

# Czech Professional Society of Clinical Pharmacy member of Czech Medical Association of J. E. Purkyně



of Czech Pharmaceutical Society
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#### From:

PharmDr. Milada Halačová, Ph.D.

President of the Section of Clinical Pharmacy of Czech Pharmaceutical Society

and

PharmDr. Jana Gregorová

President of the Czech Professional Society of Clinical Pharmacy

To:

ESCP International Office and ESCP President Prof. Bart van dem Bemt Theda Mansholtstraat 5B 2331JE Leiden Netherlands

Subject: Clinical Pharmacist's Patient Oriented Competences in the Czech Republic

Dear Mr. President,

Based on previous discussions, we are pleased to provide you with details regarding organisation of clinical pharmacy and inform you about competences required from a clinical pharmacists in the Czech Republic.

In our country a candidate for a profession of clinical pharmacist has to graduate from 5 years's postgraduate specialization in clinical pharmacy. Clinical pharmacy is an official postgraduate specialization program certified by the Ministry of Health of the Czech Republic. Clinical pharmacy is one of several postgraduate specialization programs for pharmacists and differs substantially from other specializations, such as practical (community) pharmacy and hospital pharmacy (for more information please see the attachments).

The attached list of clinical pharmacists' competences has been agreed by both professional societies of clinical pharmacists in the Czech Republic.

We hope that our material will be useful for future discussions.

In case of any question please don't hesitate to contact us.

Thank you,

With best regards,

PharmDr. Jana Gregorová

president of Czech Professional Society of Clinical Pharmacy

and

PharmDr. Milada Halačová PhD.

president of Section of Clinical Pharmacy of Czech Pharmaceutical society

### Attachments:

Attachment 1/ Description of the situation in pharmacy specializations in the Czech Republic

Attachment 2/ Current competences of clinical pharmacists in the Czech Republic

#### Attachment 1

## **Description of the situation in the Czech Republic:**

In the Czech Republic, there are several distinct pharmaceutical specializations, among them practical pharmacy, hospital pharmacy and *clinical pharmacy*. The existence of different pharmaceutical specializations and their designations are given by law 95/2004 Coll. All specializations have different postgraduate training and clearly defined competences based on education and practice during the the relevant postgraduate specialization program. The term "hospital pharmacist" as it is used in the European context for any pharmacist who works in a hospital should not be mixed with "hospital pharmacist" which is a distinct specialization in the Czech Republic according to law 95/2004 Coll.

The clinical pharmacy specialization certified by Ministry of Health of the Czech Republic requires a theoretical postgraduate training, mandatory practice at an accredited clinical pharmacy departments and 5 years of clinical practice. The theoretical part of the above mentioned educational program comprises of several courses guaranteed by actively practicing clinical pharmacists focused on rational drug use, drug efficacy, safety and drug effectiveness in different fields of medicine, different patient groups and in individual patient cases. This postgraduate training is finalized by the specialization examination in clinical pharmacy which consists of a theoretical as well as practical part including a real patient case solving (analysis, evaluation of lab tests, patient's clinical assessments, symptoms etc.), report and discussion on all clinically relevant and potentially relevant drug therapy problems. It is important to emphasize also that the Czech Law since the year 2012 distinguish special care of clinical pharmacists for the patients, so called "clinical-pharmaceutical care".

Based on joined consensus of both clinical pharmacy societies, the official translation of current clinical pharmacists' competences is sent to the ESCP office together with this explanation that clinical-pharmaceutical care as defined by the Czech law is provided in the Czech Republic by pharmacists having postgraduate specialty in clinical pharmacy.

#### Attachment 2

## **Current competences of clinical pharmacists in the Czech Republic**

(according to Clinical Pharmacists' Training Program published by the Czech Ministry of Health)

- direct patient care, including patients education regarding their pharmacotherapy
- independent formulation of pharmacotherapy recommendations
- pro-active screening and pharmacotherapy evaluation provided in inpatient and/or outpatient settings, namely
  - identification of medication risks regarding pharmacotherapy
  - evaluation and support of appropriate drugs use
  - evaluation and improvement of patient's adherence to prescribed pharmacotherapy
- verification of generic substitution including record into patient's documentation
- providing clinical pharmaceutical care in inpatients and outpatients settings:
  - proactive medication revision and possible pharmacotherapy changes proposal of either all admitted patients or selected patients (according to chosen criteria)
  - providing of requested medical consultations
- clinical pharmacist may independently provide
  - a) admission medication revision obtaining information about pharmacotherapy from the patients and their documentation, medication reconciliation of patients on the admission
  - b) complex patient's pharmacotherapy evaluation in inpatient and outpatient setting and stratifying patients according to the risks related to their medication. This information is provided to the respective attending physician and recorded into the patient's documentation. Complex evaluation of patient's medication includes particularly:
    - analysis of patient's documentation focused on the pharmacotherapy
    - evaluation of patient's pharmacotherapy (drugs, doses, dosage forms, administration routes, timing) in the context of their diagnoses, state of eliminating organs and laboratory results
    - evaluation of possible relations between patient's current health problems and his/her actual medication, assessment of clinical importance of drug interactions, identification of inessential or inappropriate medications and duplicities
    - searching and replenishment of missing information regarding drug use in patient's medication history
    - identification of risk factors in case of changes in patient's medication
    - identification of risks in patient's medication when patient's health state changes during the hospitalization
  - c) proposing of a plan for medication adjustments (for inpatient and outpatient setting) to solve potential drug related problems, providing this plan as consultation to the attending physician, schedule repeated control by clinical pharmacist (to evaluate the acceptance and effectiveness of proposed changes) and a record the proposed plan in the patient's documentation. This includes namely:
    - evaluation of current medication in the context of actual attending physicians plans, actual laboratory results and results of a clinical examinations and current recommended medication guidelines
    - proposal of a drug dose and administration changes or replacement of particular drug by another drug in case of more suitable alternative in the context of altered elimination organs state.

- therapeutic drug monitoring (i. e. interpretation of measured drug plasmatic concentrations in the context of actual dosing, patients state and indication and proposal of drug dosing adjustments)
- evaluation of possible drug-drug interactions and their clinical importance and proposal of medication changes to avoid negative influence of the interaction on the patient's health
- proposal of drug dosing changes or drug replacement by more suitable alternative in case of renal replacement therapy
- differential diagnostics of adverse drug reactions evaluation of the possibility that actual health problems of the patient results from adverse drug reaction
- identification of inessential drugs according to current EBM guidelines
- identification of drug duplicities
- proposal of more appropriate drug dosage form or application route in the context of current patient health state
- d) continuous reviewing of the proposed medication adjustment plan efficacy and acceptance by the attending physician (for inpatient and outpatient setting) including new medication adjustment plan formulation in case of need and schedule of further repeated control by clinical pharmacist and a record in patient's documentation
  - evaluation of the effect of changes that were made in the patient's medication
  - evaluation of possible patient's subjective complaints regarding to the medication changes
  - evaluation of changes in laboratory findings after the changes in the patient's medication
- e) medical reconciliation on the patient's discharge from inpatient setting including information for attending physician and record in patients documentation
- f) indication of laboratory examinations needed for evaluation of the pharmacotherapy (e. g. renal functions, potassium blood level etc.)
- g) indication of physician examination if it is needed for evaluation and adjustment of the pharmacotherapy

president of Section of Clinical Pharmacy of Czech Pharmaceutical society PharmDr. Milada Halačová Ph.D.

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