



Clinical Pharmacology and Therapeutics

Teach the Teacher program

CP4T

Workshop:
The (new) Guide to Good Prescribing and its 6-step



Content



- Introduction to CP4T
- The WHO Guide to Good Prescribing and its 6-step
- Proposal for revision
- How to integrate the WHO Guide to Good Prescribing in the curriculum
- Examples of good practices



Introduction to CP4T



How it started



European
PRESCRIBING EXAM



EurOP²E
European Open Platform for Prescribing Education

How can teachers use these platforms?
How can we improve and harmonise CPT education?



Introduction to CP4T



How it started



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Introduction to CP4T



Mission statement:

As a result of our project, teaching and training of CPT in Europe (and perhaps beyond) will be harmonized and modernized, with the aim of promoting rational and safe prescribing.



Clinical Pharmacology and Therapeutics Teach the Teacher



Who are we?



UNIVERSITY OF
GOTHENBURG



University of
Zagreb



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



Amsterdam UMC



Universidad
de La Laguna



UNIVERSITÄT ZU LÜBECK



Co-funded by the
Erasmus+ Programme
of the European Union





Introduction to CP4T

Concrete output (October 2022 – October 2025)

All freely available for medical universities in the world:

- 📌 Revision Guide to Good Prescribing
- 📌 Revision Teacher's Guide to Good Prescribing
- 📌 Teach the Teacher courses
- 📌 International + Interprofessional online student-run medication reviews
- 📌 New (innovative) teaching materials
- 📌 Various scientific papers





Introduction to CP4T

Teach the Teacher modules

Previous:

- The European Prescribing Exam
- Hot topics in CPT education
- Flip-the-classroom (online via Zoom)

Today:

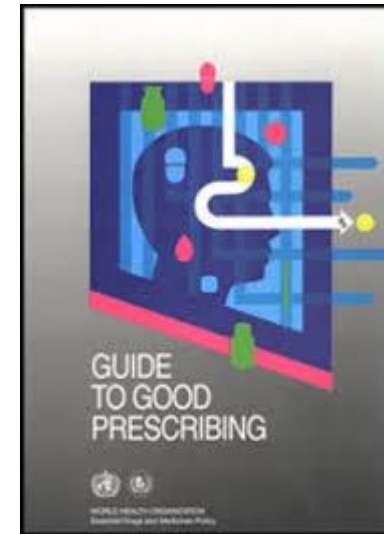
- How to integrate the (new) Guide to Good Prescribing and 6-step in education



The WHO Guide to Good Prescribing and its 6-step

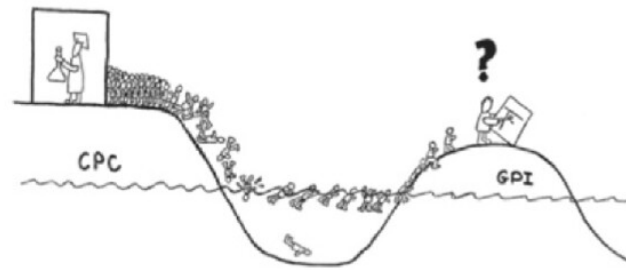


- It started in...
1994!
- Translated to 24 languages
- Evidence that it is an effective educational tool
- HOWEVER...

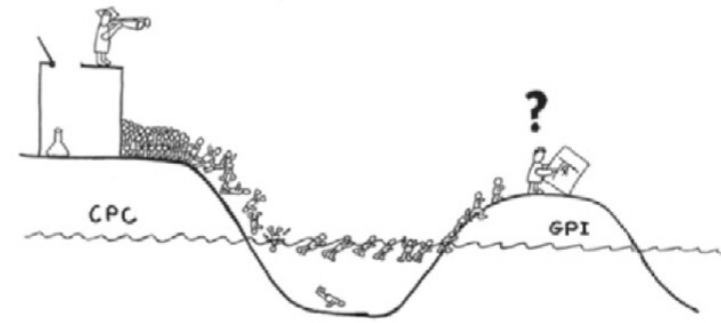




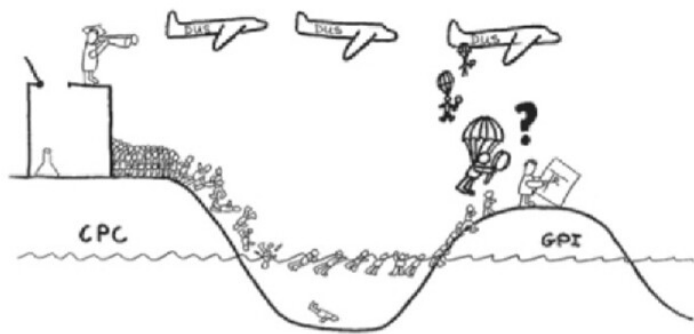
(A)



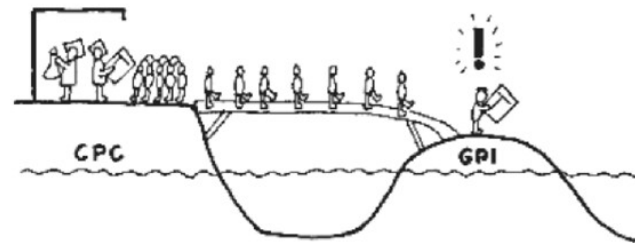
(B)



(C)



(D)




(E)

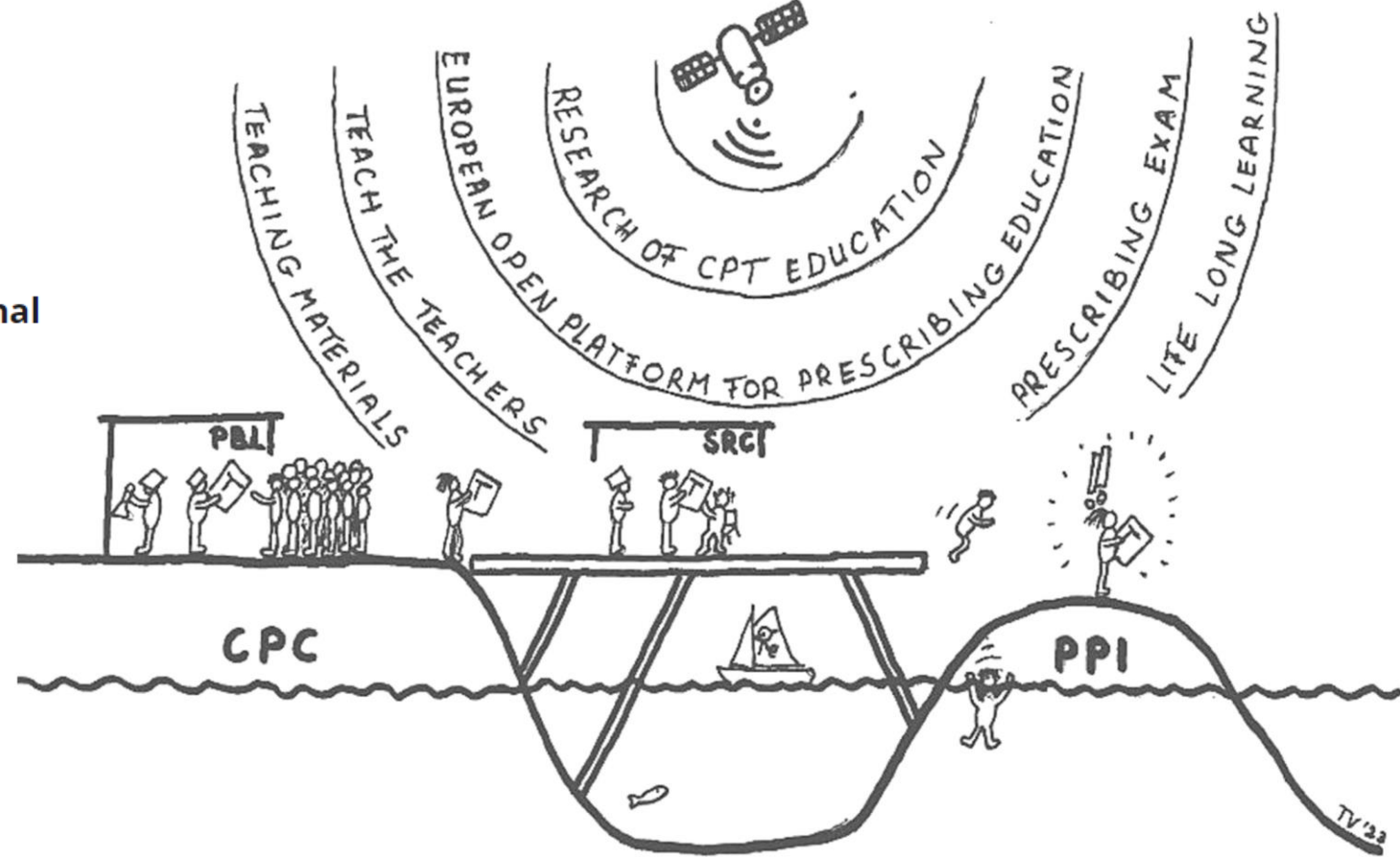




Bridging the gap between clinical pharmacology and rational drug prescribing 2.0: An up-date after 30 years

Erik M. Donker  Michiel J. Bakkum, Milan C. Richir, Jelle Tichelaar, on behalf of EuroPE+, EuroP2E, CP4T and the EACPT Education working group

First published: 14 March 2024 | <https://doi.org/10.1111/bcp.16051>



The WHO Guide to Good Prescribing and its 6-step



[Home](#) > [European Journal of Clinical Pharmacology](#) > [Article](#)

WHO guide to good prescribing is 25 years old: quo vadis?




Special Article | [Open access](#) | Published: 14 January 2020

Volume 76, pages 507–513, (2020) [Cite this article](#)

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[J. Tichelaar](#) ✉, [M. C. Richir](#), [S. Garner](#), [H. Hogerzeil](#) & [Th. P. G. M. de Vries](#)

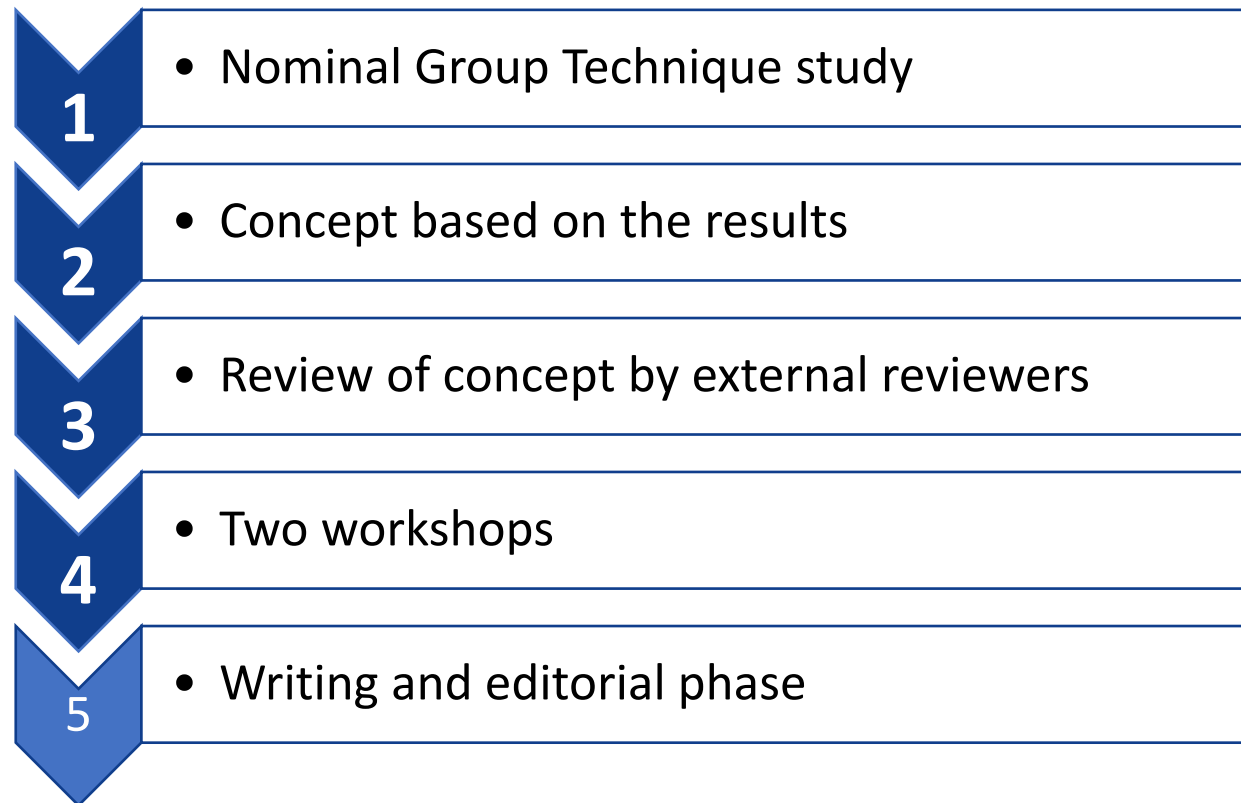
 6550 Accesses  13 Citations  1 Altmetric [Explore all metrics](#) →

- Modernization of prescribing and prescribing techniques (e.g., shared decision-making, electronic prescribing, shared electronic health records)
- Changing landscape:
 - Polypharmacy (due to aging)
 - Expanding prescribing professionals
 - Guidelines
 - New topics (ie., shared-decision making, planetary health, IPE)

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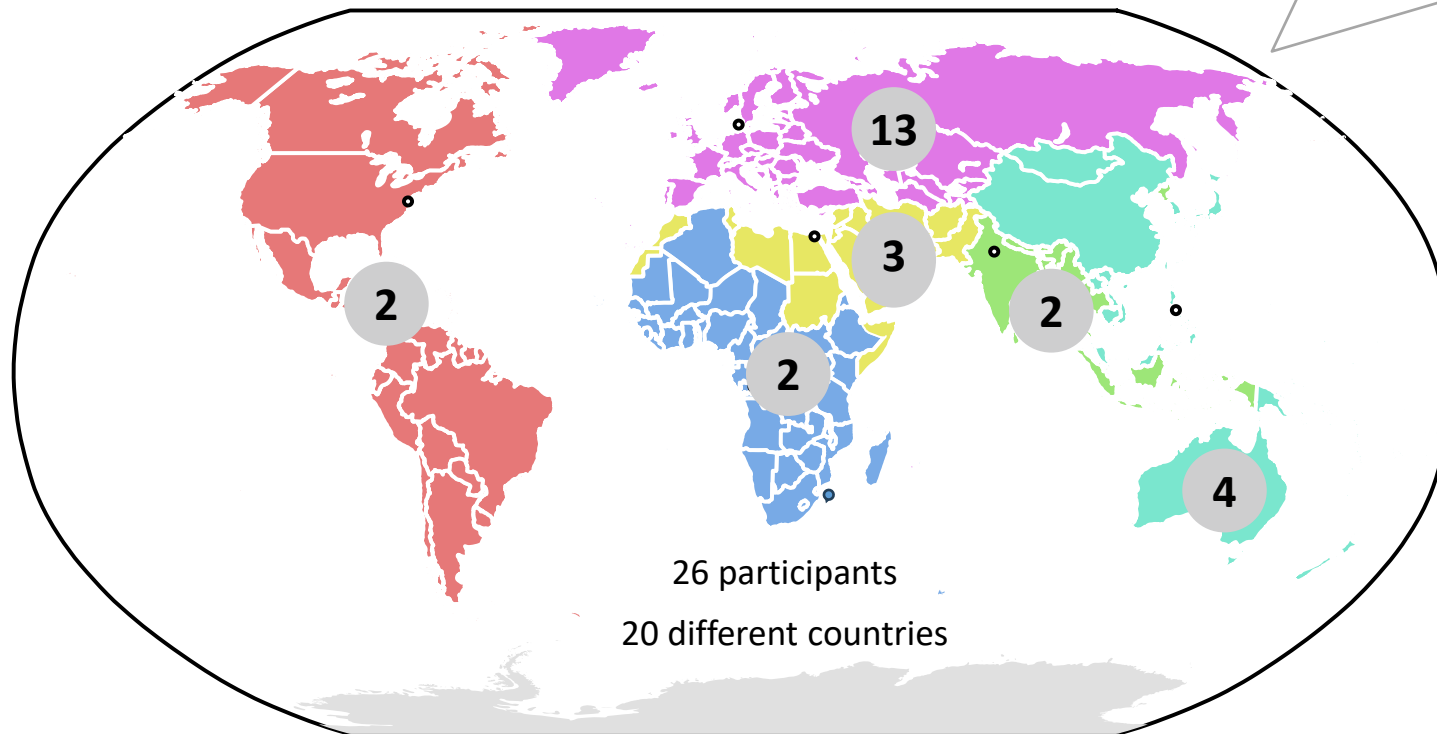
The revision project



The Nominal Group Technique Study



How should the WHO Guide to Good Prescribing be updated?



Results



Future proof format

- Fundamental principles
- Online and up-to-date
- Implementation

Six-step framework

- Problem and objective
- Non-pharmacological approach
- Medication review and deprescribing
- Factors involved in therapeutic decision making
- Pharmacovigilance
- Patient communication and shared decision making
- Documentation

Supplementary information

- Electronic prescribing
- P-drugs
- Therapeutic reasoning
- Special populations
- Specific prescribing situations



Follow-up



- Concept of the future GGP
- Review by (external) reviewers (NGT participants & CP4T members)
- Adaptation





Revision 6-step (old and new)

Old

1. Define the patient's problem
2. Specify the therapeutic objective
- 3a. Choose your standard treatment (P-drug)
- 3b. Verify the suitability of your treatment (P-drug)
4. Start treatment
5. Give information, instructions, and warnings
6. Monitor (and stop?) treatment

New

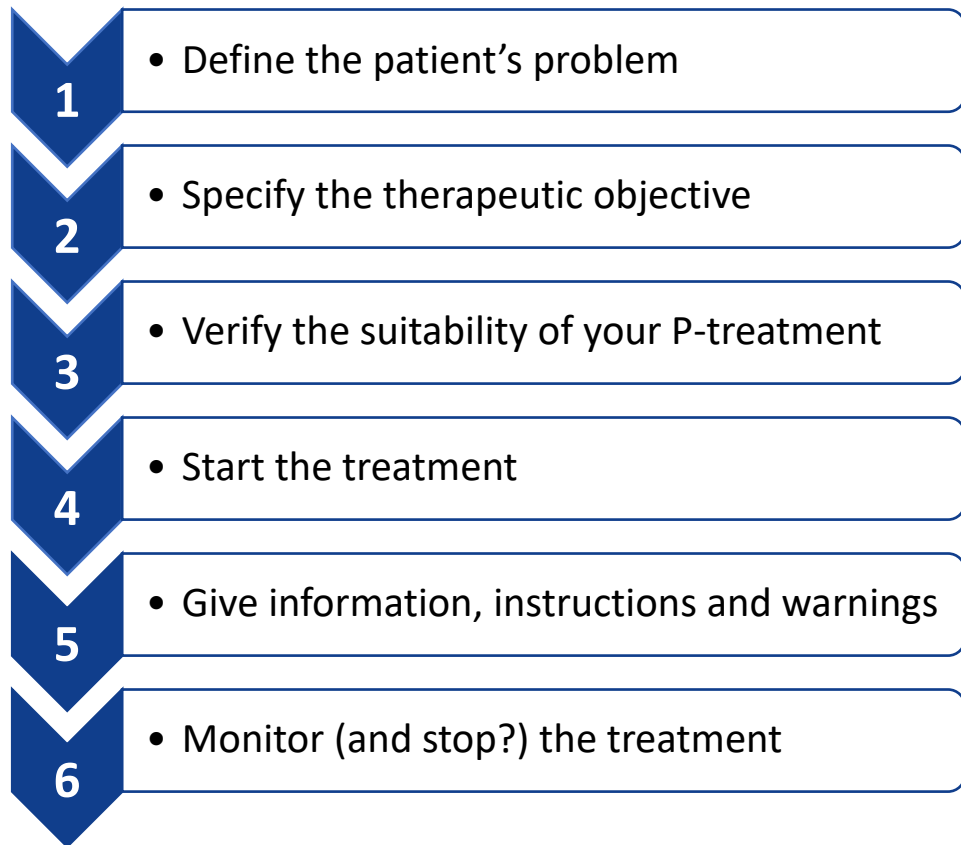
1. Identify and define patient problem(s) and treatment goal(s)
2. Search for (standard) treatment options
3. Verify suitability of treatment options
4. Define a treatment plan and write the prescription(s)
5. Give instructions
6. Monitor the treatment (and adapt if necessary)

What do you think of the (new) steps 4-6?

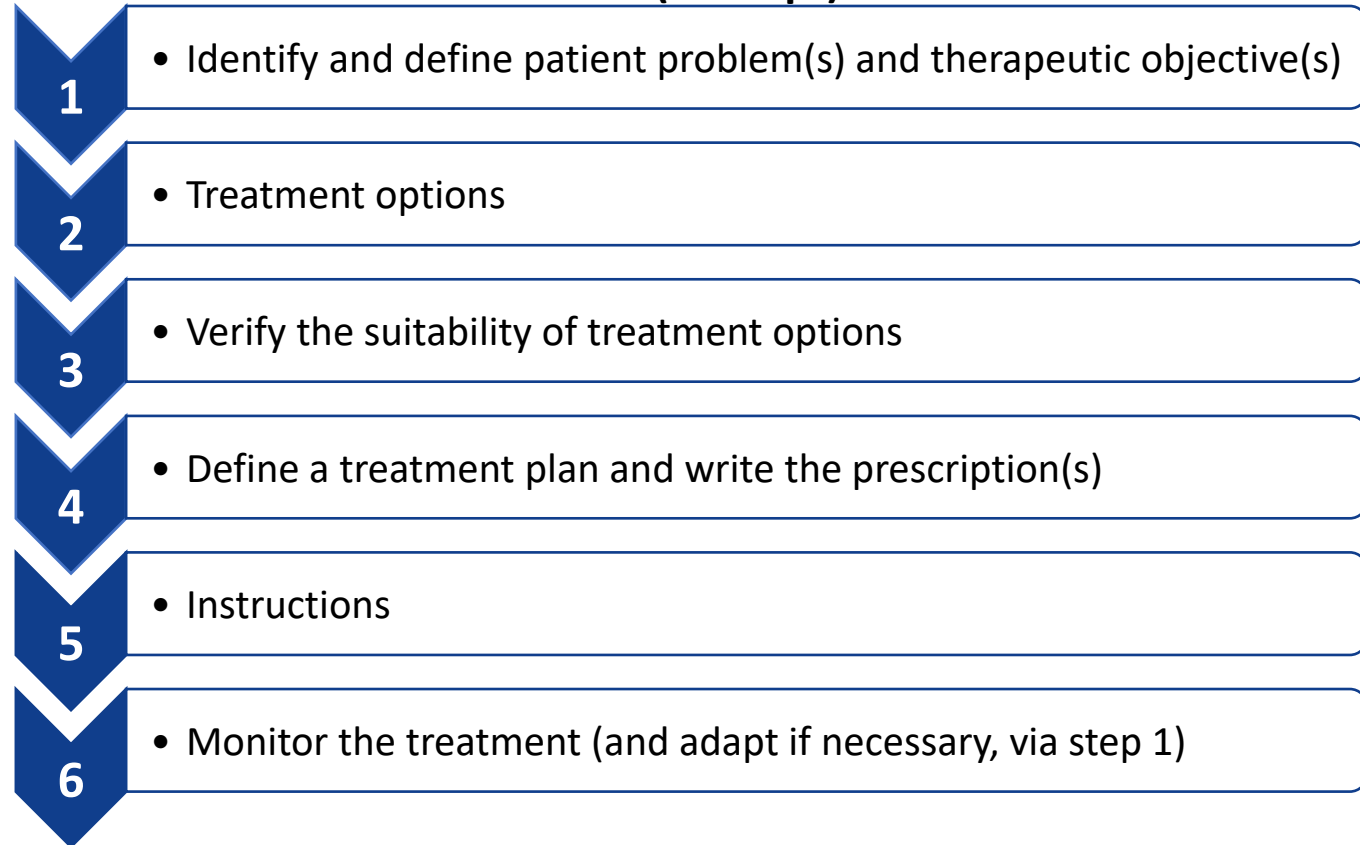


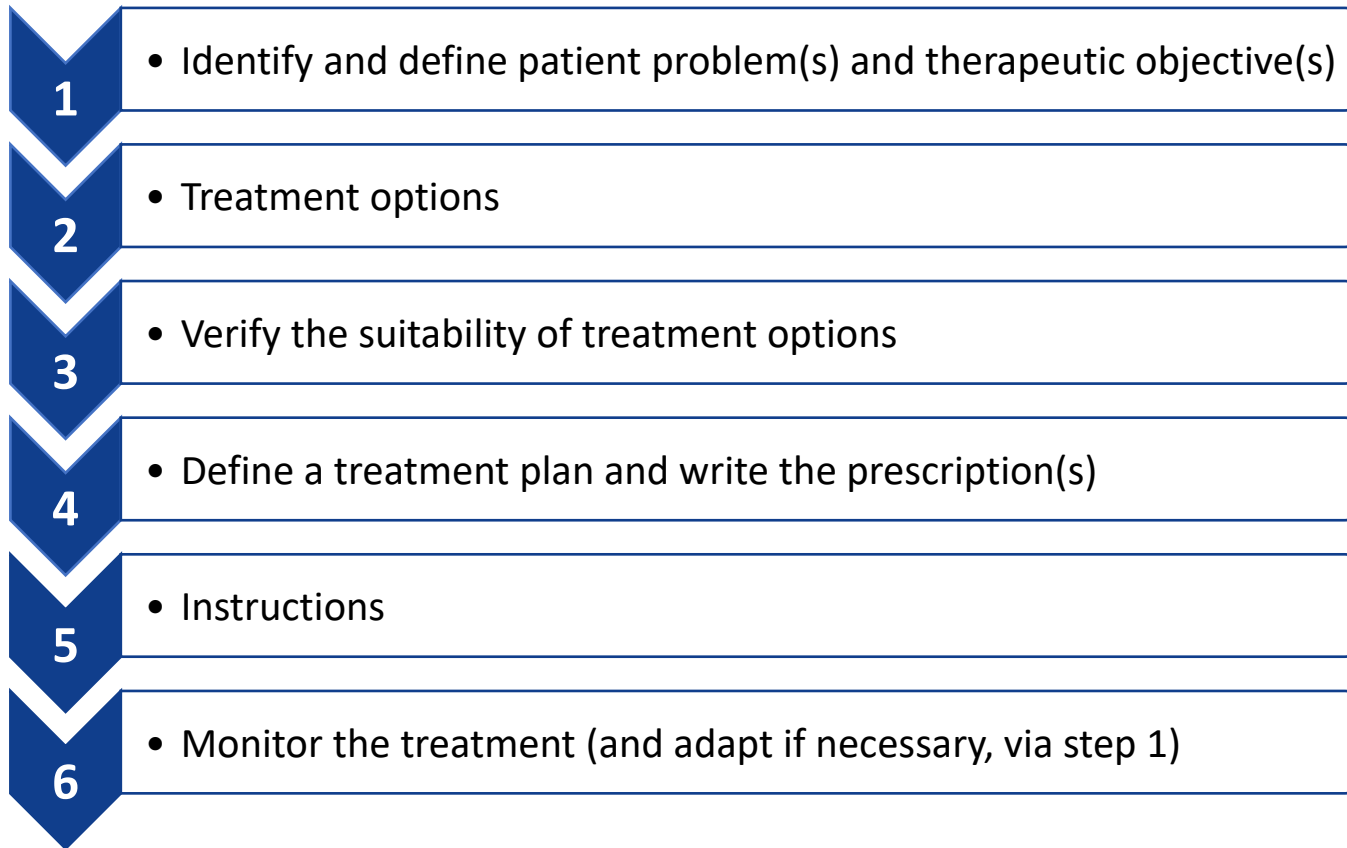
Revision 6-step

Before



After (concept)





New concepts:

- Modernization of prescribing and prescribing techniques
 - Shared decision making: Step 1 – 4 – 5 – 6
 - Electronic prescribing: Step 4
 - Deprescribing: Step 1 – 2 – 3 – 4 – 6
- Changing landscape
 - Planetary health: Step 3 – 4 – 5 – 6
 - Critical appraisal of guidelines: Step 2
 - Diversity and inclusivity: Step 1 – 3 – 4

In a loop structure



The new concept



Online via Articulate:

- Easier to access
- Interactive
- Easier to update
- Possibility to download as PDF for offline use

<https://rise.articulate.com/share/0iDe1ICP76GYyy1jJnc6uQvY8Sc1Ba9u>



The new name?



- The new GGP
- The updated GGP
- The revised GGP
- The GGP 2.0
- The 2024 GGP
- [*Other suggestions?*]





Break



How to integrate the WHO Guide to Good Prescribing in your curriculum

Part 1: Current curriculum

Part 2: Future curriculum





How to integrate the WHO Guide to Good Prescribing in the curriculum

Part 1: Current curriculum

Questions:

1. How is CPT educated and organized at your medical school?

How much time is dedicated to CPT?

Who are the teachers?

1 course or multiple?

Do you use the WHO GGP

How do you assess your students?

Do you use Problem-Based Learning?

How many students?

2. What works well, and what does not?



How to integrate the WHO Guide to Good Prescribing in the curriculum

Part 2: Future curriculum





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How to integrate the WHO Guide to Good Prescribing in the curriculum



Part 2: Future curriculum

Questions:

1. Devise at least 2 new educational methods/forms to teach students about CPT including the WHO 6-step. Describe how this would look like.

→ **Only 1 rule: Think without limitations regarding money, teachers, time, etc.**

In-school education	During internships
Post-graduate (continuing education)	Digital education
International education	Interprofessional education

2. What potential barriers could arise, and how can they be overcome?



Examples of good practices









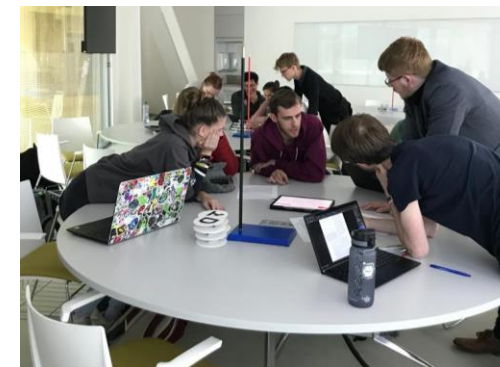
- TBL in CPT education (Masaryk University)
- OSCE in CPT assessment (Ghent University)
- Prepare own P-drug formulary in La Laguna
- ... in Bologna



TBL in CPT education (Masaryk University)



1 st step Individually 60–120 min	2 nd step 5–10 min	3 rd step 10–20 min	4 th step 15–30 min	5 th step 90 min	6 th step 15–30 min
Before class	In class – closed book			In class – open book	
 1)	 1)	 1)	 1)	 1)	 1)
Pre-class preparation	Individual Readiness Assurance Test (iRAT)	Team Readiness Assurance Test (tRAT)	Clarification session/ immediate feedback	Application exercise (virtual patient)	Close
Reading, lecture slides, videos, articles Test knowledge, self-evaluation	Individual, no discussion or use of study materials allowed MCQ, the single best answer Answers not revealed	Teams, discussion encouraged Same MCQ Decide on the team's answer	The entire group, discussion encouraged Same MCQ Answers revealed Facilitator-led discussion	Teams, apply knowledge to solve problems, discussion encouraged MCQ, open questions, tasks Answers revealed Facilitator-led discussion, content expert feedback	Entire group Open discussion, real-world problems, take-home messages, debriefing Content expert feedback



TBL in CPT education (Masaryk University)



Jiří Hlavsa is a 55-year-old man. Apart from a few respiratory infections and occasional back pain, he has never been treated. During a regular preventive check-up you measured his blood pressure - sitting, back supported, at rest, always after 5 minutes 155/110 mmHg, 148/101 mmHg, 153/115 mmHg.

Physical examination: Height 178 cm, weight 90 kg, BMI 28.4

Social history: Works as a turner in a company, lives with his wife and son (pharmacist) in the house, they have a garden

Family history: Mother - diabetes, hypertension, heart failure, father died due to ACS

Abuse: Smoking: -, Alcohol once a week some drinks

Drugs: None

Allergy: Penicillin - exanthema after 3rd dose of Augmentin (amoxi/clav)

What would be your approach?

- a) leave without intervention, next check in two years
- b) education and regimen interventions, check-up in 2-4 weeks
- c) education and regime intervention, start monotherapy, follow-up in 2-4 weeks
- d) education and regimen measures, deployment of dual combination, follow-up 2-4 weeks
- e) education and regimen interventions, triple combination deployment, follow-up in 2-4 weeks



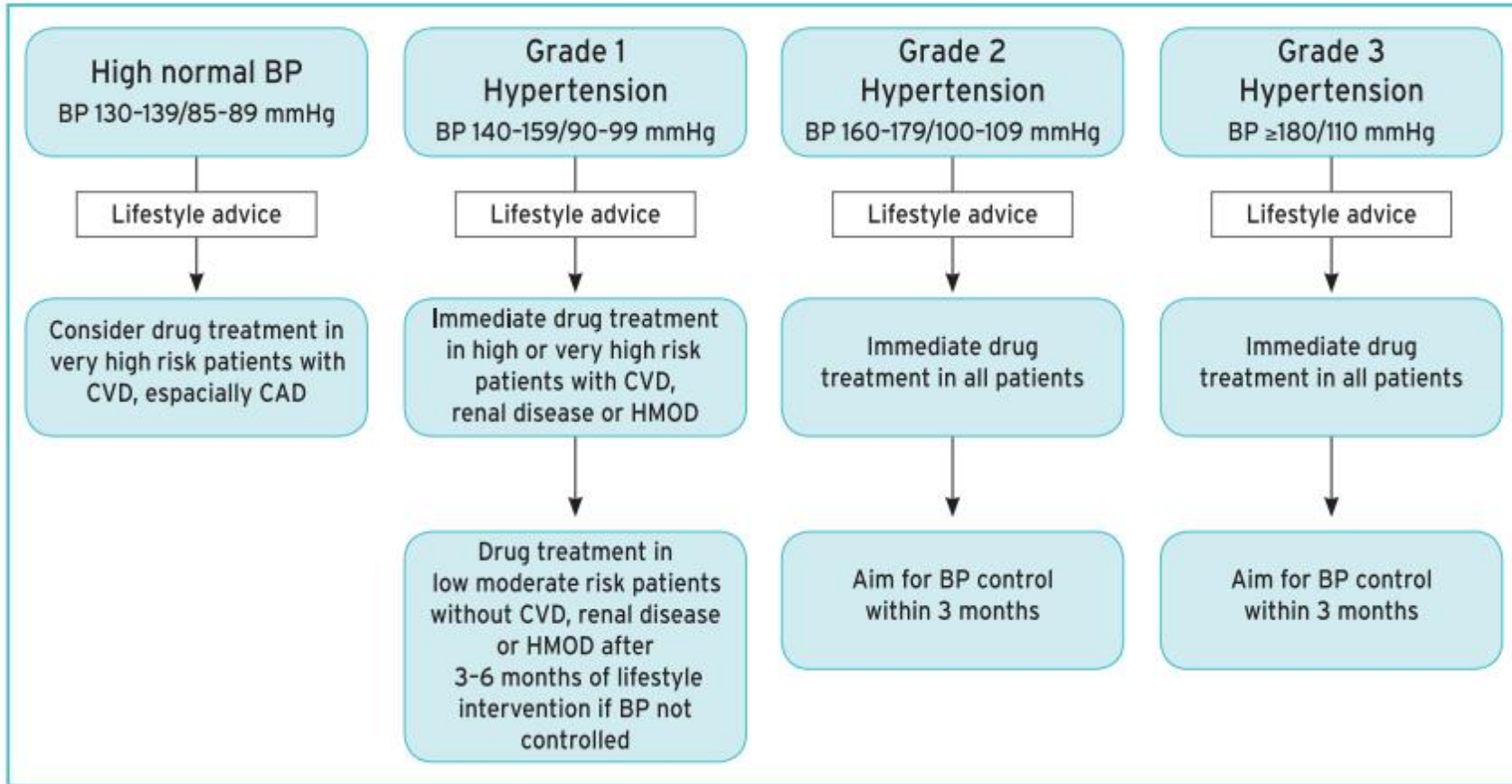
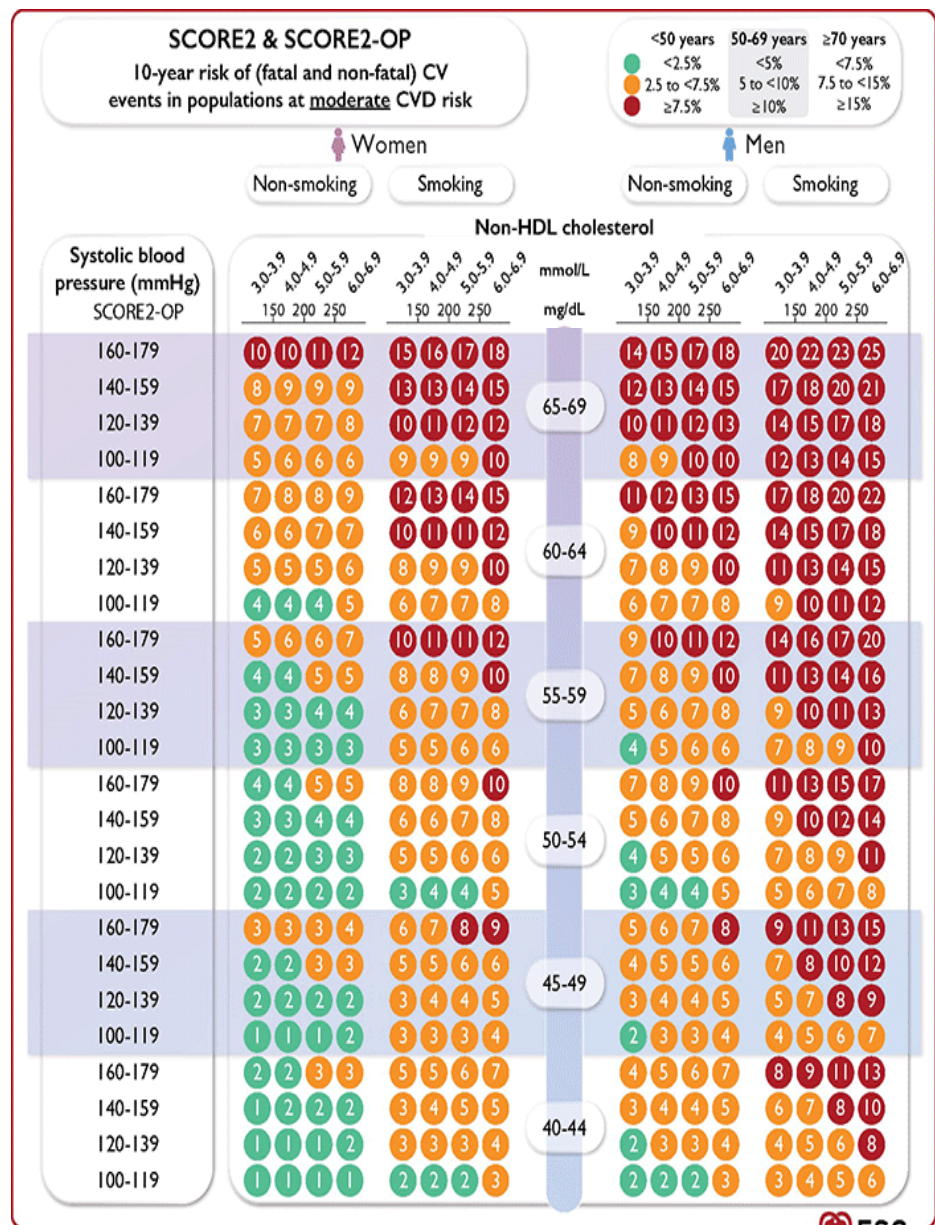
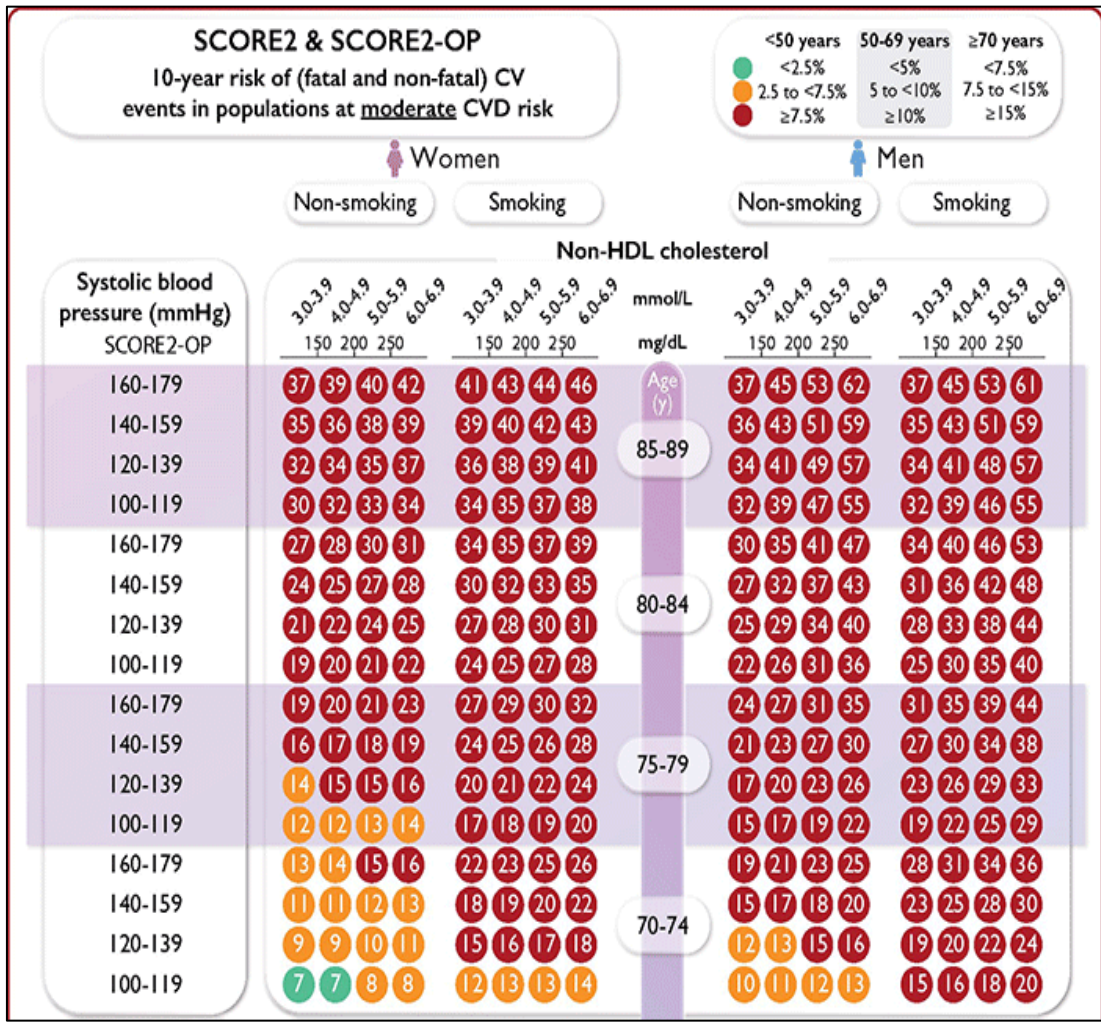


Figure 3 Initiation of blood pressure-lowering treatment (lifestyle changes and medication) at different initial office blood pressure levels. BP = blood pressure; CAD = coronary artery disease; CVD = cardiovascular disease; HMOD = hypertension-mediated organ damage.





TBL in CPT education (Masaryk University)



After four weeks, the pressure remains high, practically at the same values - sitting, always after 5 minutes 158/112, 149/100, 148/108 mmHg.

So you decide to start/strengthen drug therapy.

What drugs are available? Write out the list.

Does the patient have any contraindications to any of these? Cross out.

Choose an initial strategy, including follow-up steps.



OSCE for assesment in Ghent University



‘Objective Structured Clinical Examination’

Students perform and are assessed on specific simulated prescribing tasks





Prepare own P-drug formulary in La Laguna

For the 20 most common diseases in primary care, with a maximum of 40 drugs, using the 6-step

For each disease

1. Define the problem of the patient they are intended to treat
2. State the therapeutic objective
3. List and describe all pharmacological groups that could be used and prepare a schematic document with each group's Pharmacokinetics and pharmacodynamics properties + the evidence for effectivity, safety, and convenience.
4. Choose the one (or two) pharmacological group(s) of preference.
5. Choose the active principle (including presentation and dosage) of the P-drug(s) for that "Patient's problem."
6. Prepare all the information that should be given to the patient.

Step 1-4 for each disease in small groups, documents shared with other groups

Then each student prepares their own formulary using the p-drugs app



Evaluation

