



## **Clinical Pharmacy in Clinical Practice: Development and Implementation in the Czech Healthcare System in the Light of US Standards**

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### **Background:**

I have been working as a Clinical Pharmacist since 2010 and I was one of the first practitioners of Clinical Pharmacy in the Czech Republic. The field of Clinical Pharmacy has been rapidly developing in the Czech Republic as the new positions of Clinical Pharmacists were created recently in several hospital facilities. As a member of the Board of the Czech Society of Clinical Pharmacy I have a direct responsibility for the coordinated development of Clinical Pharmacy in the Czech healthcare system. Therefore I have decided to gain direct experience with the American system of Clinical Pharmacy which I consider one of the best established systems in the world.

I found my American partner thanks to Dr. Rebecca Attridge at an educational event called Clinical Pharmacy Week in Vienna on September 2013. Afterwards I started to seek a grant agency which would enable me to gain the US experience. I learned about AFCSLS thanks to the Educational Advisor of Fulbright Commission Ing. Tesař. Because I was the first person asking my American partner for cooperation on this kind of internship it took us almost half a year to complete all the necessary information and permissions and to do all the paperwork. As regards the visa process, the most time consuming step was getting the DS-2019 form which I received just a few days before the date of my planned departure. Fortunately then I received my visa without any problem and in the end I departed to the US as planned.

### **American Partners:**

My contact person and supervisor was Rebecca Attridge, Pharm.D, an assistant professor at the Department of Pharmacy Practice at the University of The Incarnate Word in Texas and a Pharmacotherapy Specialist in the Intensive Care Unit at the Division of Pulmonary Diseases and Critical Care Medicine at the University of Texas Health Science Center in San Antonio.

I explained to Dr. Attridge my ideas about an experience which I wanted to pursue and she arranged for me a program combining an internship in the University hospital, University Health System, and executive training at the University of Incarnate Word, Feik School of Pharmacy in San Antonio, Texas.

**Brief Evaluation Statement:**

The objective of my internship was to understand the method of work and the role of the Clinical Pharmacists within the healthcare system, especially focused on the area of Intensive Care. I also wanted to gain insight into the education of American Clinical Pharmacy Specialists.

During my project I was participating as an observer in the daily practice of Clinical Pharmacists in both didactic and clinical setting in various areas of healthcare. I was lucky to attend the Annual meeting of American College of Clinical Pharmacy through which I gained a lot of new ideas about financial support for Clinical Pharmacy Services. During my internship I met a lot of amazing American colleagues who did not hesitate to share their unique experiences from clinical practice with me and who have enriched both my professional and personal life. The project has definitely met my expectations.

**Detailed Description:**

During my two-month internship I observed the work of Clinical Pharmacists in the Intensive Care Unit (ICU) in the University Hospital. My internship started at the Medical Intensive Care Unit under the supervision of Dr. Attridge. Then I had a chance to observe some of her colleagues in other ICUs: Darrel Hughes at the Department of Emergency medicine; Conrad Gamboa at the Surgical/trauma ICU; Colleen Barthol at the Neurosurgical ICU. In addition I also observed Rebecca Brady at the Transplant ICU and I spent two days in the Hospital Pharmacy, so I could see the difference in the US and the Czech system of hospital pharmacist's work. I was also lucky to meet colleagues working at other hospitals. Dr. Renee Bellanger allowed me to observe her work in Christus Santa Rosa Hospital specialized in Pediatrics and Dr. Tony Dasher arranged for me a one-day internship in Methodist's hospital. Thanks to this experience I was able to see the different system of healthcare providers in the US and various systems of work of Clinical Pharmacists.

At the University of the Incarnate Word, the Feik School of Pharmacy, I attended a training course focused on infectious diseases. I was also invited to participate in critical care topic discussions as a part of the resident program. It was an important experience through which I saw the difference between the Czech and the US system of pre graduate and postgraduate education of Clinical Pharmacists. I also got an idea of the extent of knowledge required at the position of Clinical Pharmacy Resident.

My participation at the Annual meeting of American College of Clinical Pharmacy was really enriching. It is likely the most important event in the field of Clinical Pharmacy in the US where Clinical Pharmacists from different states and health care facilities meet and share their experiences. I attended a Curricular Track dealing about providing financial resources for Clinical Pharmacy Services and I obtained know-how from the most experienced American colleagues in this field.

**Organization and Time Schedule**

My project lasted two months, from September 4th until October 31st 2013. After my arrival we arranged with Dr. Attridge a concrete program for two months which then we made more specific according to the appointments we arranged. With Dr. Attridge I usually spent the morning in the University hospital and in the afternoon I attended some of her courses at the School of Pharmacy. In the other ICUs I followed the daily program of my supervisors. I attended the

Annual Meeting of American College of Clinical Pharmacy in Albuquerque, New Mexico on October 13th-16th 2013.

Regarding my expectations, two months of internship was enough to gain knowledge about the field of Clinical Pharmacy in the US. During my project I preferred to observe as many different areas of healthcare facilities as possible to get an overall idea about the US system. If it was my primary intention to improve some specific expertise, I would certainly need more time than two months.

**Program Cost:**

The budget was just fine for two months of internship. It was good to have a reserve because it turned out during my stay that everything is more expensive than I thought. This was caused often by the tax fees which are not included in the displayed price. The highest costs were certainly for the accommodation. It is difficult to rent an apartment for such a short period in San Antonio, so I stayed in an Extended Stay hotel which turned out to be one of the most economic options, but including taxes it was still more expensive than I expected.

Item	Anticipated Costs in US\$	Actual Costs in US\$
Executive training seminars (registration fee and costs for ACCP meeting)	1,500	1,100
Internship	0	0
Administrative fees (visa, liability insurance, etc.)	1,000	800
International travel	1,800	1,300
Local transportation (including national flight at ACCP meeting)	750	800
Medical insurance	50	150
Monthly maintenance	4,000	5,400
Contingency/Miscellaneous	1,500	1,000
<b>Total</b>	<b>10,600</b>	<b>10,550</b>

**Program Benefits:**

- ⤴ **At my work position:** Thanks to this project I better realized the utility of the Clinical Pharmacist in the Intensive Care Unit and the area of his responsibility in providing patient care by optimizing medication therapy. I could understand the role of Clinical Pharmacist in multidisciplinary team and the necessity of a personal discussion with the other members of the team during the decision making process.
- ⤴ **In the field of clinical practice:** As a member of the Board of the Czech Society I have already started to work at the methodology of providing outcomes of Clinical Pharmacy Service. I believe that it could help not only to justify the recent positions of Clinical Pharmacists, but it will help to establish the new ones in other healthcare facilities. I have

already shared my experience with other members of the Board. My US experience has confirmed our priorities and the future direction of our activities in the field of Clinical Pharmacy.

- ✧ **In the system of education:** This project helped me to define the difference in the system of education of Clinical Pharmacists in the US and in the Czech Republic. I shared my experience with other members of the Board so we can use this experience dealing with the state institutions such as the Ministry of Health. I also plan to organize a seminar in Prague this year where I would like to invite Dr. Attridge in order to give a lecture to other colleagues from the field of clinical pharmacy and to exchange their experiences. I would like to keep in contact with my American colleagues and depending on other factors I will seek future systematic cooperation with them.

### **Risks:**

I was surprised to find out that even if there is a big difference between the US and the Czech healthcare system, we have more in common with the American system of Clinical Pharmacy Practice than I expected. The fact that they still need to justify their positions is on one hand good for us because we can learn from them, on the other hand I expected that US colleagues would be so far ahead that they would not have to handle these kinds of problems anymore.

On the contrary I see a really big difference between the US and the Czech system of education of Clinical Pharmacists. I think this is a big challenge for us and at the same time the biggest risk of our current practice.