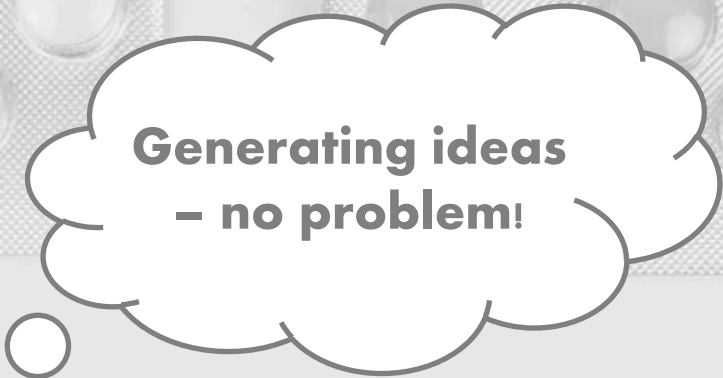
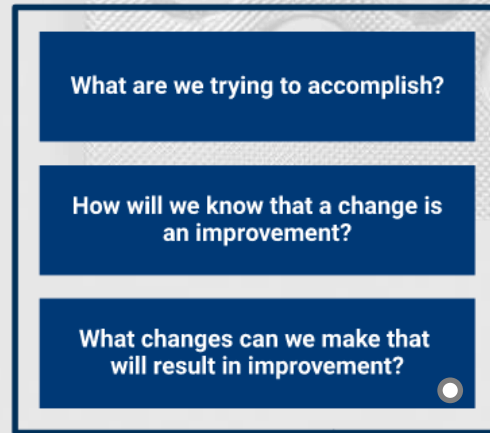
Nothing to declare.

Dansk Selskab for  
PatientSikkerhed **PS!**

# Workshop **overview**...

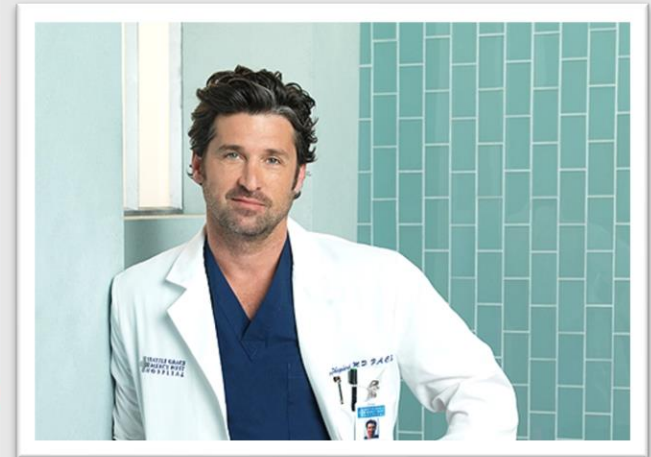
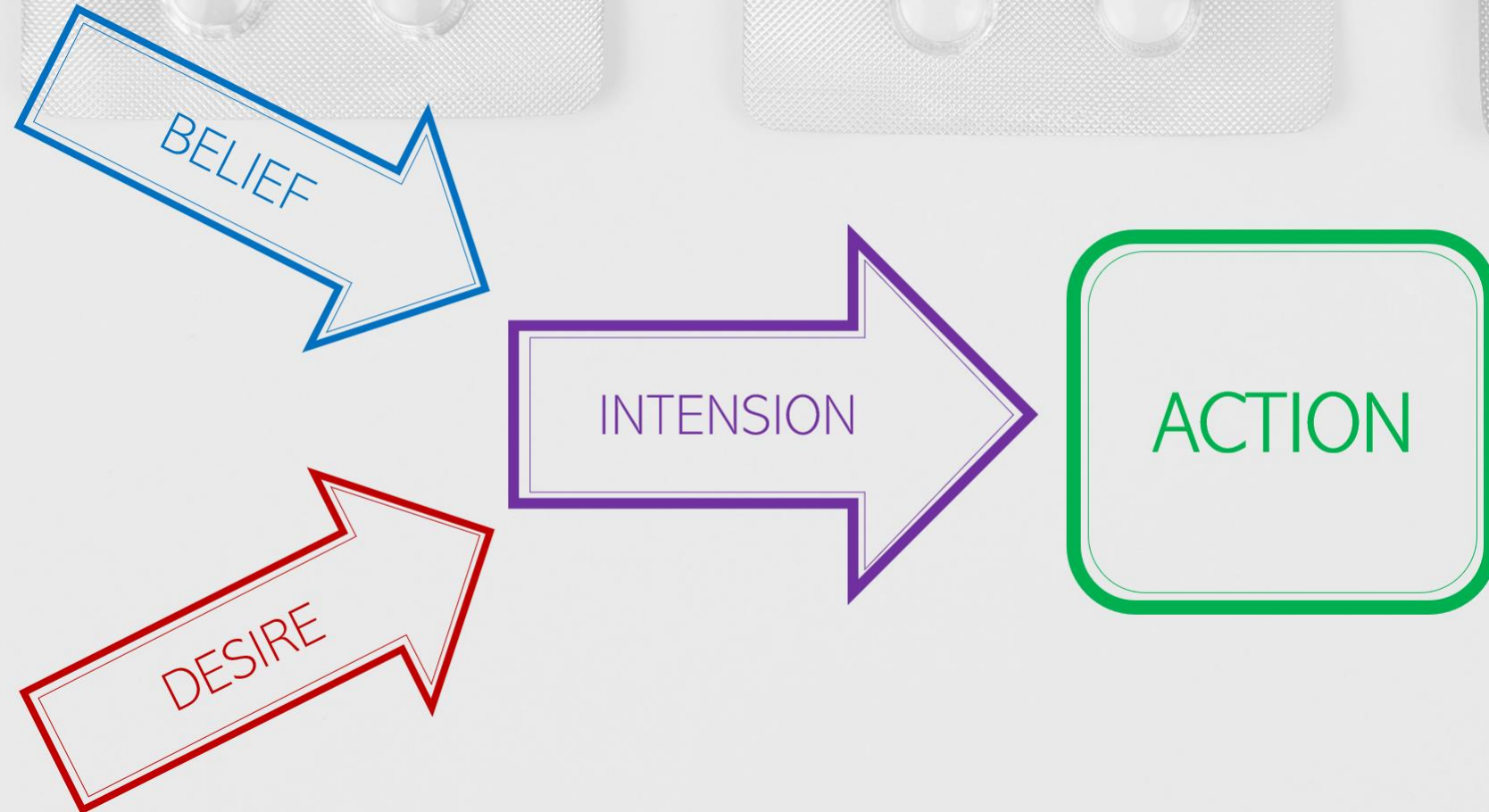
- **Problem** - Change (in healthcare) is **HARD**.
- **Solution** - Improvement Science (provides a systematic approach to testing & implementing change)
- **Problem** - Improvement Science has limitations (exploring & understanding the psychological mechanisms of change)
- **Solution** - Behavioural Insights (Understanding of how we think, which helps us to understand how we **behave**)
- **Practical example** - Increasing use of oral over I/V antibiotic use

# The **problem - solution - problem** situation...





# Folk psychology: Belief - Desire - Intension Model of Agency



# Folk psychology: Incentivisation

Greater levels of intervention

**Eliminate choice:** Regulate

**Negative incentives:** Cost / resource implications

**Positive incentives:** Financial / rewards

**Persuasion:** Communication

**Information:** Communication



# Folk psychology: Belief - Desire - Intension Model of Agency



# A model to guide our understanding of **behaviour**

## **System 1**

**'First reaction'**

**Fast, automatic,  
impulsive, associative,  
emotional and  
unconscious**

**LIMBIC**

## **System 2**

**'Thoughtful'**

**Slow, deliberate,  
reflexive, intentional,  
analytical, rational and  
logical**

**NEOCORTEX**



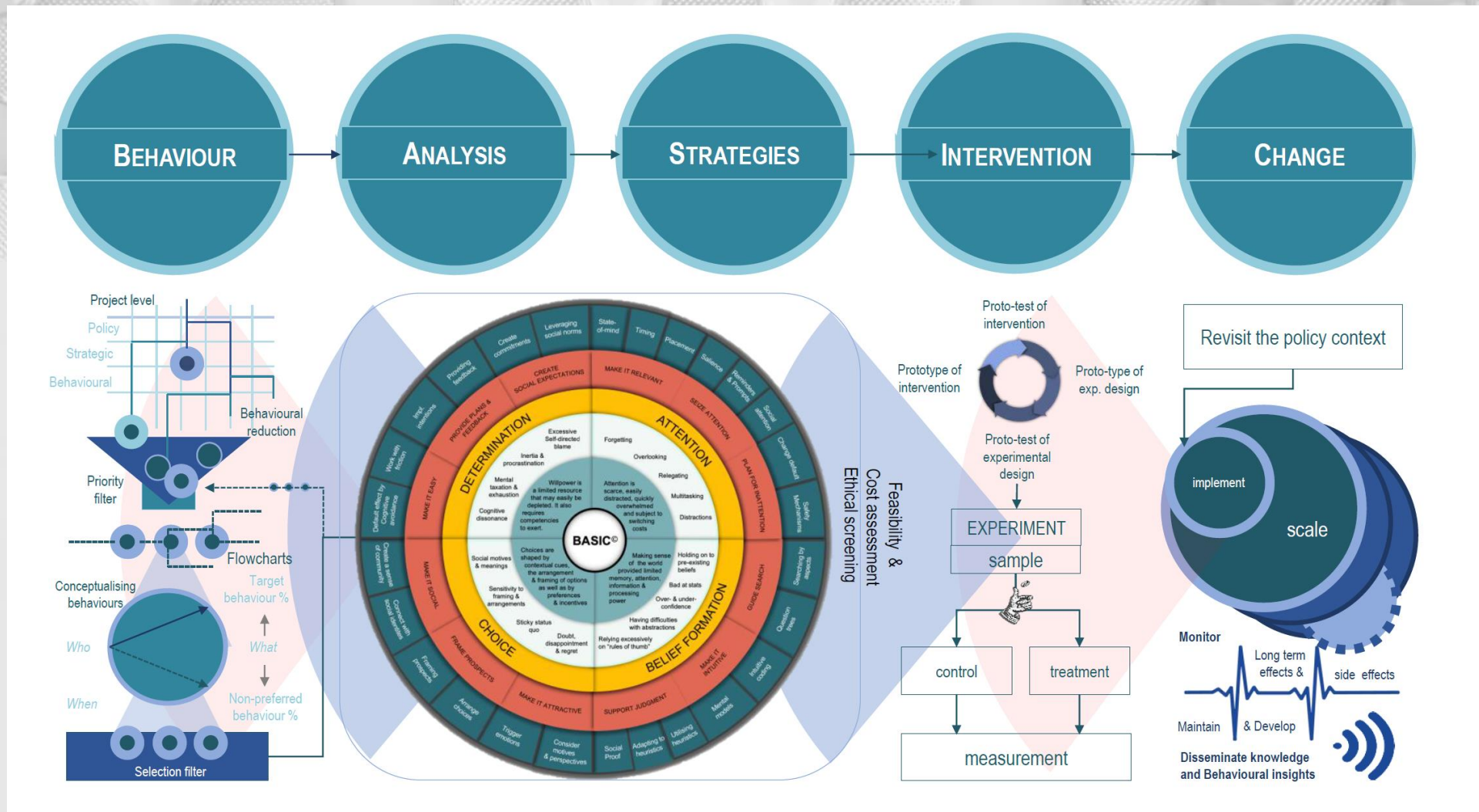
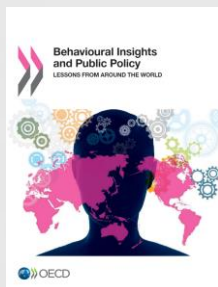


# What is 'Behavioural Insights'?

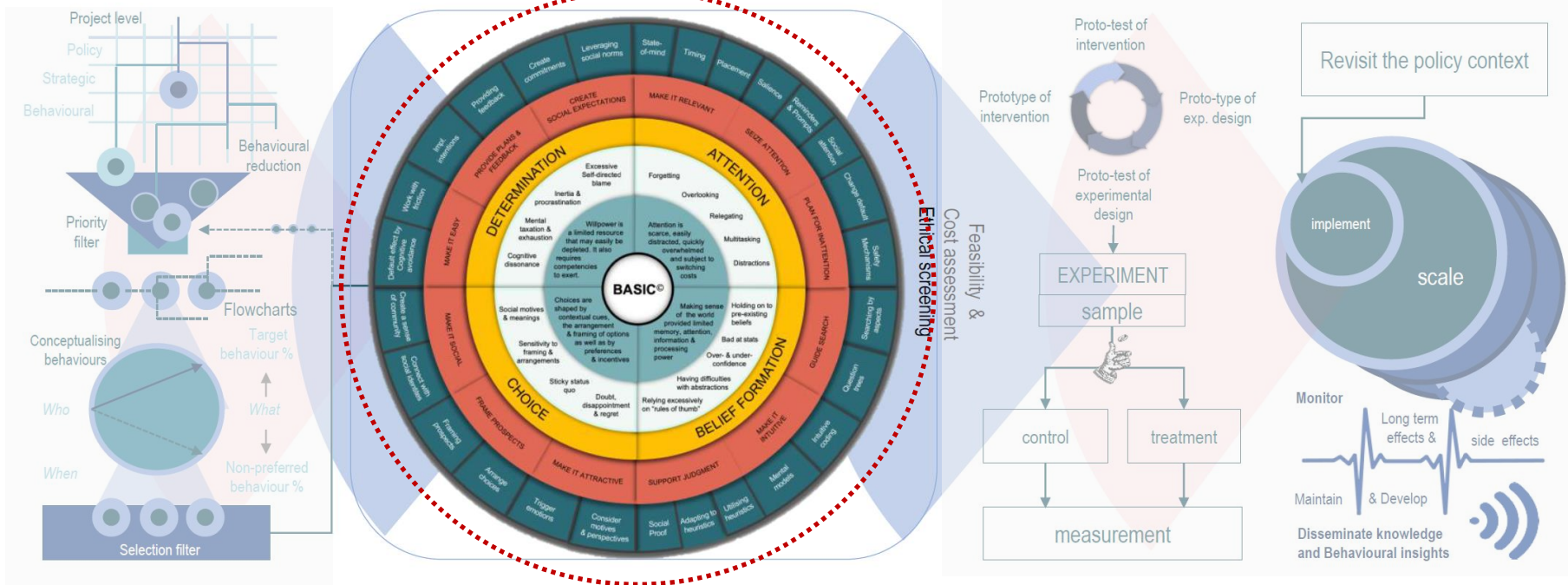
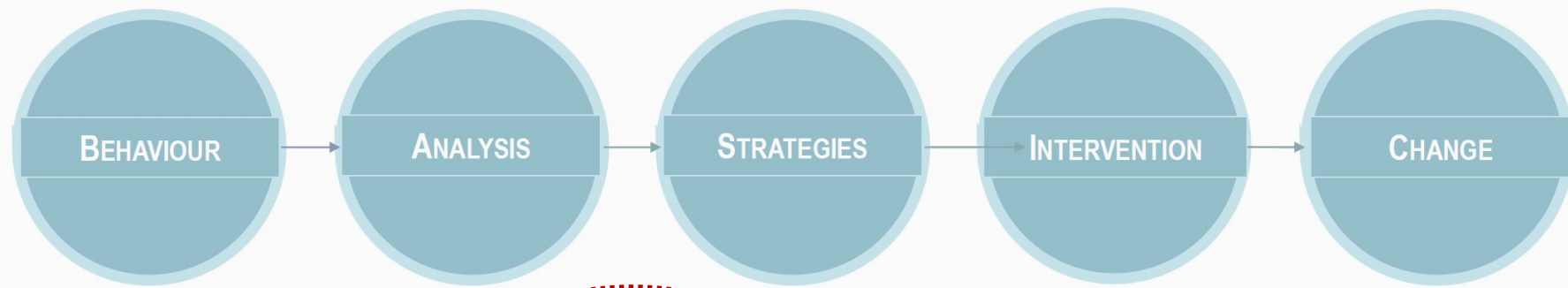
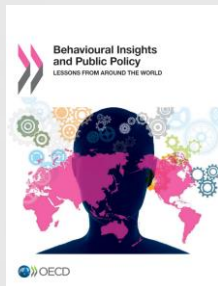
Behavioural insights (BI) is an inductive approach to policy making that combines insights from psychology, cognitive science, and social science with empirically-tested results to discover **how humans actually make choices.**



# The BASIC model of **behavioural insights**

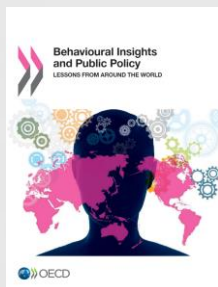


# The BASIC model of behavioural insights



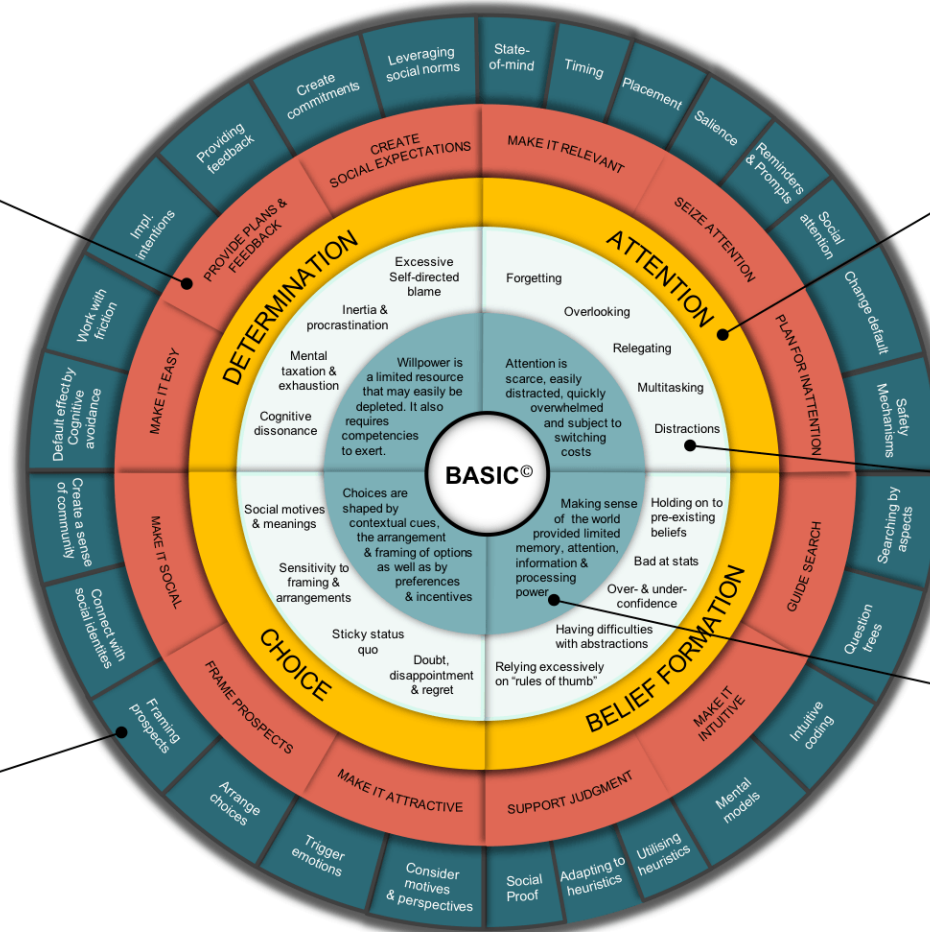


# The **ABCD** diagnostic tool



**Categories of Behavioural Insights strategies:** For practical convenience behavioural insights strategies are sorted in to broad categories that function as easily identifiable keys to more specific behavioural insights strategies.

**Behavioural Insights strategies:** In the outermost ring one finds examples of behavioural insights strategies that contains specific behavioural insights that may be used to understand as well as influence target behaviours.



**Aspects of behavioural problems:** ABCD distinguishes between four aspects of behavioural problems – Attention, Belief-formation, Choice and Determination. A Behavioural Problem may be caused by several factors within one aspect as well as by factors from several aspects. ABCD allows the practitioner to conduct a systematic inquiry into each aspect as well as matching of strategies to problematic aspects.

**Diagnostic indicators:** Certain phenomena indicates the relevancy of each diagnostic domain. These phenomena are referred to as diagnostic indicators.

**Diagnostic aspect:** The diagnostic aspect contains the broader psychological theories that has been developed to account for a particular aspect of behaviour as defined by the ABCD. Thus, the aspect contains psychological theories of attention, belief-formation, choice and determination.



# Project: Setting

Bispebjerg Hospital,  
Copenhagen

2021/22

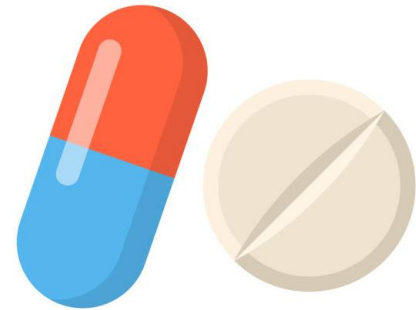
Pre-work for a larger  
Improvement Project



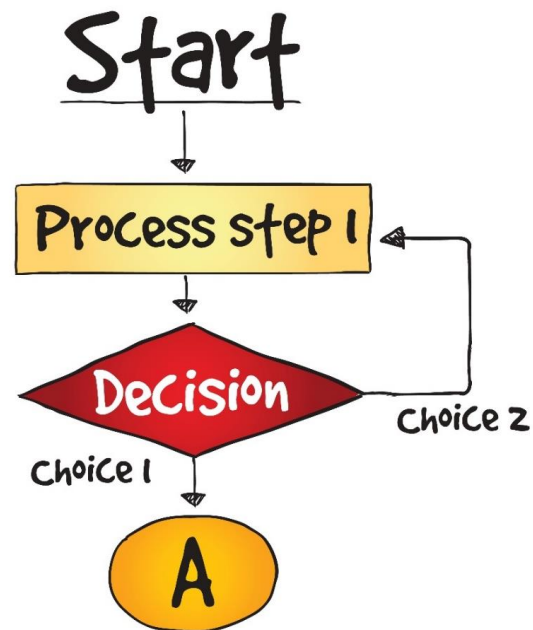
# Project: Aim



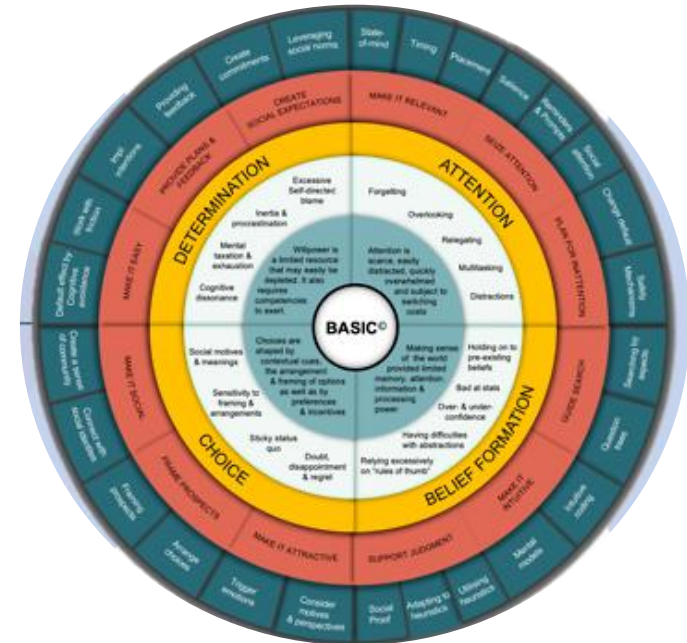
Reduce the average number of days a patient is treated with IV antibiotics by 10%



# Project: Change ideas

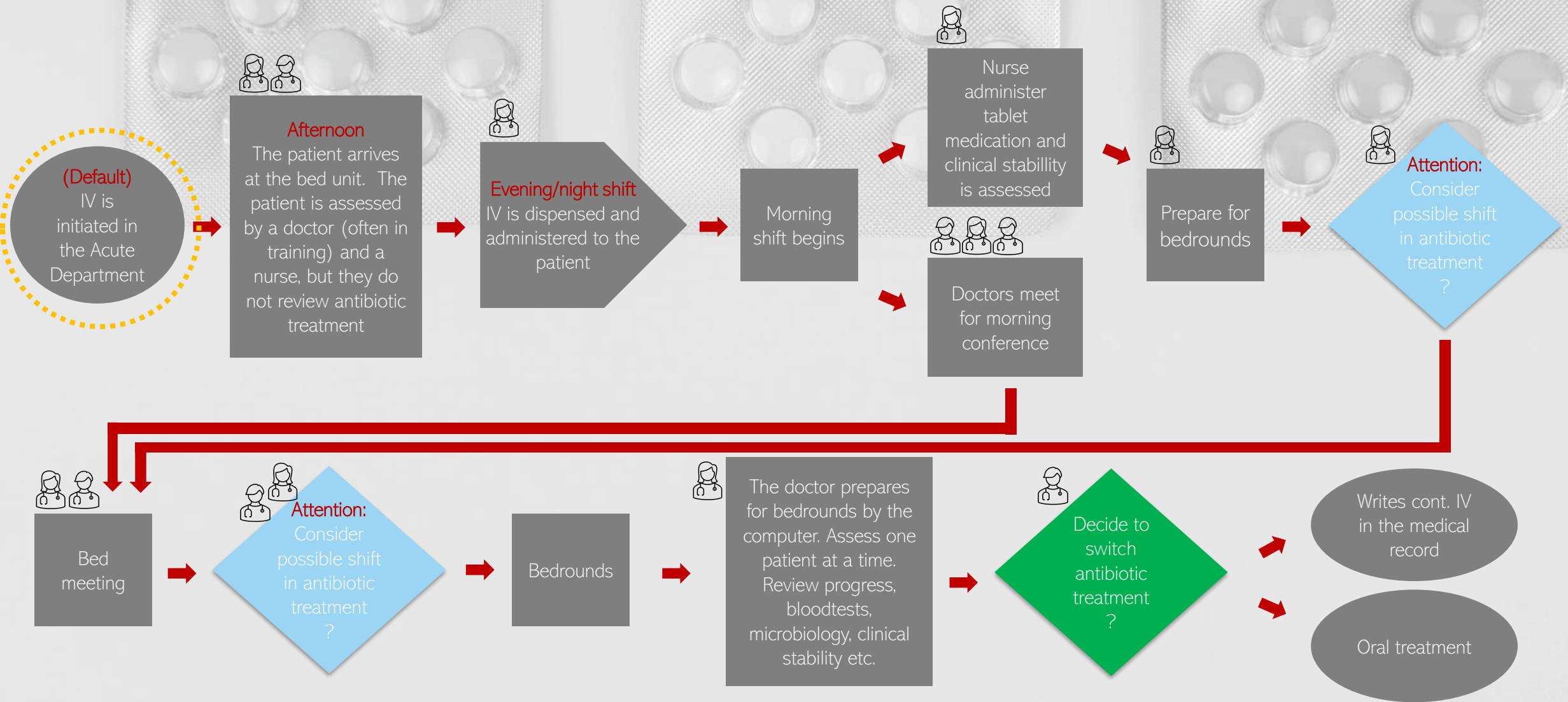


What influences the doctor's decision to switch, and how can we affect that decision?





# Project: Behavioural Flowchart



# Project: Identifying strategies (Using the ABCD wheel)



## Inattention

Nothing in the process brings attention to the patients who are ready to switch

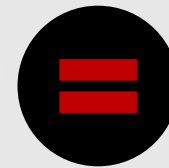
## The Default

Patient has already started IV upon arrival at the bed unit



## High complexity (mental taxation)

Doctors assess a large amount of information (clinical progress, C-reactive protein, blood tests, microbiology etc.)



## Risk of default bias

The tendency to stick with the default choice due to inattention or cognitive avoidance

# Project: Identifying strategies (Using the ABCD wheel)



## Seize attention

- Social attention
- Use reminders and Prompts
- Make it salient

## The Default

Patient has already started IV upon arrival at the bed unit



## Make it easy

### (reduce mental taxation)

- Reduce (cognitive) friction
- Guide decisions

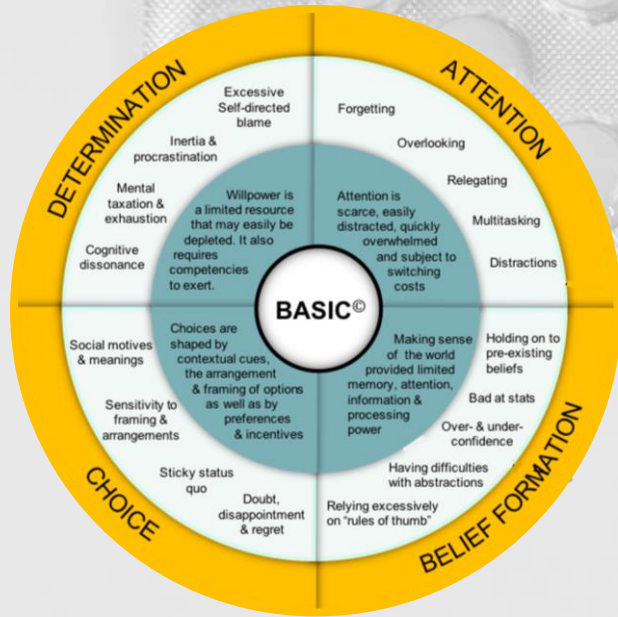


## Risk of default bias

The tendency to stick with the default choice due to inattention or cognitive avoidance



# Exercise: Use ABCD wheel to give each quote a 'theme'



## DETERMINATION

Inertia & procrastination

It is Friday, I'll wait until Monday

I don't want to risk the health of the patient

If I switch, the patient will be discharged

I have previous experienced that the patient got worse

Do I know the oral substitute?

IV is better than oral tablets

Maybe I should wait to see the effect?

I'll just write "Cont. IV" in the patient record

# Project: Driver diagram

Aim

Primary Drivers

Secondary Drivers

Change ideas

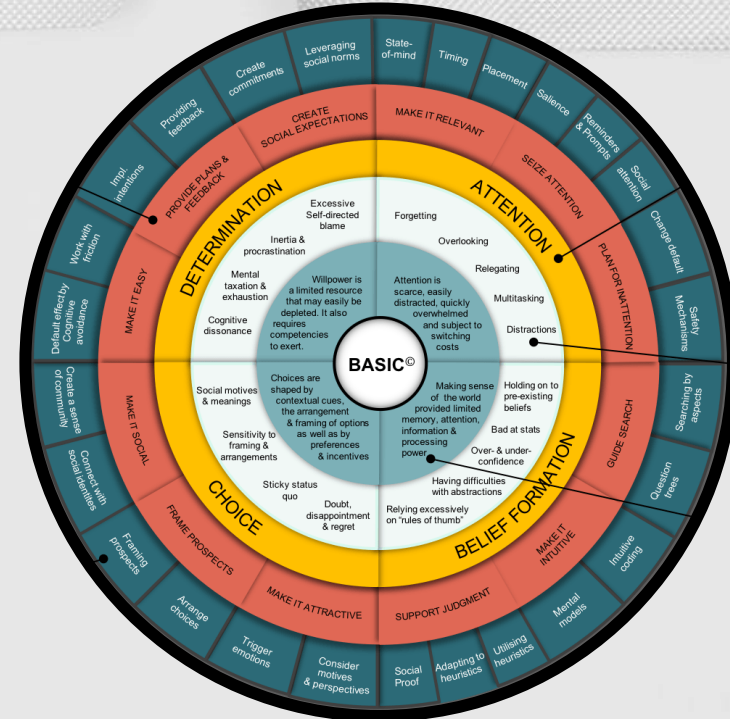
Reduce the  
average number  
of days a patient  
is treated with IV  
antibiotics by 10%

Seize attention

Reduce cognitive friction

Work with belief  
formation

Reduce risk aversion





# Take home message

To know what works, we need to know why it works!

It is possible to use tools and knowledge from BI to supplement the Mfl, to increase our understanding of what change ideas are most relevant and effectful.

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