

THE PHARMACIST'S ROLE IN THE DRUGS AND THERAPEUTICS COMMITTEE (DTCC)

OPPORTUNITIES AND PRIORITIES

DISCLOSURE

- Conflict of interest: *nothing to disclose*



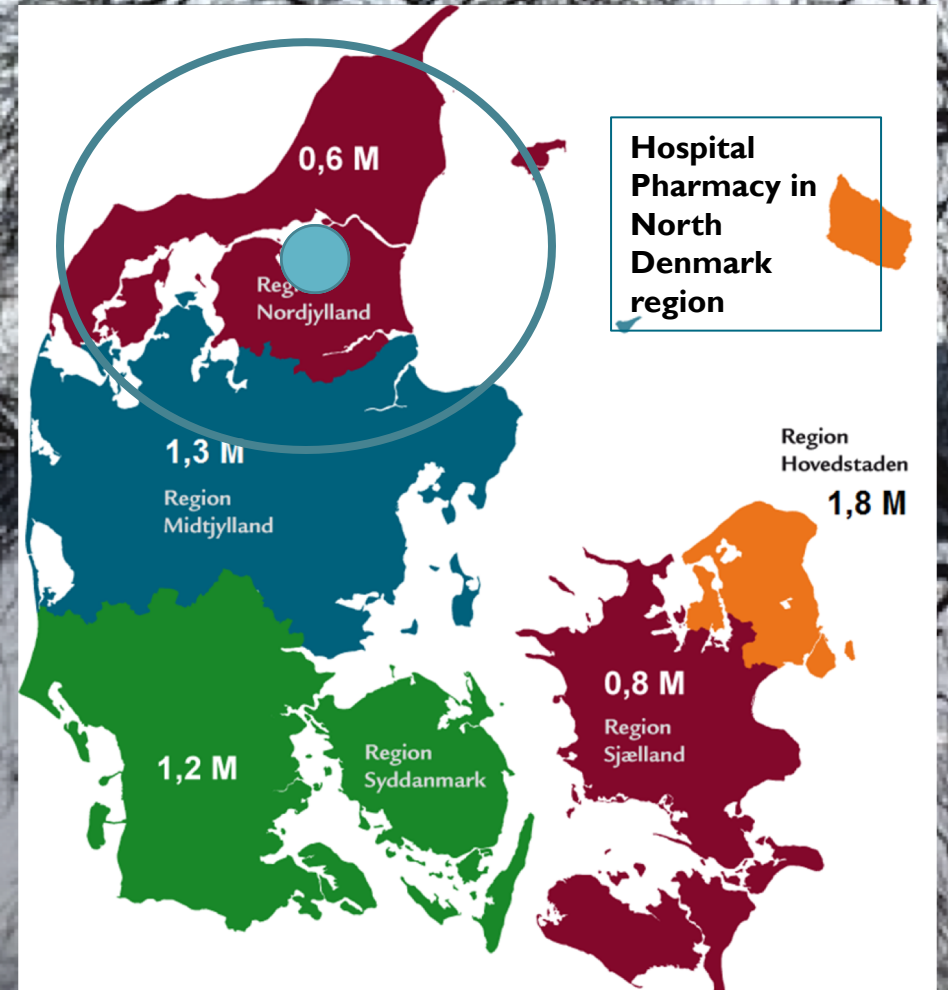
AGENDA

- Introduction
- Drug and Therapeutics Committee (DTC)
- Drug formulary and formulary management
- Implementation



INTRODUCTION

- Hanne Plet, pharmacist (1991) , PhD (2013)
- Hospital pharmacy since 1994
- Different roles as a pharmacist
- Member of the Drug and Therapeutics committee (DTC) since 2000
- Building up the regional DTC in collaboration with clinical pharmacologist and hospitals
- Defining the role of the pharmacist in the DTC and in specialist groups
- PhD in developing and implementing hospital drug formulary



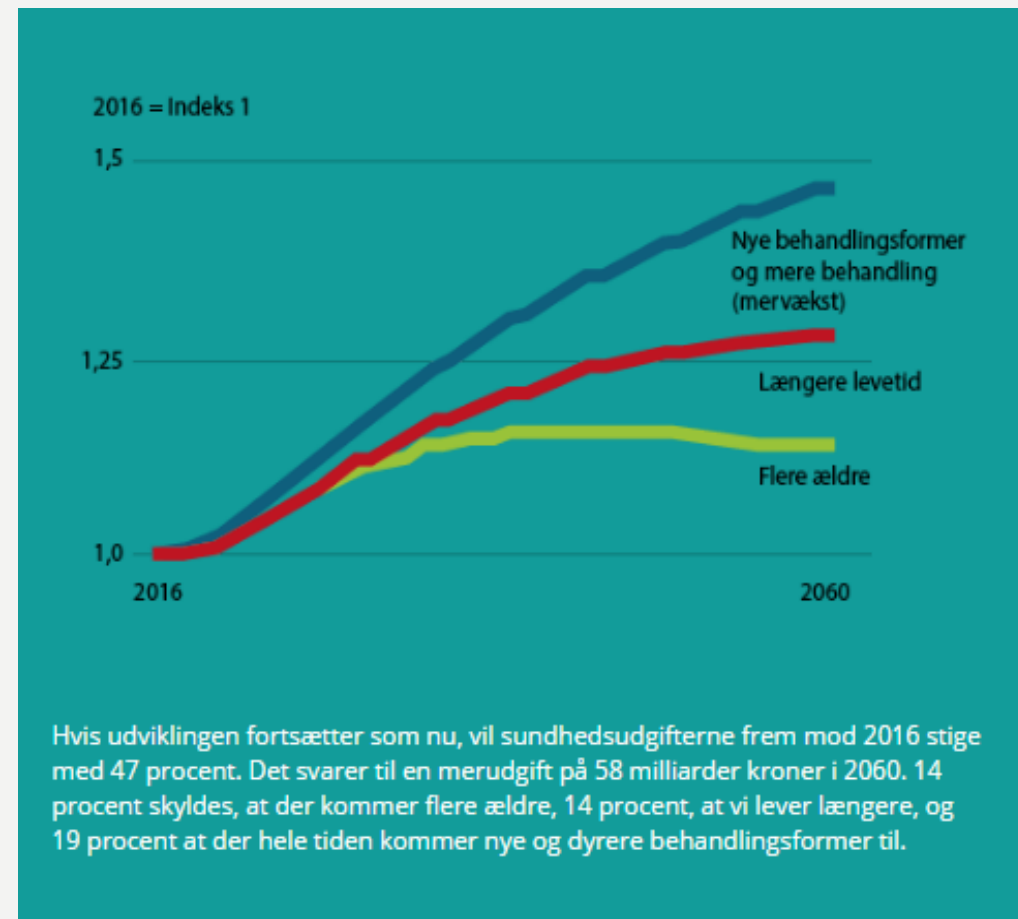


DRUGS AND THERAPEUTICS COMMITTEE

**DEFINITION, GOAL/OBJECTIVES AND
FUNCTIONS**

DO DTCS HAVE A ROLE?

- ❖ People live longer – get older
- ❖ More people have chronic diseases
- ❖ New (Expensive) (drug)treatments
- ❖ Expectations from the patients
- ❖ More people wishes health care services
- ❖ Limited amount of resources



Developing treatment guidelines

Developing and updating drug formulary

Performing formulary management

- **Therapeutic interchange**
- **Use of patient's own drug**
- **Educational training of prescribers regarding drug cost**
- **Review of new therapeutic agents**
- **Approval of use of non-HDF drugs**
- **Non-HDF request form**
- **Regularly review of non-HDF**
- **Contacting physicians to change a non-HDF drug to a drug from the HDF**

Developing drug use policy and guidelines

Performing drug use evaluation activities

Providing prescribers with objective information

- **Newsletters**
- **Bulletins**
- **Results of drug use evaluation**

**THE MOST
COMMON
RESPONSIBILITIES
AND ACTIVITIES
OF THE DTCs**

**For more reading
see WHO – Drug
and Therapeutics
Committee; a
practical guide**

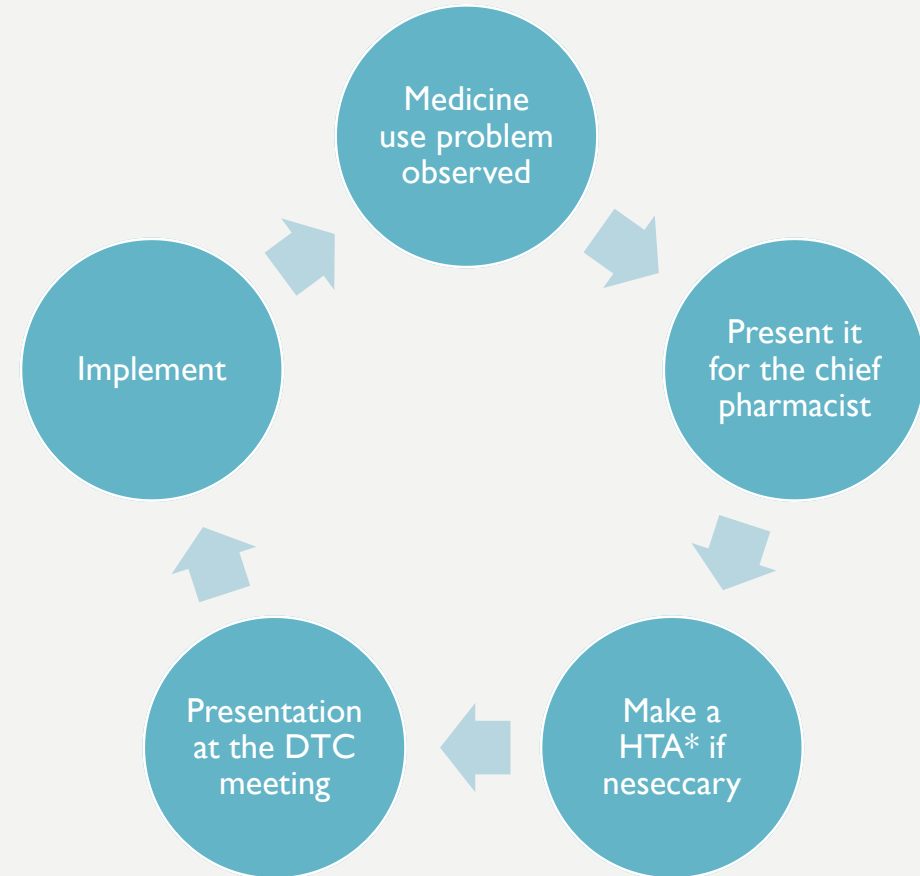
<http://apps.who.int/medicinedocs/en/d/Js4882e/>

DTC – DECISION MAKING PROCESS

It depends on:

- The organisation of the DTC
- The functions of the DTC
- The responsibilities

The pharmacist has to present the medicine use problem considering patient, economy, safety and involving relevant people in the process.



*HTA – Health Technology assessment.
See: http://www.who.int/medical_devices/assessment/en/

Level of drug management in Denmark

National level

- Danish regions => responsible for health care
- Danish Medicines Council => developing national treatment guidelines
- Amgros => National tender for hospitals – drugs and other

Regional level

- **Drug and therapeutics committees**
- Specialistgroups for treatment areas
- Regional drug formulary
- Other groups – eg. Policy and procedure for medication
- Implement the guidelines from the national council

Hospital/ward level

- Adhere to the national and regional guideline
- Develop and adhere to standard assortment
- Follow guidelines for ordering drugs

EXERCISE - PHARMACIST'S ROLE – WHAT DO YOU PRIORITISE?

Economy

PRICE


Quality

DDD

WHERE DO THE PHARMACIST'S HAVE A ROLE?

- Develop hospital drug formulary/treatment guidelines/therapeutic interchange
- Rational pharmacotherapy (patient, economy, safety)
- Better patient safety
- Drug shortage
- Procurement
- Decision support in the CPOE – Computer order entering
- Implementation of DTC decisions at the hospital
- Facilitate implementation at the hospital
- Monitor and follow up on medicine use
- Evaluate (do the doctors follow the guidelines/drug formulary?)
- Economy
 - Health Technology Assessment (HTA)
 - Medicine budget
- Better medicine processes (quality in workflows)





DRUG FORMULARY AND FORMULARY MANAGEMENT

PHARMACIST'S ROLE

DRUG FORMULARY - DEFINITION

A formulary is defined by WHO as a list containing essential drugs that are cost-effective, safe, available locally and of a quality that will satisfy the need of health care organizations and the patient.

WHY DO WE DEVELOPE A DRUG FORMULARY?

Health
problem

Pain

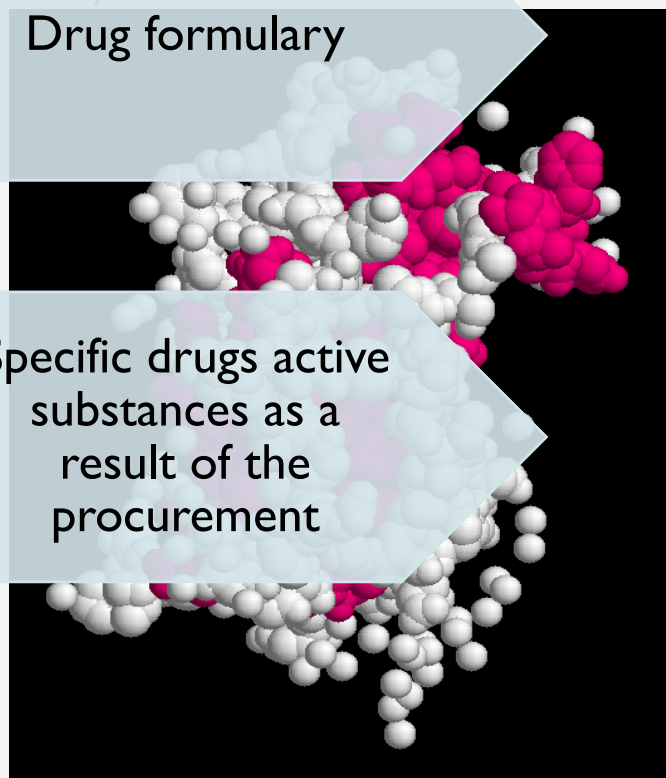
Treatment guidelines

Drug formulary

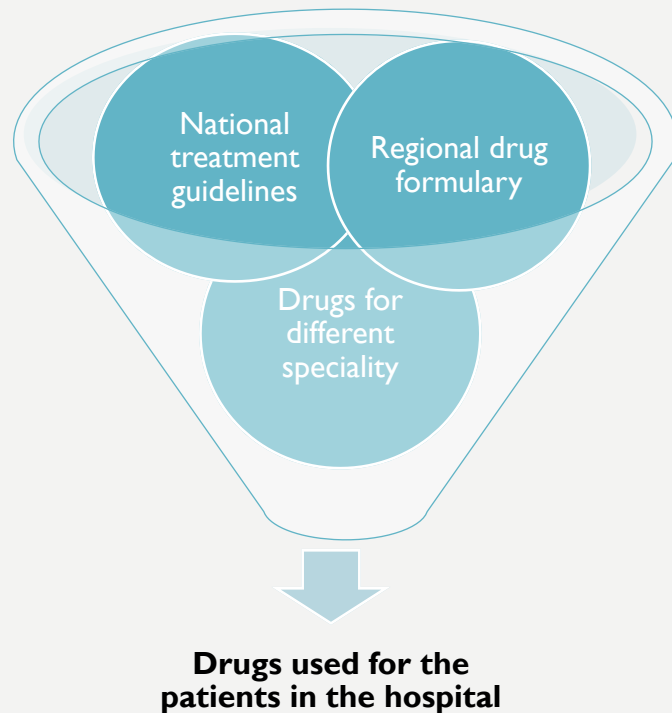
NSAID
Paracetamol
Morphin

Specific drugs active
substances as a
result of the
procurement

different devices



HOW DO WE CHOOSE THE DRUG TO BE USED?



- Which specialities do the hospital have?
- What kind of diseases do you treat in each speciality?
- Do you have guidelines for therapeutic interchange?
- Do you have guideline for using patient's own drugs?
- What is the price of the drug?

DRUG USE AND THERAPEUTIC HIERARCHY

- NEW therapeutic princip – REAL innovation
 - New mechanism of action
 - Better and/or more safe than the old treatment
 - Unmet medical need
- 'Me too' – pseudo innovation
 - Therapeutic equivalent drugs
 - Biosimilars
 - New preparation (device etc.)
- Generica
- Obsolete drugs



willingness to pay

Country	Method	Description
The Netherlands	System Objectified Judgment Analysis (SOJA) ((Janknegt R <i>et al.</i> 2007)	A model based on rational selection criteria such as clinical efficacy, adverse effects, dosage frequency, interactions, cost, and documentation. Besides rational selection criteria, other factors were included in decision-making such as emotional, personal financial and unconscious criteria.
Northern Ireland	Safe Therapeutic Economic Pharmaceutical Selection (STEPS) ((Scott M <i>et al.</i> 2007)	STEPS methodology was built on four steps. Step I: clinical evaluation (incorporating elements of SOJA), Step II: risk assessment, Step III: budgetary impact analysis, Step IV: final procurement selection.
USA	Formulary Leveraged Improved Prescribing (FLIP) ((Schiff GD <i>et al.</i> , 2012)	A tool developed as part of a project at two US public academic hospitals consisting of a checklist of 48 questions for evaluating drugs requested for addition in the formulary. The questions were related to evidence of need, efficacy, medication, safety, misuse potential, cost issues, and decision-making processes.
Denmark	GRADE approach (Grading of Recommendations Assessment, Development and Evaluation) http://www.gradeworkinggroup.org (www.medicinraadet.dk – English version exist)	<ol style="list-style-type: none"> 1. Formulating clinical questions and relevant PICO descriptions 2. Systematic literature search 3. Selecting literature 4. Assessment of the risk of bias 5. Summary of results 6. Assessment of confidence in the estimates 7. Development of guideline recommendations

EXAMPLES OF DRUG SELECTION METHODS

When developing treatment guidelines and recommendation for drug formulary different methods exist.

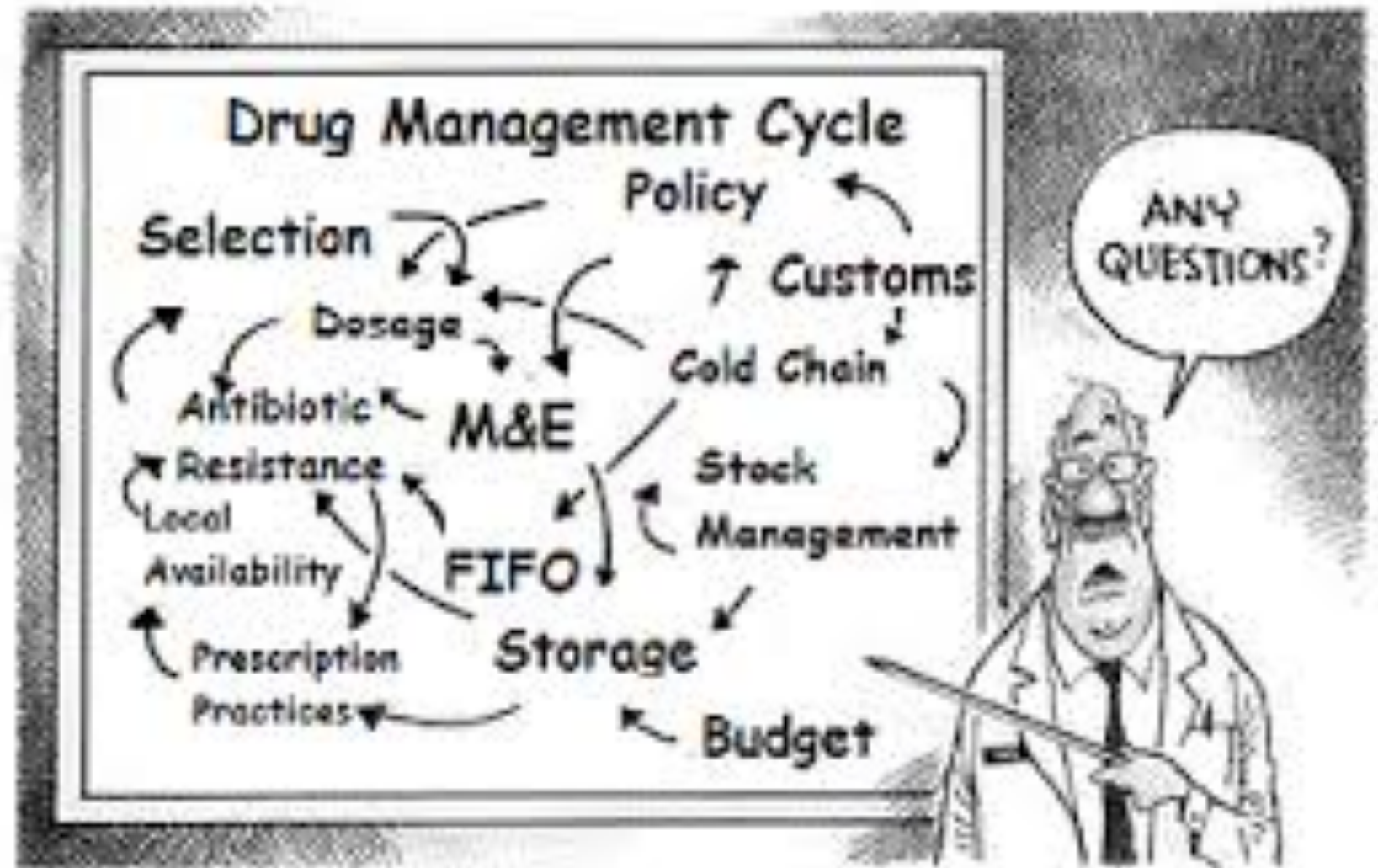
However all methods do have a systematic approach for choosing the "right" drug.

DRUG FORMULARIES AT DIFFERENT LEVELS

Drug formulary	Developed by
National drug formulary	Based on guidelines from the Medicin Council (No list exist – however the formulary can be found for each diseasearea) The pharmacist should be represented
Regional hospital drug formulary	DTC responsible Specialist groups including pharmacist's The pharmacist should be represented
Ward list	The ward (managing doctor at the ward) develop the list together with the pharmacist

Formulary management

Or perhaps this is
the real world



DRUG SHORTAGE

Considerations (model from Hospital Pharmacy North Denmark region):

- Generics in other strengths, package, device etc.
- Therapeutic equivalent drug (PPI, LMWH, etc.)
- Drugs not marketed in fx Denmark but in another country
- Extemporaneous drug (preparation of a drug to a specific patient (or situation))

INVOLVE THE DTC IF NECESSARY



Medicines shortages in European hospitals

- 99% of hospital pharmacists report experiencing problems with medicines shortages in the past year
- 63% of hospital pharmacists report that medicines shortages are a weekly, sometimes daily, occurrence
- 77% of hospital pharmacists report that medicines shortages have become worse over the past year

Survey by the European Association of Hospital Pharmacists on medicines shortages, September 2012-February 2013



eahp
european association
of hospital pharmacists

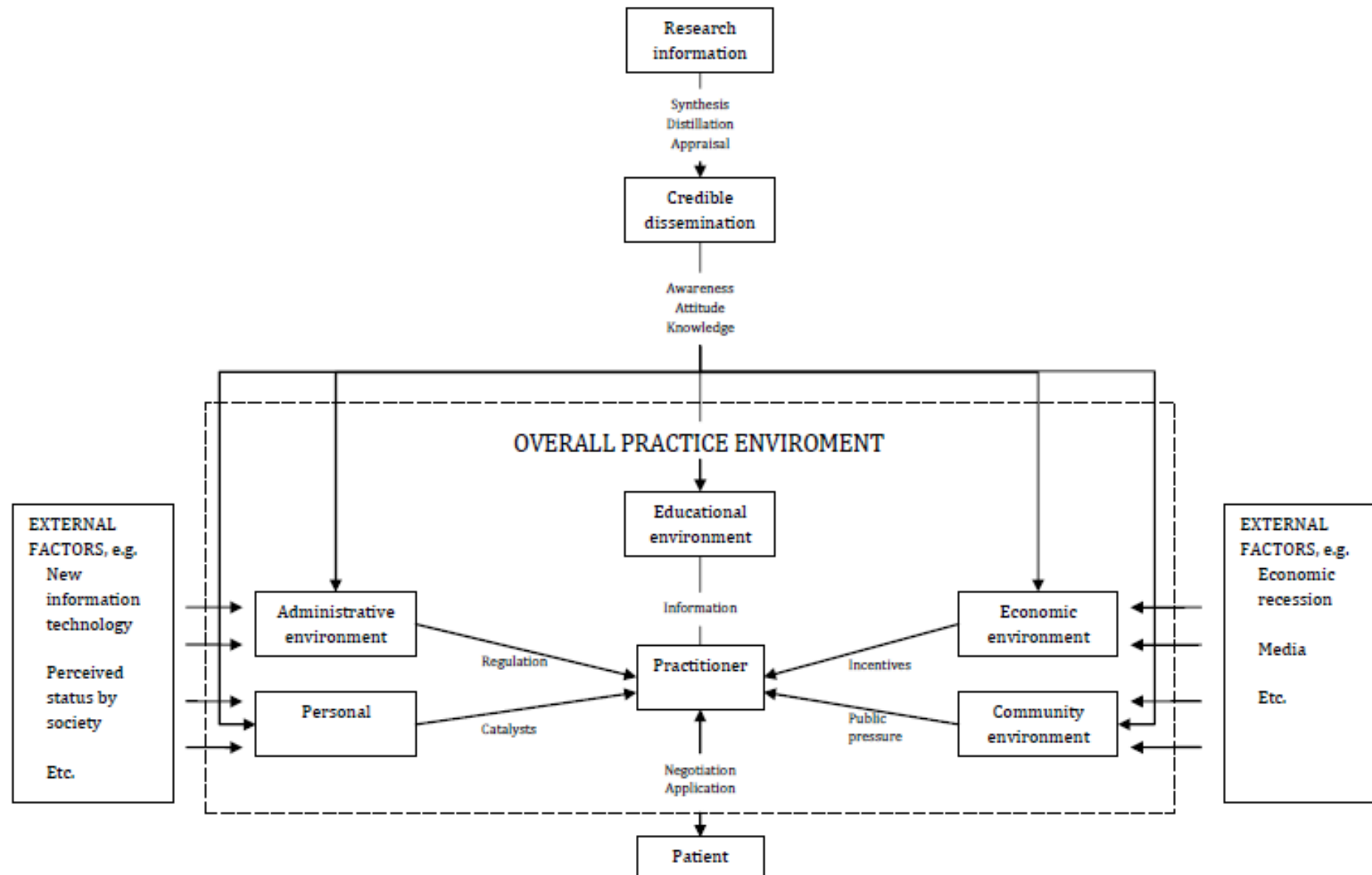
making the difference in medication



IMPLEMENTATION MONITORING EVALUATION

PHARMACIST'S ROLE

Figure 2. The coordinated implementation model (77).



Source: Lomas J. et. al. 1993 Diffusion, dissemination, and implementation: who should do what?

IMPLEMENTATION

Multifaceted interventions are needed

Different kind of information combined with dialogue, written material and drug-use evaluation (multifaceted intervention) has the biggest impact on implementation.

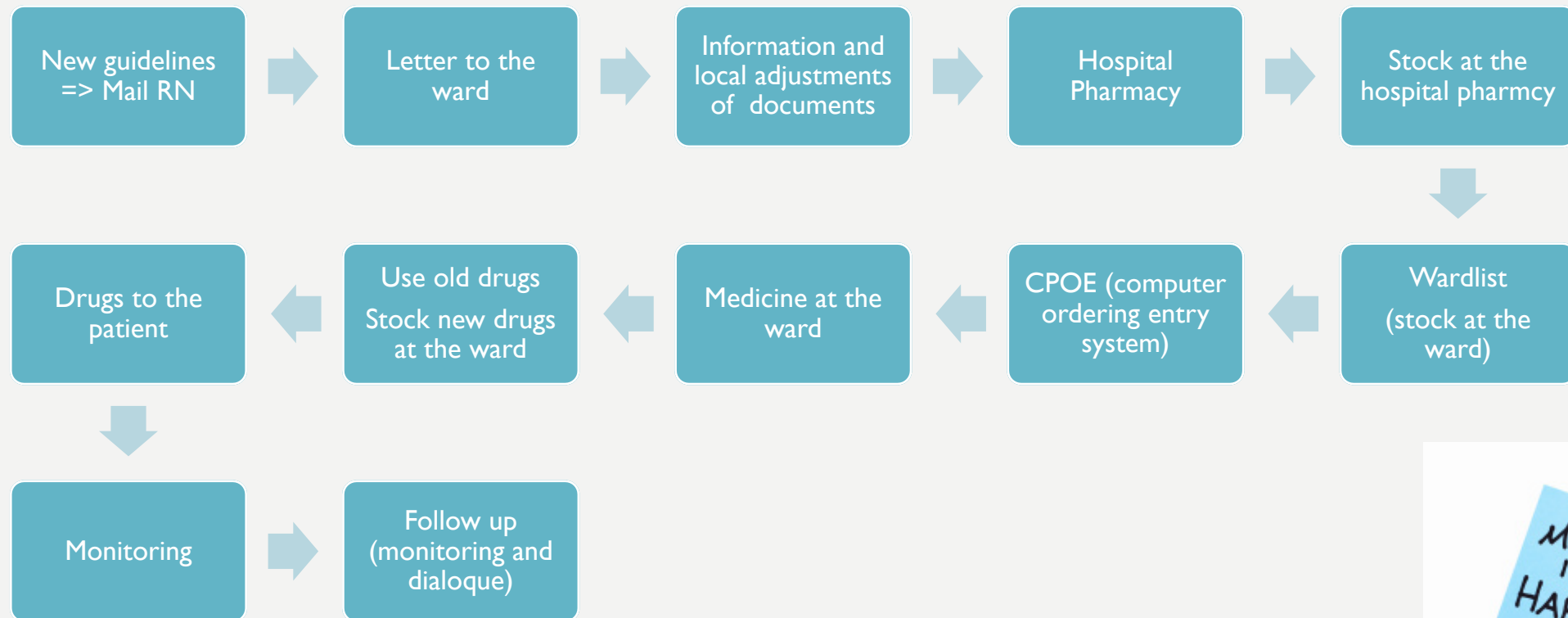
Economic incentives => money always has an effect

Inspiration from the pharmaceutical industry:

- Academic detailing (face to face visit)
- Group detailing

Grimshaw JM, Thomas RE, MacLennan G, Fraser C, Ramsay CR, Vale L, et al. Effectiveness and efficiency of guideline dissemination and implementation strategies. Health Technol Assess 2004 Feb;8(6):iii-72.

NATIONAL GUIDELINES – REGIONAL PROCES FOR IMPLEMENTATION



IMPLEMENTATION AND TYPE OF SWITCH BETWEEN DRUGS

- **Simple switch between drugs =>**
 - A list is published at the home page then it is made automatically
- **Drug switch with high complexity =>**
 - Example change in:
 - Strength
 - Device
 - Another way the drug is going to be handled
 - More information/dialogue with the physician and nurse



NON-ADHERENT TO THE GUIDELINES/FORMULARIES



- Explanatory variables:
 - Patient did not come to the appointment
 - No new patient included
 - Small patient population
- **Resistance against change?**
- **What can the pharmacist do?**

EXAMPLE - IMPLEMENTATION OF GROWTH HORMON

- New national treatment guideline and drug recommendation
- Problems
 - "Biosimilar"; many users; treatment at home;
- Meetings with the wards – Children AAUH og Vendsyssel samt Endokrinology (adults).
- Meeting with company (I. choice) and wards
- Development of written information to the patient
- Monitoring the use of growth hormon
- Dialogue if non-adherent with the guideline
- **Goal:**
 - **80 % I. choice to adults**
 - **50 % I. choice to children**



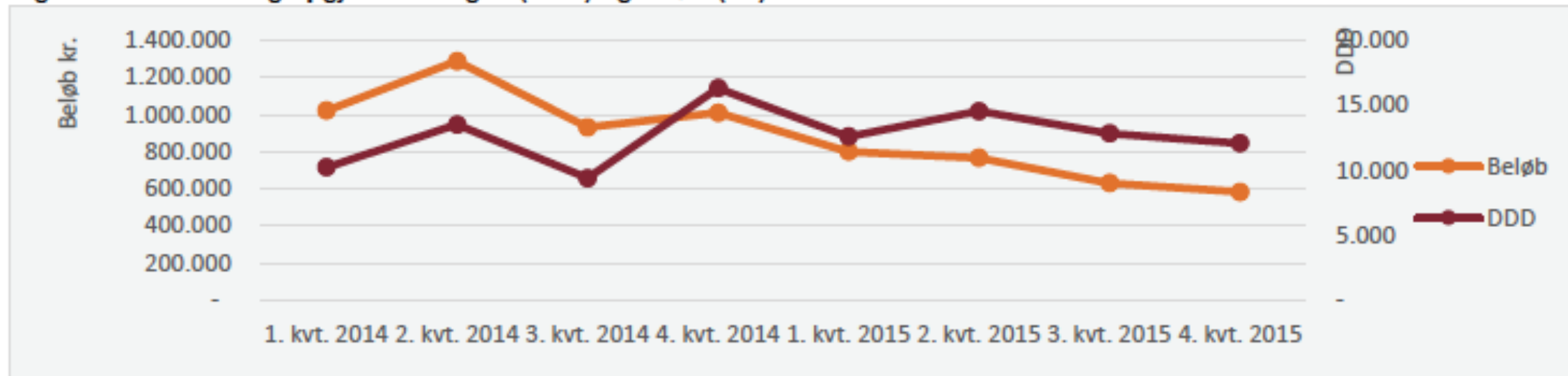
EXAMPLE – GROWTH HORMONE

IMPACT OF THE EFFORT

Figur 27. Procentvis fordeling ift. mængde (DDD) for væksthormoner for de forbrugende afdelinger.



Figur 25. Totalforbrug opgjort i mængde (DDD) og beløb (kr.) for væksthormoner.

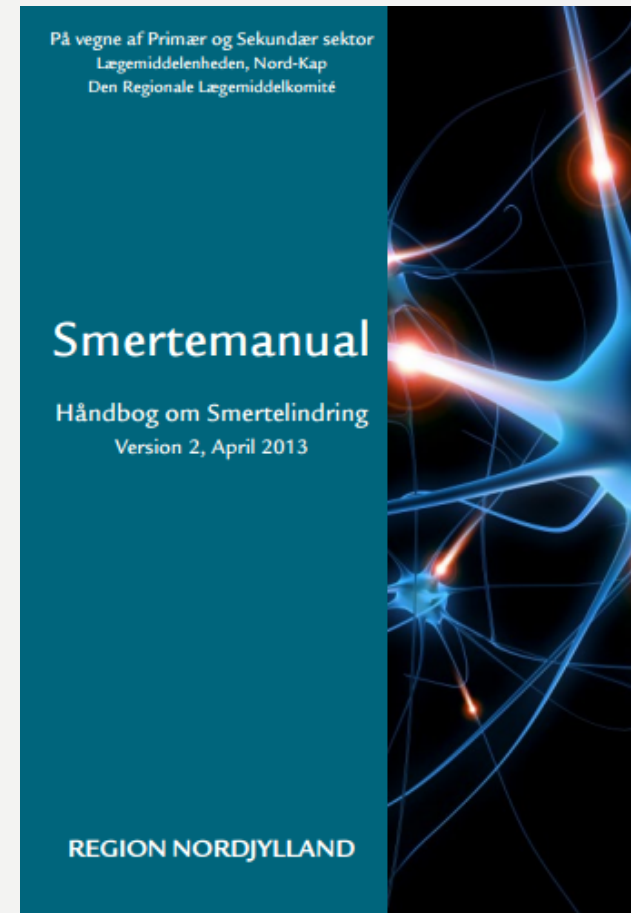


Endokrinologisk

EXAMPLE – DEVELOPING A TOOL TO PRESCRIBE "PAINKILLERS"

- High use of oxycodon in primary care and hospitals (Morphin is 1. choice)
- Morphine should be used as 1st choice
- Many wards involved
- Many opinion leaders
- Reduce the amount of opioids used in North Denmark Region
- A group from primary care and hospitals developed a small guideline to help the physician's to prescribe "pain-killers"
- Printed and distributed to all the physicians in the region

- https://www.sundhed.dk/content/cms/97/14797_smertemanual---version-2_2013.pdf





THANK YOU FOR LISTENING

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TAKE HOME MESSAGES

- Pharmacist's role in Drug & Therapeutics committee depends on: the organisation; the medicine problem in your organisation; how "old" the DTC is (years of existence) and resources
- Write down the problems related to medicine use in your organisation. Prioritise the problems which have the largest impact on **patient safety, clinical outcome and health/pharmacoecconomy**. Focus on the problems with the largest impact and present them for the DTC.
- Show the effect of the activities by using data. Focus on few problems and show that the pharmacist makes a difference and present it for the DTC

