

**Practical Year Logbooks**

**Surgery**

**Internal Medicine**

**University Hospital Würzburg**

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## **Welcome to Würzburg!**

We would like to welcome you all to University Hospital Würzburg and our associated teaching hospitals as future colleagues during your period of practical year training here.

In accordance with the laws governing the licence to practice medicine for doctors in Germany, the training provided during the practical year focusses on patient care. You will consolidate and expand on the knowledge, abilities, and skills obtained during your studies and learn to apply these to individual patients' cases under the supervision and responsibility of trained staff. It is the aim of the practical year to provide you with the ideal preparation to practice as a doctor.

The Practical Year Logbooks (Surgery and Internal Medicine) were developed to guarantee that your training be structured, standardized, and of the greatest personal use. The Logbooks keep you up to date with the content, course, and organization of your training throughout the practical year.

The Logbooks are designed to accompany you throughout the entire period of your training, providing you with an overview of and means to document the tasks to learn and practice. It should also guarantee that you are able to train specific techniques and carry them out yourselves. We would also like to encourage you not simply to take note of the learning objectives in your Logbooks but also request them actively on ward, in theatre, and on the units.

The exercise of the tasks listed in the Logbooks should not be considered as duties imposed. This should instead be viewed as stimulating self-reflection and as a means to provide feedback on your progress as well as skills you have already developed.

The maintenance of the Logbooks is however deemed a requirement for certification of the completion of your practical year training.

**We anticipate that you will succeed in learning a lot and hope you enjoy your time here at University Hospital Würzburg and our associated teaching hospitals.**

## **Imprint**

Office of the Dean of Studies, Faculty of Medicine

Josef-Schneider-Straße 2/D7

97080 Würzburg

**Logbook**

**Surgery**

### **Working Hours and Rotation**

In general, your training during the practical year will comprise working full days within the training facilities on all days of the working week and the assignment of common clinical duties under the supervision of a physician. You will receive compensatory time off as required by law and be expected to work on call, night shifts, as well as weekend rotas. You should also spend some time working in the Accident and Emergency Department / Emergency Room.

If the work on ward or in theatre requires longer working hours now and then, we are grateful to you for your support and cooperation. Where appropriate and as agreed on ward, you may take time off on one of the following days to compensate for your overtime.

To gain the widest possible insight into the respective discipline and broaden your spectrum, you will be required to switch wards/departments/functional areas at least once. The subject-specific teaching coordinators will take care of all the organization of your rotation.

You should allocate around 15% of your weekly training time to participating in professional training and tuition sessions as well as literature study. No provision has been made for days of study.

### **Days absent**

Absences include sick leave as well as holiday leave and days of travel associated with trips abroad. A period of absence amounting to a total of 30 days will be allowed for over the entire 48-week duration of the practical year (comprising 240 days of training). A maximum of 20 days will be allowed per trimester of 16 weeks. Absences will be documented in the practical year log book (PYLB).

### **Introduction to the UHW and Practical Year “Driving Licence”**

The so-called Practical Year “Driving Licence” contains a curriculum of training events as well as specific regulations relating to the activities of practical year students and is compulsory at the University Hospital of Würzburg (UHW) along with the PYLB.

The first of these two events in which participation is obligatory encompasses a general day of introduction spanning the entire University Hospital. The second comprises a specific information event provided by the respective clinic or department in which the practical year student is to work.

Training topics comprise, among other things, standards in the fields of hygiene, data protection, attitude in theatre, and safety in the workplace.

The day of introduction, to which each practical year student is invited by the Office of the Dean of Studies, takes place at the start of each four-month trimester. Those

students who have already participated in this general introduction as part of a previous elective completed at the University Hospital can enjoy a day off without that day counting towards their officially allocated time off.

During the introduction day, practical year students receive their “Practical Year Driving Licence”, in which the regulations for different activities throughout the practical year are noted down. A differentiation is made between clinical duties that are not to be delegated to practical year students at all and those duties specified by each clinic separately that may be performed solely under the direct supervision of a qualified physician. These tasks will be documented in the “Practical Year Driving Licence” by each clinic and specific to the respective clinical subdivision. The third category comprises tasks that may be carried out on the instruction of a qualified physician either with his/her prior practical guidance or after having passed a suitable test.

In addition to the general day of introduction, each practical year student receives a compulsory introduction to the circumstances of the clinic in which they will be spending the next four months. Each clinic informs students autonomously of clinic-specific characteristics and features as well as contact persons.

### **The Course of Your Training and Support**

The physicians’ team on ward – mostly comprising two consultants and two to three residents – is primarily responsible for your training and integration into the team on ward. The ward duty doctor is generally your mentor and first point of contact.

Your mentor has the task of supporting your training with the help of the PYLB. He/she should enable you to achieve what is required. Your mentor should be available as a cooperative contact person to address questions and problems that arise during your training, as well as offer constructive suggestions relating to your study progress. Your mentor is also there for you to discuss things of an organisational nature, such as night duty and periods of leave of absence, etc.

You are requested to have an introductory talk with the respective ward duty doctor at the onset of every assignment to a ward. Make sure that your duties and the organisational requirements on ward have been explained to you fully. At this point in time you should also ensure that you discuss your learning objectives and what you expect from your assignment on the ward.

A talk with the respective ward duty doctor is also necessary at the end of each ward assignment. He/she will provide you not only with feedback on your achievements but also convey important tips on your further development. You will also have time to give your feedback on your assignment.

These introductory and closing talks are to be documented in the PYLB.

Meetings documenting your progress should take place with the ward consultant(s) regularly and at least once a month. Subjects of discussion should include your personal

assessment of your study progress, as well as problems and shortcomings in the training programme where necessary. Your ward consultant will provide you with feedback on your personal development (strengths, room for improvement, future prospects).

We would similarly like to encourage you to request and obtain feedback on your clinical duties from other people around you, such as consultants, the nursing staff, as well as patients with whom you dealt.

### **Vocational Training Courses**

In addition to the practical training provided on ward, within the functional areas, and in theatre, all students in their practical year have access to a regular programme of vocational training courses. It is important to us that you participate in these courses whenever possible. Moreover and as a matter of principle, you are more than welcome to participate in training courses aimed at all members of the entire medical profession. Nevertheless, urgent duties on ward or in theatre cannot guarantee that you will always be able to take part.

### **Assessment of achievements**

The PYLB lists a number of skills and competencies which you should practice repeatedly throughout the practical year. Following sufficient practice and at a point in time chosen at your discretion, you should then demonstrate the respective skill or competency to your mentor or another physician on ward. He/she will provide you with feedback on your performance and, providing you have demonstrated your expertise successfully, confirm this in your PYLB with their signature.

### **Validity of the Logbook**

The guidelines and learning objectives stipulated in the PYLB are valid not only within the Clinics and Institutes of the University of Würzburg but also in our teaching hospitals.

### **Practical Year at Other Universities**

If you complete any parts of your practical year in the teaching facilities of another university, then the logbook provided by the host university is to be complied with for these parts.

### **Practical Year Abroad**

If you spend any time during your practical year in a teaching establishment abroad, then the PYLB issued by the Faculty of Medicine in Würzburg is binding for this time.

## **Affective Learning Objectives (Interdisciplinary)**

The following affective learning objectives taken from chapters 5 – 11, 14c, 18, and 19 of the National Competency-Based Catalogue of Learning Objectives in Medicine (NKLM) (the physician as communicator, collaborator, health advocate, professional, medical expert, and leader, as well as medical communication skills and medical ethics) need to have been reached at the very latest by the end of your training during your practical year and to the level of competence listed:

<b>Affective Learning Objectives</b>	<b>Level</b>
Deal with patients respectfully, empathetically, and without judgement.	3
Behave empathetically in extreme situations, e.g. preoperative or oncological patients.	3
Display openness towards the impact of each patient's social background	2
Heed patient autonomy	2
Display sensitivity towards the individual needs of patients	2
Be sensitive of the use of non-verbal communication when talking with patients.	2
Be willing to work in a team constructively	3
Demonstrate willingness to engage in self-criticism	3

(Modified from the PYLB published by the MRI, TU Munich, 2010)

### **Explanation of the Competence Levels**

- 1 Theoretical knowledge of the objective
- 2 Has observed the objective
- 3 Has demonstrated the objective

## Assessment of the student by the team on ward (Rotation 1-4)

Student's name: \_\_\_\_\_

Hospital: \_\_\_\_\_

Ward: \_\_\_\_\_

	1 - excellent	2 - good	3 - satisfactory	4 - sufficient	5- unsatisfactory	6 - insufficient	Cannot be assessed
<b>On ward</b>							
Knowledge							
Practical skills							
Attitude							
Overall assessment							
<b>In theatre</b>							
Knowledge							
Practical skills							
Attitude							
Overall assessment							
<b>Strengths:</b>	<b>Room for improvement:</b>						
<b>Comments:</b>							

Date

Signature of Doctor on ward; Mentor

## Patient treatment demonstration

Student's name: \_\_\_\_\_

Ward: \_\_\_\_\_

Rotation:           1.   2.   3.   4.

Diagnosis: \_\_\_\_\_

	Exceeds expectations		Fulfil expectations		Lies below expectations	
	1	2	3	4	5	6
Taking the patient's case history						
Physical examination						
Compliance with hygiene regulations						
Handling of dressings und drains						
Interpretation of results/findings						
Portrayal of the treatment plan						
Discussion of the prognosis						
Overall impressions						
<b>Strengths:</b>	<b>Room for improvement:</b>					
<b>Comments:</b>						

Date  
\_\_\_\_\_

Signature Doctor on ward/Mentor  
\_\_\_\_\_

## General and Visceral Surgery

<b>Acute abdomen</b>							
Ileus (mechanical/paralytic)	2	D		M	N		
Peritonitis	2	D			N		
Mesenteric artery ischaemia	2	D			N		
Perforation of a hollow organ	2	D			N		
Volvulus	1				N		
Invagination	1				N		
Appendicitis	2	D		M	N		
Diverticulitis	2	D		M	N		
Gastroenteritis	2	D					
<b>Abdominal wall</b>							
Epigastric hernia	2	D					
Incisional hernia	2	D					
Inguinal hernia	2	D					
Umbilical hernia	2	D					
Diastasis recti	2	D					
Femoral hernia	2	D					
Incarcerated hernia	2	D			N		
<b>Oesophagus</b>							
Oesophageal carcinoma	2			M			P
Reflux oesophagitis	2			M			P
Barrett's oesophagus	2						P
Oesophageal diverticula	2						
Oesophageal varices	2				N		P
<b>Stomach/duodenum</b>							
Ulcer / ulceration	2			M			P
Diaphragmatic hernia	2						
Gastritis	2			M			
Gastrointestinal bleeding	2			M	N		
Gastric cancer	2						
Duodenal cancer /cancer of the ampulla of Vater	1						
<b>Gallbladder/bile ducts/liver</b>							
Cholecysto-/Choledocholithiasis	2			M			
Cholecystitis	2			M			
Carcinoma of the gall bladder / bile ducts	1						
Bile duct injury	1						
Bile duct stricture	1						
<b>Pancreas</b>							
Annular pancreas	1						
Chronic pancreatitis / pseudocysts	2						P
Acute pancreatitis	2			M	N		

Pancreatic carcinoma	2						
Pancreas transplantation	1					R	
<b>Liver</b>							
Hepatocellular carcinoma	2			M			P
Liver metastasis	2			M			
Echinococcal cyst	1						
Cirrhosis of the liver	2			M			P
Liver transplantation	1					R	
<b>Spleen</b>							
Splenomegaly	2			M			
<b>Small intestine</b>							
Adenoma und carcinoma	1						
Carcinoid	1						
Meckel's diverticulum	1						
<b>Large intestine</b>							
Colon cancer	2			M			P
Colon adenoma	2			M			
Inflammatory bowel disease	2			M			
Diverticulitis / diverticulosis	2			M			P
<b>Endocrine organs</b>							
Phaeochromocytoma	2	D		M			
Tumours of the adrenal cortex	1						
Hyperparathyroidism	2	D		M			
Hyperthyroidism	2	D		M			
Hypothyroidism	2	D	T	M			
Nodular goitre	2			M			P
Thyroid cancer	2			M			
<b>Abdominal trauma</b>							
Rupture of the liver	2				N		
Rupture of the spleen	2			M	N		
Rupture of the pancreas	1						
Intra-abdominal bleeding	2				N		
<b>Skin / wound healing</b>							
Keloid	1						
Abscess	2	D					
Haematoma	2	D					
Pilonidal sinus	2	D					
Wound assessment	2	D					
Wound healing disorder	2	D					
Wound infection	2	D					
Wound care and management	2		T				
<b>Rectum / anus</b>							
Haemorrhoids	2						
Anal fissure	1						
Perianal thrombosis	2	D					

Perianal abscess	2	D					
Rectal- / anal prolapse	1						
Rectal cancer	2			M			
Pouchitis	1						
<b>Postoperative course</b>							
Prolonged Ileus	2	D					
Infections / Abscesses	2	D					
Postoperative bleeding / haemorrhage	2	D					
Thrombosis / embolism	2						
Wound healing disorder	2	D					
Afferent and efferent loop syndrome	1						
Anastomosis leak	2						
Intra-abdominal adhesions	2						
Micturition disorders	1						
<b>Perioperative drug therapy</b>							
Thrombosis prevention	2		T				
Infection prevention	2		T				
Pneumonia prevention	2						
Ulceration prevention	2		T				

## Explanation of the Competence Levels

<b>Knowledge</b>	1	has heard of it, can place it in a clinical context, but does not have to be able to treat it
	2	has to be able to diagnose it, needs to know the differential diagnosis and have a more profound knowledge of it
	D	independent diagnosis
	T	Treatment performed by the practical year student
	M	independent patient management
	N	Recognise emergencies, emergency measures
	P	Preventative measures
	R	Knowledge of the legal basis

(Modified from the PYLB published by the MRI, TU Munich, 2010)

## Accident/Emergency, Hand, and Reconstructive/Plastic Surgery

<b>General traumatology</b>							
Wound management	2	D	T	M	N		
Tetanus vaccination	2	D		M			
Bone fracture diagnostics	2	D					
Bone fracture retention	2	D		M	N		
Joint dislocation diagnostics	2	D					
Joint dislocation repositioning	1	D		M	N		
Bandaging	2	D	T	M			
Casting (plaster or other materials)	2	D		M	N		
Thrombosis prevention	2	D		M			
Postoperative analgesia	2						
Antibiosis	2						
<b>Special traumatology</b>							
Fracture of the distal radius	2	D			N		
Head of humerus fracture	2	D			N		
Vertebral fracture	2	D			N		
Fractures of the proximal femur	2	D			N		
Management of polytrauma in the shock room	1				N		
<b>Plastic surgery</b>							
Burns/scald management	1	D			N		P
Wound management	2		T				
The “reconstructive ladder”	1						P
<b>Hand surgery</b>							
Wound management of cuts	2	D		M			P
Replantation of fingers/thumbs	1						
Splinting of a fractured finger	2						
Tendon injury	2	D			N		

### Explanation of the Competence Levels

<b>Knowledge</b>	1	has heard of it, can place it in a clinical context, but does not have to be able to treat it
	2	has to be able to diagnose it, needs to know the differential diagnosis and have a more profound knowledge of it
	D	independent diagnosis
	T	Treatment performed by the practical year student
	M	independent patient management
	N	Recognise emergencies, emergency measures
	P	Preventative measures
	R	Knowledge of the legal basis

## Guidelines – Skills and Competencies

<b>Examination techniques</b>	<b>Level</b>
Abdominal examination	3
Signs of peritonitis	2
Palpation of the liver / spleen	3
Groin examination	3
Examination of the thyroid	3
Rectal examination	2
<b>Surgical wound management</b>	
Management of first / second-degree burns	2
Infiltration anaesthesia	3
Conduction anaesthesia	1
<b>Suturing techniques</b>	
Simple interrupted suture	3
The Donati suture	3
<b>Dressing and bandaging</b>	
Gilchrist bandage	2
Figure-of-eight bandage	2
Elastic bandage	3
Compression bandage in thrombosis prophylaxis	3
<b>How to act in theatre / Postoperative management</b>	
Surgical positioning	2
Preparation of the surgical field prior to minor surgical interventions	3
Maintaining sterile conditions	3
Assistance in theatre	3
Postoperative fluid replacement therapy	3
Postoperative analgesia	3
Drainage tube removal	3
<b>General basic skills</b>	
Lancing and draining of an abscess	2
Endoscopy	1
Placement of a (naso-)gastric tube	3
Stoma management (bag replacement)	3
Crossmatching	3
<b>Communication and interaction</b>	
Take a patient's case history	3
Obtain informed consent to surgery	2
Obtain informed consent in oncology	2
Informing and/or advising relatives	2
<b>Team and organization</b>	
Organizing a patient's discharge from hospital	3
Writing discharge letters	3
Organize rehabilitation or convalescence	3
Schedule follow-up	3

## **Explanation of the Competence Levels**

<b>Skills</b>	1	Theoretical knowledge
	2	has observed the skill
	3	has demonstrated the skill

(Modified from the PYLB published by the MRI, TU Munich, 2010)

# **Logbook**

## **Internal Medicine**

## Organizational Aspects

At the start of your training, you will be presented with a flyer containing comprehensive information, in addition to that contained in this logbook, on the current regulations in place, including among other things: data protection, uniform, absences, current offers of continuing education, in-house services, name tags, practical training certification, the issuance of keys, timetables, as well as access to the clinic's computing systems.

### **Objectives and Content of Your Training**

You will find a set of guidelines attached that contains a list of all the skills and knowledge to be attained by the end of your Practical Year trimester. Please use these guidelines actively and discuss how you can best reach the goals set and improve your skills accordingly with the doctors on ward.

A system of rotation is mandatory, as a result of which you will change departments within the clinics once during the trimester. The aim is to guarantee the widest possible insight into clinical internal medicine. Previous duties or work spent in a particular field (e.g. a clinical elective/clerkship, having taken a certain course, or laboratory work) do not justify your being assigned or not to a specific ward automatically. In order to become familiar with the characteristics of the Accident & Emergency Department or an admission ward, we aim to rotate all students onto such a ward for a period of 1 to 2 weeks. To ensure that the course of your practical year training runs in an orderly fashion and thus in the interest of all parties, we must stress that the allocation of places on the wards is binding. Any changes of ward undertaken independently and without consultation will lead to the time spent on ward not being accepted.

You will work independently on tasks that are transferable under the supervision of a physician responsible for you, in order that you develop a certain degree of autonomy. Fundamentally, only the physician may order diagnostic and therapeutic measures. However, the duty of performing such measures may be transferred to someone else. In order to incorporate you actively into your own training, you will be assigned two patients, to whom you will attend and for whom you will be personally responsible up to and including their discharge reports. That is, within the time frame of 8 weeks, respectively, at least two patients will have been treated and discharged with letters by you under the supervision of the ward duty doctor before the consultant responsible can confirm your activities on his/her ward.

You are furthermore obliged to present a clinical case within the framework of a Monday Seminar. This Monday Seminar is to be prepared independently by practical-year students in the form of a classic case and held portraying a full case history including diagnostics, differential diagnoses, and treatment. The presentation is to be certificated by the consultant responsible either on rotation to another ward or at the end of the trimester. Should there be fewer practical-year students available on the premises, those who are there will have to present a case more often. The lecturer

assigned according to the timetable takes on the role of supervisor; he/she should give the practical-year student's initiative free rein, albeit supplement accordingly where appropriate and/or necessary, as well as provide a statement of conclusion to the case presentation. Important clinical matters relating to the presentation material can be raised on the part of the lecturers where considered necessary.

### **Working Hours in General**

The routine daily hours of work are from 7.30 am until 4 pm (including a half-hour break for lunch). The compulsory working hours arise from the timetable you were given at the beginning of your training. However, please remember that these times may vary in accordance with clinical requirements (emergency care, shift work on the ICU or observation ward).

If you are pregnant or breastfeeding during your practical year, please refer to the leaflet provided by the Occupational Medicine Service. If the wards do not have a suitable secluded room available in order to breastfeed, you will be able to resort to using the facilities on offer in the Teaching Clinic.

### **Weekly Events on Offer from the Medical Clinics, Wards, and Organizational Units**

The respective functional units as well as general events relevant to continuing education on offer from the University Medical Clinics and Outpatients' Departments I and II are listed for you in Supplements I and II.

Attendance during specialist consultation appointments is open to all practical-year students of the Medical Clinics. The agreement of the ward doctor is all that is needed in order to participate in such an appointment.

Please refer to the attached timetable for training courses and events specific to practical-year students.

Seminars and events of a similar nature all take place in Lecture Theatre 1 (Centre for Internal Medicine, ZIM) or in Seminar Room 9 (A3.0.308, library corridor), unless otherwise stated. The respective lecturer may name another location where appropriate or necessary (e.g. for the X-ray seminar, or laboratory seminar). Larger events (scientific and clinical conferences) often take place in Lecture Theatre 1 (ZIM) and are announced separately.

## Assessment of the PY student by the team on ward (Rotation 1-4)

Student's name: \_\_\_\_\_

Hospital: \_\_\_\_\_

Ward: \_\_\_\_\_

	1 - excellent	2 - good	3 - satisfactory	4 - sufficient	5- unsatisfactory	6 - insufficient	Cannot be assessed
<b>On ward</b>							
Knowledge							
Practical skills							
Attitude							
Overall assessment							
<b>Within the unit</b>							
Knowledge							
Practical skills							
Attitude							
Overall assessment							
<b>Strengths:</b>	<b>Room for improvement:</b>						
<b>Comments:</b>							

Date

Signature of doctor on ward / mentor

\_\_\_\_\_

\_\_\_\_\_

(Modified from the PYLB published by the MRI, TU Munich, 2010)

## Patient treatment demonstration

Student's name: \_\_\_\_\_

Ward: \_\_\_\_\_

Rotation:      1.   2.   3.   4.

is \_\_\_\_\_

	Exceeds expectations		Fulfils expectations		Lies below expectations	
	1	2	3	4	5	6
Medical professionalism when dealing with patients						
Adherence to the rules of hygiene						
Taking a case history						
Physical examination						
Differential diagnostic considerations						
Interpretation of the findings						
Presentation of the treatment plan						
Overall assessment						
<b>Strengths:</b>	<b>Room for improvement:</b>					
<b>Comments:</b>						

Date  
\_\_\_\_\_

Signature of doctor on ward / mentor  
\_\_\_\_\_

### INTERNAL MEDICINE

#### Clinical Skills and Competencies

- 1 Theoretical knowledge
- 2 Carried out under supervision
- 3 Carried out routinely

<b>Examinations</b>	
Abdominal ultrasonography	2
Echocardiography	2
Record an ECG	3
Ergometry	2
Schellong test	3
Lung function test	2
Endoscopy (broncho-/gastro-/colonoscopy)	1
Perform crossmatching	2
<b>Physical examination techniques</b>	
Complete a clinical examination:	3
<ul style="list-style-type: none"> <li>-&gt; Head and neck findings including examination of the thyroid gland</li> <li>-&gt; Lymph node status</li> <li>-&gt; Heart auscultation</li> <li>-&gt; Pulmonary examination (auscultation, percussion)</li> <li>-&gt; Abdominal examination (especially the liver / spleen)</li> <li>-&gt; Digital rectal examination</li> <li>-&gt; Examination of the limbs</li> <li>-&gt; Pulse/blood vessel status</li> <li>-&gt; Neurological examination including reflexes</li> <li>-&gt; Diabetic examination of the foot</li> </ul>	3
<b>Interventions</b>	
Injection i.v. / i.m. / s.c.	3
Insert a peripheral line	3
Pleural tap / thoracentesis	2
Ascites tap / paracentesis	2
Arterial blood gas analysis	3
Place a (naso-) gastric tube	2
Take blood cultures	3
<b>Clinical competencies</b>	
Comprehensive patient case history and documentation	3
Talk with patient during rounds	3
Obtain informed consent from patient prior to intervention	2
Talk with relatives	2
Dictate a discharge letter	3
Present a patient's case during the case conference / present to consultants	3

Interpret an ECG/EKG <sup>1</sup> trace	3
Interpret the results of a lung-function test	2
Basic interpretation of a chest X-ray	2
Interpret laboratory results (inter alia signs/parameters of infection, acute coronary syndrome, cholestasis, hepatitis, diabetes mellitus, acute/chronic renal failure)	3
Interpret bloodwork	3
Request diagnostics correctly / consultation	3

## Theoretical knowledge

- 1 has heard of it, can place it in a clinical context, but does not have to be able to treat it
- 2 has to be able to diagnose it, needs to know the differential diagnosis and have a more profound knowledge of it
- D independent diagnosis
- T Treatment performed by the practical year student
- M independent patient management
- N Recognise emergencies, emergency measures
- P Preventative measures
- R Knowledge of the legal basis

(Modified from the PYLB published by the MRI, TU Munich, 2010)

Clinical competencies specific to disease symptoms and characteristics							
Acute/Chronic heart failure; have knowledge of the clinical signs	2	D		M	N	P	
Differential diagnostics of chest pain	2	D		M	N	P	
Differential diagnostics of acute / chronic dyspnoea	2	D		M	N	P	
Management of acute coronary syndrome	2	D			N	P	
Recognize the symptoms of liver cirrhosis	2	D		M	N	P	
Differential diagnostics of syncope	2	D		M	N	P	
Differential diagnostics of abdominal pain	2	D		M	N	P	
Differential diagnostics of lower leg oedema	2	D		M	N	P	
Clinical signs of tumour disease	2	D		M	N		
Clinical signs of deep vein thrombosis	2	D		M	N	P	
Autopsy	1						R

<sup>1</sup> EKG is used in American English often as an abbreviation of electrocardiogram

<b>Develop a treatment plan for:</b>							
Arterial hypertension	2	D		M	N	P	
Cardiac decompensation	2	D		M	N	P	
Chronic heart failure	2	D		M	N	P	
COPD	2	D		M	N	P	
Diabetes mellitus type 1 und type 2	2	D		M	N	P	
Pneumonia	2	D		M	N	P	
Anticoagulation to treat deep vein thrombosis or atrial fibrillation	2	D		M	N	P	
Coronary heart disease	2	D		M	N	P	
Analgesia to treat colicky pain (e.g. nephrolithiasis or biliary colic)	2	D		M	N	P	
Hyperthyroidism	2	D		M	N		
Acute renal failure	2	D		M	N		
Lung embolism	2	D		M	N	P	
Upper/Lower GI bleeding	2	D		M	N	P	