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TAME

Training Against Medical Error

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D1.1, Curriculum adaptation

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1. Introduction

The modernization of MD education through teaching against medical errors using VPs will mean that all PCU have available to them an enhanced learning environment that will support MD education. The educational packages will not only enhance the quality and relevance of the curriculum during the project, but they will continue to roll out through clinical years' of study and afterwards during training in residency programs of each competency; it will be incorporated into successive cohorts of students; and will support each PCU as they consider how to modernize other components/modules of their curricula.

This deliverable focuses on the general overview of current medical education curricula in each partner country medical university (PCMU) and how each PCMU analyzed its own curriculum and planned for pediatric cases. Finally, the deliverable explains what subject area each PCMU chose and how they plan to introduce new cases.

2. Overview of current medical education curricula

2.1. Introduction

Introduction of paediatric cases in the curriculum leads to the modification of the current curriculum in each PCMU. Thus, the first step to be taken is to describe and summarize the current medical education curricula in order to get the general idea of content of medical education curricula in each PCMU. Implementation of new cases will give the opportunity to develop professional competences of the students by using new educational technologies. New curriculum themes and educational approaches will enhance and enrich students' clinical training spaces (bases) of University. Modified modules of new MD program will continue to support each University as they consider how to modernize and adapt further modules/components of their curricula.

2.2. Kazakhstan

2.2.1. AMU

2.2.1.1. Overview of the curriculum

Kazakhstan medical education system changed in 2006 because of new world trends in education. An analysis of the situation at that time led to the need for developing, "The Conception for reforming the medical and pharmaceutical education in the Republic of Kazakhstan", on the basis of which, new state educational standards were developed for medical and pharmaceutical specialties. In accordance with the new educational standards began 3 levels training system: Bachelor's, Master's, and Doctor's. And with the introduction of a new educational program, the training is conducted for all levels of practical health care system: bachelors, doctors, residents, masters and PhD.

Basic medical education (BME) on the program "General Medicine" is 5 + 2 years, 5 years of bachelorship and 2 years of internship. At the end of the internship graduates receive a medical degree.

Educational program in specialty "General Medicine" (2006) consists of the cycles of general, basic and major education (Table 1). 38% of disciplines are basic in the undergraduate program and 37% of them are major. The internship has 100% of major disciplines.

№	**The name of the discipline**	**In hours**	**Year**
	Bachelor's programme (undergraduate)		
1	General disciplines	1548	Years 1-3
2	Basic disciplines	3312	Years 1-3
3	Major disciplines	3240	Years 4-5
4	Curricular practical training	468	Years 1-5
	Total	8 568	
	Internship		
5	Major disciplines	3240	Years 6-7
	Final state certification	144	Year 7
	In total	3384	
	In total of basic medical education (5+2) 11952 hours.		

Table 1

A graduate, who completed the training in the specialty "General Medicine" (5 + 2), has the right to continue his education in master's program or residency.

2.2.1.2 Overview of current Pediatric curriculum

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One of the first stages of the project is to analyze the pediatric curriculum. AMU conducted a thorough analysis of the curriculum. Taking into account the goals and objectives of the project, AMU studied the curricula of "General Medicine" specialty. In accordance with the educational program of the Republic of Kazakhstan the bachelor's program is from Year 1 to 5, Years 6 and 7 is an internship. The students learn the basic disciplines from Year 1 to Year 3 (physiology, anatomy, histology, pharmacology, etc.). In Year 4-5 they learn major disciplines, such clinical subjects as children's diseases, internal medicine, general medical practice, surgical diseases and obstetrics-gynecology). The internship (Year 6-7) begins medical training with real patients and clinics.

2.2.2. KSMU

2.2.2.1. Overview of the curriculum

Being the signatory of the Bologna Declaration, Kazakhstan introduced the three-cycle framework of qualifications in education, including Bachelor, Master and PhD degrees. The given degrees all exist in medical education, however are only required for learners willing to become University professors or medical researchers. If students want to become the practicing physicians, they need to complete 5 year Bachelor degree in General Medicine, then 2 years of internship in one of the following specialties: surgery, internal diseases, paediatrics, general medical practice, obstetrics and gynaecology. After the internship, the students may choose to complete 2-3 year Residency program in 35 different subspecialties. They can also start practicing Medicine directly if they choose general surgery, general medical practice, or therapeutics. The levels of medical education in Kazakhstan are presented in Figure 1.

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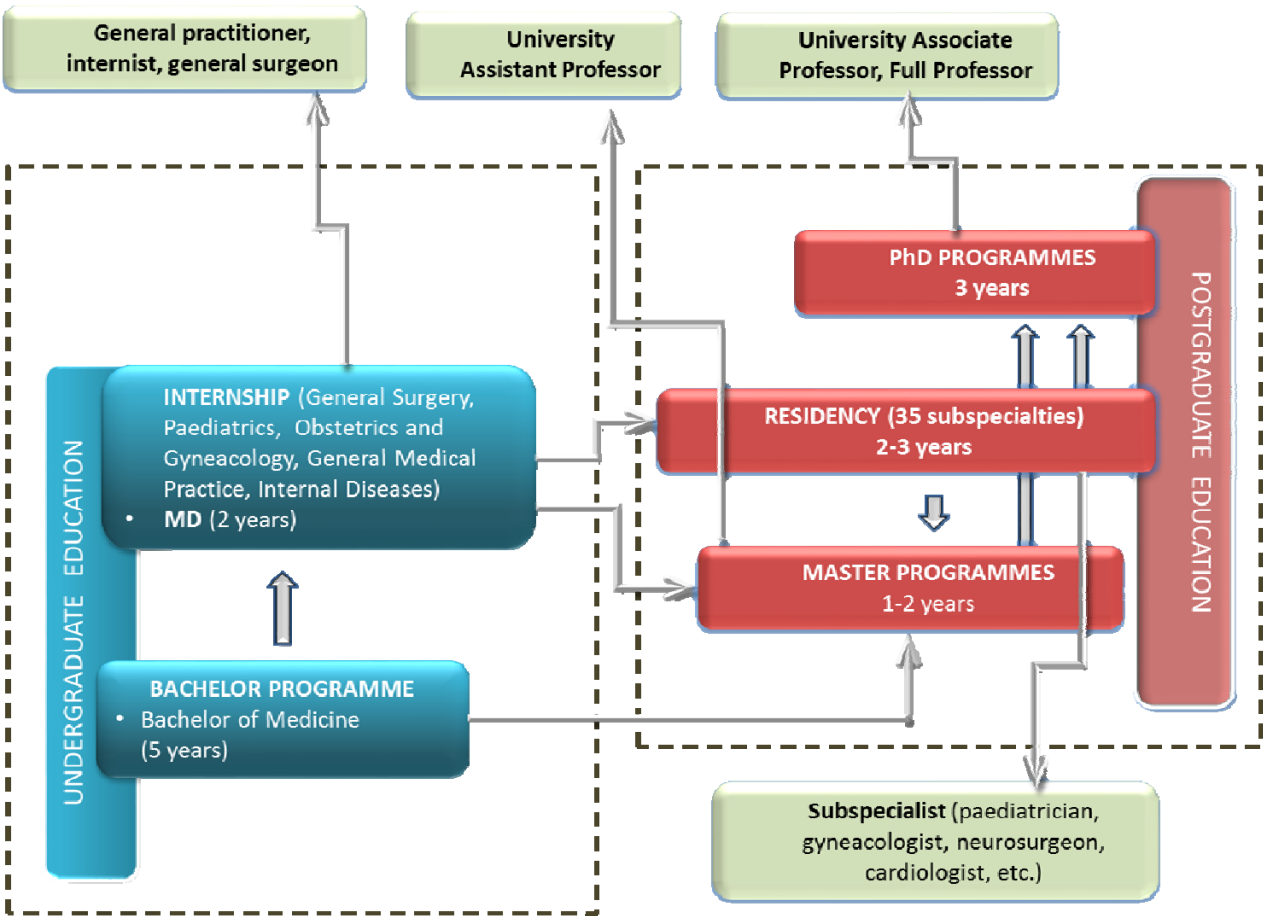

Figure 1. Structure of medical education programme in Kazakhstan

The medical educational programme of KSMU is based on the State Obligatory Standards of Education in "General Medicine" introduced in 2006 and obligatory for all medical schools in Kazakhstan. The Standards regulate not only the competencies of graduates, but also the list of disciplines, their content and duration for all years of study. Any higher educational program in Kazakhstan (medical, as well) includes three components – general disciplines, basic disciplines, major disciplines and field practice. For Medicine, general disciplines include such subjects as History of Kazakhstan, Foreign Language, Political Science, Informatics, etc. The basic disciplines are such as Physiology, Anatomy, Histology, Pathology, etc. The major disciplines are clinical disciplines, which will be the particular interest of this overview, since the project is aimed to introduce case-based learning in clinical disciplines. The field practice is organised at the end of the year to let students practice in real clinical setting (in hospitals and out-patient clinics).

The duration of disciplines is calculated in hours or credits. Even though credit transfer system is not officially introduced for Medicine in Kazakhstan, Karaganda State Medical University received the special permission from the Ministry of Health and Social Development to implement it. One credit in Kazakhstan is equal to 45 hours of training, including 15 hours of contact hours and 30 hours of student's individual learning (with or without the assistance from the teacher). Roughly, one credit is equal to one week of

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training. Table 2 presents the overview of credits in KSMU's undergraduate curriculum with the special attention paid to clinical disciplines.

Year	Discipline	Credits
Bachelor Programme		
1	General disciplines	32
	Basic disciplines	8
	Clinical disciplines	5
	Communication Skills 1	2
	Introduction into Clinical Work 1	1
	Field Practice "Junior Assistant Nurse"	2
	Total	**45**
2	General disciplines	8
	Basic disciplines	27
	Clinical disciplines	9
	Communication Skills 2	1
	Introduction into Clinical Work 2	2
	Clinical Elective	2
	Field Practice "Ward Assistant Nurse"	4
	Total	**44**
3	Basic disciplines	29
	Clinical disciplines	16
	Clinical Medicine	5
	Visual Diagnostics	3
	General Surgery	3
	Clinical Elective	1
	Field Practice "Procedural Assistant Nurse"	4
	Total	**45**
4	Clinical Disciplines	44
	Internal Diseases	9
	Surgery	9
	Obstetrics and Gyneacology	9
	Paediatrics	9
	Field Practice "Physician Assistant"	8
	Total	**44**
5	Clinical Disciplines	44
	General Medical Practice	9
	Neurology, Psychiatry, Narcology	9
	Ambulance Emergency Medical Care	9

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Year	Discipline	Credits
	Clinical Electives	9
	Field Practice "Emergency Care Assistant Physician"	8
	Total	**44**
Total for Bachelor Programme		**222**
<u>Different Choices for Internship (Years 6 and 7)</u>		
General Medical Practice	General medical practice	16
	Internal Disease	8
	Surgical diseases	4
	Obstetrics & Gynaecology	8
	Paediatrics	8
	Psychiatry, Narcology	4
	Neurology	4
	Phthisiatry	4
	Infection diseases	4
	Oncology	4
	Clinical Electives	8
Internal Diseases	Internal Disease	24
	Clinical Laboratory Diagnostics	8
	Psychiatry, Narcology	4
	Phthisiatry	4
	Infection diseases	4
	Clinical Pharmacology	8
	Neurology	4
	Reanimation and Intensive Therapy	4
	Visual Diagnostics	4
	Clinical Electives	8
Surgery	Surgical diseases	20
	Anaesthesiology and Reanimation	8
	Paediatric Surgery	8
	Clinical Anatomy and Operative Surgery	8
	Traumatology and Orthopaedics	8
	Ophthalmology, Otorhinolaryngology	8
	Oncology and Mammalogy	4
	Visual Diagnostics	4
	Clinical Electives	4
Obstetrics and Gynaecology	Obstetrics & Gynaecology	28
	Anaesthesiology and Reanimation	8
	Clinical Anatomy and Operative Surgery	8

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Year	Discipline	Credits
	Clinical Pharmacology	4
	Oncology and Mammalogy	4
	Visual Diagnostics	4
	Paediatric Gynaecology	4
	Venereology	4
	Clinical Electives	8
Paediatrics	Paediatrics	28
	Phthisiatry	4
	Paediatric Infection Diseases	8
	Clinical Pharmacology	8
	Pediatric Surgery	4
	Reanimation and Intensive Therapy	4
	Visual Diagnostics	4
	Paediatric Neurology	4
	Clinical Electives	8
Total for Internship		**72**
Total for all MD Programme (5+2)		**294**

Table 2. Overview of KSMU undergraduate curriculum

2.2.2.2 Overview of current Pediatric curriculum

KSMU analysed its medical curriculum looking for the placement of paediatric cases. The educational program is structured in such a way that for the first three years the students hardly study any clinical disciplines. Years 4 and 5 are mostly clinical with paediatrics being studied at year 4. The paediatrics is also studied during the internship, however only during the internship in General Medical Practice and Paediatrics. Surgical interns study paediatric surgery. Gynaecological interns study paediatric gynaecology. Therefore, the best place for the paediatric cases is in Year 4, since this course is available for all the students, and could probably guide them in choosing paediatric specialty in the future.

2.3. Ukraine

2.3.1. ZSMU

2.3.1.1. Overview of the curriculum

Education in ZSMU is conducted using the system of modules and based on the European Credit Transfer System (ECTS). The curriculum for undergraduate education lasts for 6 years and consists of 360 credits. One academic year involves 40 working weeks and consists of 60 credits (1 week equals to 1.5 credits), 1 credit involves 30 academic hours. One academic year consists of 1800 academic hours.

Total academic load includes time for lectures, practicals, seminars and laboratory exercises, practical trainings, independent and individual work, as well as tests. Week teaching load equals to approximately 30 academic hours (1 academic hour is equal to 45 astronomic minutes), independent study is about 40 percent from the total load. 2nd-, 3rd-, 4th- and 5th year students undergo practical training, total amount of credits for practical training is 21 credit.

Every academic year consists of 2 semesters. Additional time is also provided for those who have not managed to complete the modules in time (retesting, rating improvement etc.) – 1-2weeks after the semester for 1-5th year-students. During this additional term all students must prepare to and pass National exams: KROK-1 after 3rd year and KROK-2 after 6th year.

Curriculum includes two stages of undergraduate medical studies: preclinical and clinical. Its structure is focused on compliance with the logical sequence of disciplines that form the relevant cycles of humanitarian, social and economic, natural and scientific, and professional training.

Professional clinical practical training of students of 4-6 years is carried out in accordance with the requirements of educational qualification characteristics in the study of clinical and hygienic disciplines and during practice. Manufacturing medical practice for the 4th year (4 weeks) and 5th year (4 weeks) is held during the academic year or during the summer period by the decision of the Academic Council of the university.

Academic Council of the university can make changes to the distribution of hours across disciplines within the 15% of the total number of hours, but any single discipline can't be reduced by more than 10% compared to the one that is provided for the appropriate discipline by curriculum. It should be ensured, mastering all disciplines in the scope of the program of courses approved by the Ministry of Health of Ukraine.

2.3.1.2 Overview of current Pediatric curriculum

Discipline "Surgery, Pediatric Surgery" for the 5th year (7.5 credits, 225 hours, including 140 classroom) takes 2 credits (60 hours of total academic load) to study pediatric surgery.

Discipline "Pediatrics, Children infectious diseases" for the 5th year (6 credits 180 hours, including 130 classroom) takes 1.5 credits (45 hours of total academic load) to study childhood infectious diseases.

Subject Disciplines	Batch	Credits	Total hours	Lectures	Practical trainings	Self-directed learning	Control
Internal medicine	I, II	4	120	16	70	34	Module

							control
Surgery	I, II	3	90	10	40	40	Module control
Social medicine, organization and economics of healthcare	I, II	1.5	45	10	20	15	Module control
Infectious diseases	I, II	3.5	105	20	50	35	Module control
Radiation medicine	I, II	1.5	45	4	20	21	Pass-fail test
Obstetrics and gynecology	I, II	2.5	75	10	30	35	Module control
Pediatry	I, II	2	60	10	30	20	Module control
Children infectious diseases	I	2	50	10	30	10	Module control
Occupational diseases	I	2	60	6	25	29	Module control
Neurosurgery	I	1.5	45	10	20	15	Pass-fail test
Sectional course	I	0.75	23	-	15	8	Pass-fail test
Emergency and acute medical care	I	1.5	45	4	25	16	Pass-fail test
Clinical pharmacology	I	1.5	45	-	30	15	Pass-fail test
Clinical immunology and allergology	I	2.5	75	10	40	25	Module control
Anesthesiology and intensive care	II	3	90	10	60	20	Module control
Children surgery	II	2	60	10	40	10	Module

							control
Oncology	II	3	90	20	50	20	Module control
Traumatology	II	3	90	10	50	30	Module control
Total:							

Table 3: Medical (Paediatric) disciplines in ZSMU's 5th year curriculum, IX semester

5th academic year IX semester Academic weeks – 19 weeks. Vacations – 5 weeks

Discipline	Batch	Credit	Total hours	Lectures	Practical training	Independent work	Control
Internal medicine	I, II	4,5	135	14	80	41	Module control
Surgery	I, II	2,5	75	-	40	35	Module control
Epidemiology	I, II	1,5	45	10	20	15	Pass-fail test
Infectious diseases	I, II	2,5	75	-	30	45	Module control
Obstetrics and gynecology	I, II	2	60	10	40	20	Module control
Pediatrics	I, II	2,5	70	10	40	20	Module control
Children infectious diseases	II	1,5	50	10	30	10	Module control
Occupational diseases	II	2	60	6	25	29	Module control
Neurosurgery	II	1,5	45	10	20	15	Pass-fail test
Sectional course	II	0,75	23	-	15	8	Pass-fail test

Emergency and acute medical care	II	1,5	45	4	25	16	Pass-fail test
Clinical pharmacology	II	1,5	45	-	30	15	Pass-fail test
Clinical immunology and allergology	II	2,5	75	10	40	25	Module control
Anaesthesiology	I	3	90	10	60	20	Module control
Children surgery	I	2	60	10	40	10	Module control
Oncology	I	3	90	20	50	20	Module control
Traumatology	I	3	90	10	50	30	Module control
Elective course		1,5	60	20	-	40	Pass-fail test
Practical training		6	180		120	60	
Total							

Table 4: Medical (paediatric) disciplines in ZSMU's 5th year curriculum. X semester

2.3.2. BSMU

2.3.2.1. Overview of the curriculum

Ukrainian education system is aimed at European Educational Trends. In particular, since 2005, the Bologna system is actively implemented in the educational system of Ukraine at all levels of training of future medical staff. Basic medical education comprises 6 years of study at the University. Postgraduate education (internship) in certain specialty takes from 1 to 3 years. In general, the number of total hours of training for the first and second years students of specialty "General Medicine" are the same and amounts to 1960 total hours per academic year, for the third-fifth years students consists of 1800 total hours and sixth year of study includes 1660 total hours. In BSMU postgraduate specialization is in 24 specialties. In particular, the amount of training for the specialty "Pediatrics" covers 2 years and up to 1716 total hours.

2.3.2.2 Overview of current Pediatric curriculum

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The study of pediatrics at the BSMU begins on third course with propedeutics of pediatrics (195 total hours). On the fourth course, students study Module 1 "Pediatric endocrinology, cardiorheumatology, somatic early childhood diseases", which consists of 135 total hours, 5th course include Module 2 "Neonatology", Module 3 "Haematology, Pulmonology and Allergology" and Module 4 "Childhood infectious diseases" (total of 180 hours). Module 5 "Pediatrics" and Module 6 "Childhood Infectious Diseases" for the 6th years students consists of 180 hours for the specialty "Medicine", and 645 hours for the students of specialty "Pediatrics".

№	**The names of disciplines in the module**	**Total number of hours**	**Contact classes**		**self-study work**
			Lectures	**Practical classes**	
1	Basic oh the Children's diseases	135	10	80	45
2	Neonatology	60	8	30	22
3	Haematology, pulmonology and allergology	60	6	30	24
4	Children's infectious diseases	60	6	30	24
5	Differential diagnosis of the most common childhood diseases	345	-	242	103
6	Neonatology and ambulatory practice	165	-	118	47
7	Children's infectious diseases	135	-	92	43
	Total	960	30	622	308

Table 5. Module "Children's diseases" in BSMU

2.4. Vietnam

2.4.1. HMU

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2.4.1.1 Overview of the curriculum

The basic curriculum of undergraduate "General Medicine" training program at Hanoi Medical University (HMU) lasts for 6 years and includes 299 credits. In total, there are 240 weeks maximum (40 weeks/ academic year) for the whole study period, comprising time for lectures, practicums, laboratory exercises, clinical training at hospitals, self-study and tests. Additional time is provided for students who do not complete any modules in their study duration.

This program consists of general, basic and major disciplines. From the first year to the third year, students have to learn the general, basic and preclinical training. They focus on Anatomy, Physiological, Biophysics, Biochemistry, Pathology, Parasitology, etc. In addition, in the third year, they also learn some major clinical disciplines such as Basic Internal Diseases, General Surgery, Ana-pathology and Pathophysiology. In the fourth and sixth years, students will be provided profound knowledge on Internal, Surgery, Obstetrics and Paediatrics. In fifth year, they learn other major disciplines such as Ophthalmology, Dermatology, Oncology, etc. In addition, the students will participate in the community practicums in the third and fifth years.

After finishing all modules, students have to prepare the graduation examinations, including clinical examination and Political Theory. They can also do the thesis instead of participating clinical examination if they meet specific requirements (e.g. Grade point average have to be 7.0/10 or above).

General Medicine Curriculum
First year: 39.5 lecture credits/10.5 practical credits (total 50 credits)

No	Discipline	The number of credits (lecture/practical)		
		1st Term	2nd Term	Total
1.	Military Education 1	3/0		3/0
2.	Military Education 3	0/3		0/3
3.	Physical Education 1	0/1		0/1
4.	Principles of Marxist and Leninist 1	3/0		3/0
5.	English 1	4/0		4/0
6.	Chemistry	4/1		4/1
7.	Biophysical	3/1		3/1
8.	Human Anatomy 1	2/1		2/1
9.	Principles of Marxist and Leninist 2		5/0	5/0
10.	Physical Education 2		0/1	0/1
11.	English 2		4/0	4/0
12.	Human Anatomy 2		2/1	2/1
13.	Demography		2/0	2/0
14.	General Informatics		1/1	1/1
15.	Biology		1.5/0.5	1.5/0.5
16.	Military Education 2		3/0	3/0
17.	Military Education 4		2/0	2/0
Total		**19/7**	**20.5/3.5**	**39.5/10.5**

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Second year: 35 lecture credits/10.5 practical credits (total 45.5 credits)

No	Discipline	The number of credits (lecture/practical)		
		1st Term	2nd Term	Total
1.	English 3	4/0		4/0
2.	Biochemistry	4/1		4/1
3.	Immunology	1/0.5		1/0.5
4.	Histology	3/1		3/1
5.	Physiology I	2/1		2/1
6.	Basic Nurse	2/1		2/1
7.	Nutrition and Food Safety	2/1		2/1
8.	Ho Chi Minh Ideology		3/0	3/0
9.	Psychology-Medical Ethic		3/0	3/0
10.	Microbiology		3/1	3/1
11.	Physiology II		2/1	2/1
12.	Parasitology		3/1	3/1
13.	Communication Skill		1/1	1/1
14.	Practical Surgery		2/1	2/1
Total		**18/5.5**	**17/5**	**35/10.5**

Year 3 31 lecture credits/24 practical credits (total 55 credits)

No	Discipline	The number of credits (lecture/practical)		
		1st Term	2nd Term	Total
1.	Environment Health	2/0.5		2/0.5
2.	Anapathology	2/1		2/1
3.	Pathophysiology	3/0.5		3/0.5
4.	Health Education	1.5/0.5		1.5/0.5
5.	Sports Medicine	3/0		3/0
6.	Revolution Lines of Vietnam Communist Party	4/0		4/0
7.	Preclinical	0/4		0/4
8.	Health Economic	1/0		1/0
9.	Pharmacology		4/1	4/1
10.	Basic Internal Disease		4/7	4/7
11.	General Surgery		4/7	4/7
12.	Genetics		2.5/0.5	2.5/0.5
13.	Community Internship 1		0/2	0/2
Total		**16.5/6.5**	**14.5/17.5**	**31/24**

Year 4: 25 lecture credits/27.5 practical credits (total 52.5 credits)

No	Discipline	The number of credits (lecture/practical)		
		1st Term	2nd Term	Total
1.	Visual Diagnostics	3/1		3/1
2.	Internal Disease	4/6		4/6
3.	Surgical Disease	4/6		4/6

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4.	Biostatistics	2/1		2/1
5.	Applied Informatics		1/1	1/1
6.	Pediatric		4/6	4/6
7.	Obstetrics		4/6	4/6
8.	Nuclear Medicine		1/0	1/0
9.	Occupational Health		1/0.5	1/0.5
10.	Research Methodology		1/0	1/0
11.	Political theory (for Graduation Examination)		4/0	4/0
Total		**13/14**	**12/13.5**	**25/27.5**

Year 5: 33 lecture credits/23 practical credits (total 56 credits)

No	Discipline	The number of credits (lecture/practical)		
		1st Term	2nd Term	Total
1.	Anaesthesiology and Reanimation	2/1		2/1
2.	Health Management	2/1		2/1
3.	Epidemiology	2/1		2/1
4.	Ondotology	2/1		2/1
5.	Otorhinolaryngology	2/1		2/1
6.	Ophthalmology	2/1		2/1
7.	Dermatology	2/1		2/1
8.	Allergology	2/1		2/1
9.	Oncology	2/1		2/1
10.	National Medical Program		2/0	2/0
11.	Infection diseases		3/2	3/2
12.	Traditional Medicine		2/2	2/2
13.	Tuberculosis		2/2	2/2
14.	Rehabilitation		2/2	2/2
15.	Neurology		2/2	2/2
16.	Psychiatrics		2/2	2/2
17.	Community Internship 2		0/2	0/2
Total		**18/9**	**15/14**	**33/23**

Year 6: 19 lecture credits/18 practical credits (total 37 credits)

No	Discipline	Credits (lecture/practical)	Total
1.	Obstetrics	2/3	2/3
2.	Pediatric	2/3	2/3
3.	Internal Disease	4/6	4/6
4.	Surgical Disease	4/6	4/6
5.	Family Medicine	1/1	1/1
6.	Forensic Medicine	1/1	1/1
7.	Clinical Medicine	3/0	3/0
8.	Clinical Pharmacology	2/0	2/0
Total		19/18	19/18

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2.4.1.2 Overview of current Pediatric curriculum

The students at HMU should have knowledge on basic internal medicine and general surgery before starting to learn the paediatric discipline in the fourth year. This discipline consists of 2 modules: Paediatric I (10 credits) and Paediatric II (5 credits) in the fourth and sixth years, respectively. In the fourth year, students learn the basic knowledge on children in terms of the anatomical and physiological characteristics, methods to evaluate the growth of children, the diagnosis and management of some common children's medical emergencies. Meanwhile, in the sixth year, the students study the diagnosis and management of some common diseases in children. They also learn the national program on integrative care of childhood illnesses.

2.4.2. HUMP

2.4.2.1 Overview of the curriculum

The GP training curriculum at Hue UMP follows a six years model. It has been updated since 2012 based on the frame curriculum issued by MoH. The first year focuses on providing foundations of basic sciences to students such as mathematics and statistics, biophysics, biomedicine etc. The next two years focuses on providing basic medical sciences such as anatomy, microbiology, physiology, physiopathology, biochemistry, embryology, health psychology etc. In the year 3 and year 4, students are exposed to clinical settings which is focused on symptomatology and diagnostics. The last two years focuses on pathology and treatment.

No	Name of the disciplines	Credits	Year
1	Basic sciences	73	1-2
2	Basic medical sciences	70	2-3
3	Clinical Sciences	140	3-6
4	Selective credits	22	4-6
5	Graduation credits	15	6
	Total	**320**	**6**

1. Basic sciences include: Philosophy, medical English, biology, biophysics, medical genetics, chemistry, applied informatics, biostatistics, health psychology and ethics, health education and demography.
2. The basic medical sciences include: Anatomy, embryology, physiology, biochemistry, microbiology, parasitology, ana pathology, physiopathology and immunology, pharmacology, nutrition, food safety, and environmental health, basic nursing, epidemiology, and radiology.

3. Medical sciences include: Surgery, internal medicines, obstetrics and gynecology, pediatrics, odonto-stomatology, dermatology, hematology, infectious diseases, traditional medicine, psychiatry, health management and health policies, disasters, Anesthesiology and recuperation, research methodology.

2.4.2.2 Overview of Paediatric curriculum

The paediatric curriculum of Hue UMP for GP students has been integrated from basic medical sciences to advanced paediatrics. The paediatric subjects starts at the year fourth with the symptomatology, year fifth (pathology), and year sixth (clinical rotation).

No	Topics	Focuses	Credits	Classroom/Clinical rotation	Year
1	Basic paediatrics (P1)	Symptomatology	5	Classroom	4
2	Basic paediatrics (P2)	Diagnosis	4	Clinical	4
3	Advanced paediatrics (P3)	Treatment	4	Classroom	5
5	Advanced Paediatrics (P4)	Advanced in treatment	5	Clinical	6
	Total		18		4-5-6

Pediatrics 1&2 (P1 & P2)

No	Topics	P1 (lecture hours)	P2 (clinical practice hours)
1	Dengue fever	2	5
2	Tuberculosis in children	2	5
3	AIDS in children	2	5
4	Anatomical and physiological features of child respiratory system	2	5
5	Breath difficulty	2	5

6	Pneumonia by bateria	2	5
7	Asthma in children	4	5
8	Vitamin A deficiency	2	5
9	Ricket diseases	2	5
10	Malnutrition in children	2	5
11	Child nutrition	2	5
12	Viral hepatitis	2	5
13	Rheumatic heart disease	2	5
14	Iron deficiency anaemia	2	5
15	Features of child hematoloric system	2	5
16	Features of digestive system in children	2	5
17	Diarrhoea in children	2	5
18	Chronic diarrhoea	2	5
19	Baciliary dysentery	2	5
20	Abdominal pain in children	2	5
21	Complication of parasitic worms	2	5
22	Vomiting syndrome	2	5
23	Constipation in children	2	5
24	Features of endocrine system in children	2	5
25	Goitre in children	2	5
26	Features of cardiovascular systems in children	2	5

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27	Cardiology defect in children	4	5
28	Features of full term and preterm births	2	5
29	Acute respiratory inflammations	2	5
30	Viral pneumonia	2	5
31	Features of child neurological system	2	5
32	Integrated management of childhood illness	2	5
33	Features of child urologic system	2	5
34	Streptococcal nephritis	2	5
35	Hemauria	2	5
36	Vaccination	2	5
37	Hand mouth and foot disease	2	5
38	Malaria in children	2	5
39	Features of skin skeletal and muscular system in children	2	5
40	Child development	2	5
41	Child physical development	2	5
42	Child mental and motor development	2	5

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Pediatrics 3 &4 (P3&4)

No	Topics	P3 (lecture hours)	P4 (clinical practice hours)
1	Kidney failure	3	5
2	Untypical pneumonia	3	5
3	Acute bronchitis	3	5
4	Anorexia in children	3	5
5	Asthma drugs	3	5
6	Bacterial meningitis	3	5
7	Fever in children	3	5
8	Encephalitic	3	5
9	Epilepsy in children	3	5
10	New-born infection	3	5
11	Chăm sóc trẻ sơ sinh	3	5
12	Myocarditis	3	5
13	Thalassemia	3	5
14	Heart failure	3	5
15	Congenital tear defect	3	5

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3. Curriculum plan for pediatric cases

3.1. Introduction

PCMUs analysed their own MD curricula structures and identified prospective modules and clinical sites for embedding VP cases, supporting teaching and learning against medical error. Subject areas for new cases were identified and agreed on for curriculums of each PCMU.

3.2. Kazakhstan

3.2.1. AMU

Taking into account the profile of the pediatric cases and their focus, AMU plans to introduce pediatric cases into the module of "children's diseases", since the purpose of this module is to develop knowledge and skills in the diagnosis and treatment of common childhood pathologies. The main objective of the module is to teach students the basic principles of the diagnosis and treatment of the most common diseases in pediatric practice and improve interpersonal skills and counseling of children and their caregivers. Module "Children's diseases" in Year 4 consists of two disciplines: children's diseases and children's infectious diseases. The total number of hours of the module is 405 hours, including 30 hours of lectures, 135 hours of SSW (self-study work) and 240 contact hours. The Table 6 describes how the hours are distributed in the disciplines.

Thus, the introduction of pediatric cases in this module will allow students to broaden their knowledge in pediatrics and to use acquired skills in future practice and warn future errors.

Unfortunately, the educational program in Kazakhstan does not have the disciplines which teach the issues of how to avoid and prevent errors. The introduction of the paediatric cases with errors in the curriculum will allow solving this problem. Our students will learn how not only to diagnose and treat, but also how to analyse possible medical errors in a safe environment.

№	The names of disciplines in the module	Total number of hours	Contact classes		self-study work
			Lectures	Practical classes	
1	Children's diseases	297	18	180	99
2	Children's infectious diseases	108	12	60	36

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	Total	405	30	240	135

Table 6. Module "Children's diseases"

The discipline "children's diseases "consists of 6 units (Table 7).

№	Name of the unit (block)	The number of contact hours
1	Unit 1. Physiology and pathology of newborn and infants	30
2	Unit 2. Respiratory Diseases	30
3	Unit3. Diseases of the cardiovascular system	30
4	Unit4. Diseases of the digestive system	30
5	Unit5. Diseases of the urinary system	30
6	Unit 6. Diseases of the blood system	30
	Total	180 hours

Table 7. The discipline "children's diseases"

The weekly student's workload is 30 academic hours. Table 2 shows that the students learn each unit for a week. Taking into account the fact that AMU is planning to introduce 5 pediatric cases in the discipline "children's diseases" and 1 case in the discipline "children's infectious diseases", we are also planning to distribute 1 case per 1 unit on the first day and the second of the unit with the duration of 3 hours. Consequently, 6 hours will be allocated for 1 case. Thus, all the cases will be distributed throughout the unit. During the comparison of the names of pediatric cases and thematic plan for the discipline, AMU team found matches (similarities), which are very important. In this way the students can learn topics more detailed and will work with cases with great interest.

3.2.2. KSMU

Having analysed its medical curriculum KSMU decided that the best place for the paediatric cases is in Year 4, since this course is available for all the students, and could probably guide them in choosing paediatric specialty in the future.

The learning objectives for the cases correspond to the learning objectives for "Paediatrics" discipline in Year 4. The overall objective for the discipline is to develop the basic skills in students for diagnosis and treatment of the most common children diseases, to facilitate communication skills, skills of consultancy and medical care. The discipline has two parts: "General diseases" (6 units) and "Infectious children diseases" (2 units), which also teaches the general principles of WHO programme "Integrated Management

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of Childhood Illnesses" (Table 8). At the same time, the curriculum does not include any topics on prevention of medical errors, so the introduction of paediatric cases in early phases of education will help to address this problem as well.

Disciplines (units)	Credits	Contact hours		Self-study	Total	Number of VP cases
		Lectures	Practice sessions			
Children diseases	**7**	**18**	**87**	**210**	**315**	**5**
Unit 1. Physiology and pathology of new-borns and infants. Organization of paediatric services		6	9	32	47	**2**
Unit 2. Respiratory diseases		2	18	46	66	**1**
Unit 3. Diseases of the cardiovascular system		4	16	40	60	**1**
Unit 4. Digestive system diseases		0	19	38	57	**1**
Unit 5. Urinary system diseases		2	13	32	47	-
Unit 6. Endocrine and blood diseases		4	12	22	38	-
Infectious children diseases	**2**	**6**	**24**	**60**	**90**	**1**
Unit 7. Infectious diseases		3	12	30	**45**	-
Unit 8. Viral hepatitis and acute intestinal infections in children		3	12	30	**45**	**1**
Total	**9**	**24**	**111**	**270**	**405**	**6**

Table 8. Paediatric disciplines in KSMU's Year 4 Curriculum

Each unit includes a number of lectures, practice sessions and self-study time. Half of the self-study sessions are scheduled for students to be able to see the thematic patients in the hospital or outpatient clinic. The practice sessions are contact sessions with the teacher, where the teacher can explain some theoretical material regarding the patient's case, demonstrate students certain clinical skills or present the patient in the hospital. The other half is not included into the schedule and is planned by the students themselves. They usually dedicate this time to studying the theoretical material. In order not to change the already established practice much, KSMU decided to schedule additional sessions for PBL tutorials on available 6 cases and reduce the number of non-scheduled sessions for individual self-study. The day for the first tutorial on the case was rearranged in such a way, so the students can have free self-study time after the tutorial with no other planned sessions during that day. The other sessions throughout the week were rearranged to match the objectives for Virtual Patient (VP) case. In total, we included 2 cases into the first unit, and 1 case into the units 2,3,4,8. The units 5, 6 and 7 do not have any scheduled VP cases.

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Figure 2 presents the example of the learning week for the VP case. The complete schedule is included into Appendix section.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8.00-8.50	Lecture	Practice session	VP case tutorial 1	VP case tutorial 2	Individual clinical practice
8.55-9.45					
9.50-10.40	Individual clinical practice	Individual clinical practice			
11.00-11.50			Self-study for VP case	Practice session	
11.55-12.45	Practice session				Practice session
13.15-14.05					
14.10-15.00					

Figure 2. Exemplar learning week for VP case

3.3. Ukraine

3.3.1. ZSMU

ZSMU team made a decision to make paediatric cases as a course, which was approved during the kick-off meeting. In frames of this course all 5th year students will be randomized in three cohorts:

- The first, or intervention, cohort (4 groups of 8 students, 32 total) will study on medical error cases;
- The second cohort (4 groups of 8 students, 32 total) will study on linear cases of the same subject matter.
- The third, or control, cohort (4 groups of 8 students, 32 total) will study according to the traditional (national) education system.

This will allow us to compare three teaching methodologies and obtain reliable results suitable for analysis.

To accomplish the task ZSMU will develop and implement the course based on 6 medical error cases provided by St George's University of London. The developed course will also include tutorials and lectures. Students will study on 6 cases for 6 successive weeks of the autumn semester of 2016/2017 academic year in the following way (tables 9).

TIMETABLE TAME 2016 (autumn semester)												
Week 1												
	Monday		Tuesday **15.11.16**			Wednesday		Thursday **17.11.16**			Friday	
Group	8.30-	12.00-15.45	8.00-11.45			8.30-10.10	12.00-15.45	8.00-11.45			8.30-10.10	12.00-15.45

	10.10											
1	Lecture Surgery (regional hospital)	Practical classes*	Practical classes*	**12.30-15.30** Case 1 (Neonato-logy) branched	**15.40-16.40** Lecture "Problems of prematurity. Transition at birth."	Lecture Children Surgery (aud. 5)	Practical classes*	Practical classes*	**12.30-15.30** Case 1 (Neonatology) branched	**15.40-16.40** Lecture "Respiratory distress syndrome"	Lecture infection diseases (aud.3)	Practical classes*
2		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
3		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
4		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
5		Practical classes*	Practical classes*		**15.30-17.30** Case 1 (Neonatology) linear		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Problems of prematurity. Transition at birth."	**15.30-17.30** Case 1 (Neonato-logy) linear		Practical classes*
6		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
7		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
8		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
Week 2												
	Monday		Tuesday **22.11.16**			Wednesday		Thursday **24.11.16**			Friday	
Group	8.30-10.10	12.00-15.45	8.00-11.45			8.30-10.10	12.00-15.45	8.00-11.45			8.30-10.10	12.00-15.45
1	Lecture Oncology	Practical classes*	Practical classes*	**12.30-15.30** Case 2 (Growth) branched	**15.40-16.40** Lecture "Normal growth in childhood. Hormonal and Nutritional causes of disordered growth"	Lecture Internal medicine (aud. 3)	Practical classes*	Practical classes*	**12.30-15.30** Case 2 (Growth) branched	**15.40-16.40** Lecture "Cystic fibrosis. Coeliac disease."	Lecture obstetrics (aud.3)	Practical classes*
2		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
3		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*

4		Practical classes*	Practical classes*				Practical classes*	Practical classes*					Practical classes*
5		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Respiratory distress syndrome"	**15.30-17.30** Case 2 (Growth) linear		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Normal growth in childhood. Hormonal and Nutritional causes of disordered growth"	**15.30-17.30** Case 2 (Growth) linear			Practical classes*
6		Practical classes*	Practical classes*				Practical classes*	Practical classes*					Practical classes*
7		Practical classes*	Practical classes*				Practical classes*	Practical classes*					Practical classes*
8		Practical classes*	Practical classes*				Practical classes*	Practical classes*					Practical classes*

Week 3

	Monday		Tuesday **29.11.16**			Wednesday		Thursday **01.12.16**				Friday	
Group		12.00-15.45	8.00-11.45				12.00-15.45	8.00-11.45				8.30-10.10	12.00-15.45
1		Practical classes*	Practical classes*	**12.30-15.30** Case 3 (Difficulty in Breathing) branched	**15.40-16.40** Lecture "Stridor and wheeze causes. Childhood asthma"		Practical classes*	Practical classes*	**12.30-15.30** Case 3 (Difficulty in Breathing) branched	**15.40-16.40** Lecture "Pneumonia. Bronchiolitis"	Lecture infection diseases (aud.3)		Practical classes*
2		Practical classes*	Practical classes*				Practical classes*	Practical classes*					Practical classes*
3		Practical classes*	Practical classes*				Practical classes*	Practical classes*					Practical classes*
4		Practical classes*	Practical classes*				Practical classes*	Practical classes*					Practical classes*
5		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Cystic fibrosis. Coeliac disease. "	**15.30-17.30** Case 3 (Difficulty in Breathing) linear		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Stridor and wheeze causes. Childhood asthma"	**15.30-17.30** Case 3 (Difficulty in Breathing) linear			Practical classes*
6		Practical classes*	Practical classes*				Practical classes*	Practical classes*					Practical classes*
7		Practical	Practical				Practical	Practical					Practical

		classes*	classes*				classes*	classes*				classes*
8		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
Week 4												
	Monday		Tuesday **06.12.16**			Wednesday		Thursday **08.12.16**			Friday	
Group		12.00-15.45	8.00-11.45			8.30-11.30	12.00-15.45	8.00-11.45				12.00-15.45
1		Practical classes*	Practical classes*	**12.30-15.30** Case 4 (Blue baby) branched	**15.40-16.40** Lecture "VSD, Fallot's tetralogy and other heart defects"	Lecture Internal medicine (aud. 3)	Practical classes*	Practical classes*	**12.30-15.30** Case 4 (Blue baby) branched	**15.40-16.40** Lecture Lecture "Presurgical management and surgical treatment of children with CHD"		Practical classes*
2		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
3		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
4		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
5		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Pneumonia. Bronchiolitis"	**15.30-17.30** Case 4 (Blue baby) linear		Practical classes*	Practical classes*	**14.00-15.00** Lecture "VSD, Fallot's tetralogy and other heart defects"	**15.30-17.30** Case 4 (Blue baby) linear		Practical classes*
6		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
7		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
8		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
Week 5												
	Monday		Tuesday **13.12.16**			Wednesday		Thursday **15.12.16**			Friday	
Group		12.00-15.45	8.00-11.45				12.00-15.45	8.00-11.45			8.30-10.10	12.00-15.45
1		Practical class	Practical class	**12.30-15.30** Case 5	**15.40-16.40** Lecture		Practical class	Practical class	**12.30-15.30** Case 5	**15.40-16.40** Lecture	Infectious disease	Practical class

		es*	es*	(Vomiting) branched	"Causes of vomiting, diarrhea, abdominal pain and distension"		es*	es*	(Vomiting) branched	"Acute intestinal infectious diseases"		es*
2		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
3		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
4		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
5		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Presurgical management and surgical treatment of children with CHD"	**15.30-17.30** Case 5 (Vomiting) linear		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Causes of vomiting, diarrhea, abdominal pain and distension"	**15.30-17.30** Case 5 (Vomiting) linear		Practical classes*
6		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
7		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
8		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*

Week 6

	Monday		Tuesday **20.12.16**			Wednesday		Thursday **22.12.16**			Friday **23.12.16**	
Group		12.00-15.45	8.00-11.45			8.30-11.30	12.00-15.45	8.00-11.45				12.00-15.45
1		Practical classes*	Practical classes*	**12.30-15.30** Case 6 (Seizures) branched	**15.40-16.40** Lecture "Types of seizure in childhood. Emergency management of seizures"	Lecture Internal medicine (aud. 3)	Practical classes*	Practical classes*	**12.30-15.30** Case 6 (Seizures) branched	**15.40-16.40** Lecture "Meningitis and encephalitis"		Practical classes*
2		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
3		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
4		Practical class	Practical class				Practical class	Practical class				Practical class

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		es*	es*				es*	es*					es*
5		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Acute intestinal infectious diseases"	**15.30-17.30** Case 6 (Seizures) linear		Practical classes*	Practical classes*	**14.00-15.00** Lecture "Types of seizure in childhood. Emergency management of seizures"	**15.30-17.30** Case 6 (Seizures) linear	**09.00-10.00** Lecture "Meningitis and encephalitis"	Practical classes*
6		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
7		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*
8		Practical classes*	Practical classes*				Practical classes*	Practical classes*				Practical classes*

Notes: *- topics' names for practical session depends on the cycle.

Table 9: autumn semester of 2016/2017 academic year

Therefore, each case is provided with 2 tutorials (135 minutes/3 class hours each), 2 lectures (60 minutes/1.5 class hours each). Moreover, students' individual work for 7 hours (45 minutes for each case) is also stipulated. Hence, it follows that 16 hours (9 class and 7 independent hours) are provided for each case.

3.3.2. BSMU

Problem-based learning (PBL) is not used at BSMU, so students will have the opportunity to try to learn with cases in this project. In our opinion, the advantage of PBL is that the student develops independent learning skills, learns to work in team, defends his own opinion, and develops logical thinking. In addition, PBL stimulates students to search new and creative solutions.

In BSMU the cases of errors in paediatric practice will be introduced in working training programs in paediatrics and childhood infectious diseases for students of VI course, specialty "Pediatrics". These cases will correspond to the topics of practical trainings according to the credit-module training system. The total number of hours of the module "Pediatrics" are 510 hours (10 weeks), including 360 contact hours, and 135 hours (3 weeks) of the module "Childhood Infectious diseases" (including 92 contact hours). After analysis of the case, each student will have time for self-training. The analysis of one case in detail will take 2 days (6 contacts hours). Studying of 6 cases of errors in pediatric practice will take 2 months.

	Title of module	Total hours	Contact hours

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1	Pulmonology	53	37 (5 days)
2	Cardiorheumatology	89	61 (8 days)
3	Gastroenterology	50	37 (5 days)
4	Nephrology	34	23 (3 days)
5	Endocrinology	65	49 (7 days)
6	Hematology	37	29 (4 days)
7	Neonatology	80	56 (8 days)
8	Ambulatory pediatrics	71	56 (8 days)
9	Children's infectious diseases	135	92 (15 days)

Table 10. Modules and hours at the Pediatrics in BSMU

3.4. Vietnam

3.4.1. HMU

3.4.1.1 Curriculum plan for paediatric cases

The students in year 4 taking the Subject Paediatric I will be involved in the implementation of the project. The students will take lectures at the University campus and clinical practice at the National Paediatric Hospital where the Department office locates. The duration of the courses is 10 weeks, including 40 hours in class (10 lectures) and clinical practice training (see Table below). Cases will be incoporated in the Lectures on Pediatrics and Infectious Diseases and delivered every week. In total, students will take 6 classes, each class for 4 hours.

SCHEDULE FOR CLINICAL TRAINING AT NATIONAL PEDIATRIC HOSPITAL 2016-2017 (HMU)

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Time / Department	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Gastroenterology	Group 1	Group 2	Group 7	Group 8	Group 9	Group 10
Nutrition	Group 1	Group 2	Group 7	Group 8	Group 9	Group 10
Cardiology	Group 2	Group 7	Group 8	Group 9	Group 10	Group 1
Endocrinology	Group 2	Group 7	Group 8	Group 9	Group 10	Group 1
Infectious Diseases	Group 7	Group 8	Group 9	Group 10	Group 1	Group 2
Hematology	Group 8	Group 9	Group 10	Group 1	Group 2	Group 7
Kidney	Group 8	Group 9	Group 10	Group 1	Group 2	Group 7
Neurology	Group 9	Group 10	Group 1	Group 2	Group 7	Group 8
ICU	Group 9	Group 10	Group 1	Group 2	Group 7	Group 8
Antenatal care	Group 10	Group 1	Group 2	Group 7	Group 8	Group 9
Immunology	Group 10	Group 1	Group 2	Group 7	Group 8	Group 9

3.4.2. HUMP

3.4.2. 1 Curriculum plan for paediatric cases

PBL has not been applied at Hue UMP. The skills training is mostly carried out in the clinical setting on real patients. This could be very dangerous to patients and limit the opportunity for students to practice. This situation is critical for training clinical reasoning skills. Application of PBL-D using paediatrics virtual patient cases would be useful for promoting clinical reasoning skills, problem solving in a safe environment.

Based on the current curriculum design and the nature of the cases, we plan to integrate the six paediatric cases which were developed by St George's University of London to teach students in year sixth. Year sixth is spent for clinical practice. Students will spend 10 weeks to practice at the Department of Paediatrics, Central hospital and University hospital. Since the nature of cases is highly comprehensively covering basic and advanced paediatric competences, therefore, implementation cases to year sixth students could be the

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best appropriate. We will extract one week (40 hours) to teaching each case (40 hours). To integrate 5 cases into current curriculum. (see appendix)

4. Curriculum plans for new cases

4.1. Introduction

The overall objective of the project is to introduce innovative pedagogy methods that will provide training for students against medical error. TAME will innovate curricula towards teaching and learning in safe environment and closer to the needs of the real practice, where medical errors occur.
The development and implementation of new cases with errors will also allow each PCMU teaching students how to avoid errors in different medical specialties as well as the provision of innovative education and medical services to international standards.

4.2. Kazakhstan

4.2.1. AMU

Introduction of new developed cases during the project is planned in the module "General medical practice", which is in Year 5. Module "General medical practice" consists of 4 disciplines: internal medicine in the work of GP, children's diseases in the work of GP, obstetrics and gynecology in the work of GP and surgical diseases in the work of GP (Table 11). The total number of hours in the module is 405 hours, including 270 of classroom hours (practical trainings - 240 hours and lectures -30 hours). Thus each discipline consists of 8 units (Table 12). 1 week is allocated for each unit (30 hours). Therefore, AMU plans to develop and implement one case in 6 units. New cases will be allocated in each unit. Since the subject of cases will correspond to the units, it will enable students to more detailed approach during the analysis of cases. The distribution of new cases is given in the appendix section.

Using new developed cases in the curriculum will lead to changes in students thinking and will allow them to look at important issue differently. It will teach them consider every step of the patient management. We believe that in the future, in clinical practice, this knowledge will help avoid medical errors.

№	The name of disciplines in the module	Total	Contact classes			self-study work
			Total	Lectures	Practical classes	

1	Internal medicine in the work of GP	201	134	14	120	67
2	Children's diseases in the work of GP	102	68	8	60	34
3	Obstetrics and gynecology in the work of GP	51	34	4	30	17
4	Surgical diseases in the work of GP	51	34	4	30	17
	Total	405	270	30	240	135

Table 11. Module "General medical practice"

№	The name of unit in disciplines	The number of hours	The number of days
1	Unit №1 Cardiology	30	5 days
2	Unit №2 Pulmonology, Nephrology	30	5 days
3	Unit №3 Gastroenterology, Hematology	30	5 days
4	Unit №4 Rheumatology, Endocrinology	30	5 days
5	Unit №5 Internal medicine in the work of GP	30	5 days
6	Unit № 6 Children's diseases in the work of GP	30	5 days
7	Unit №7 Obstetrics and gynecology in the work of GP	30	5 days
8	Unit №8 Surgical diseases in the work of GP	30	5 days
	Total	240	40 days

Table 12. The units of the disciplines

4.2.2. KSMU

The development of new VP cases in KSMU will take place for Year 5 students in General Medical Practice. The total number of hours for this discipline is 405 (9 credits). Table 13 shows the different units of this discipline and distribution of VP cases planned for development in KSMU.

Units	Total	Contact hours		Self-study hours	VP case
		Lectures	Practice		

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			sessions		
Cardiology	90	12	18	60	Chest pain
Pulmonology and Nephrology	45	3	12	30	Breathlessness
Gastroenterology and haematology	45	0	15	30	Bleeding
Rheumatic diseases and Endocrinology	45	0	15	30	Intoxication
Surgery in GP	45	3	12	30	-
Obstetrics and Gynaecology	45	3	12	30	Acute abdomen
Children diseases in GP	90	6	24	60	Diarrhoea
Total	**405**	**27**	**108**	**270**	**6**

Table 13. "General medical practice" discipline in KSMU

The complete detailed schedule will be developed after the objectives for the cases are finalised. The general approach will remain the same: the case objectives will be matched against the objectives for the unit in which it is placed, the topics around will be rearranged and time for PBL sessions will be taken from unplanned portion of students' self-study time. The learning week will look similar to the learning week for paediatric cases.

4.3. Ukraine

4.3.1. ZSMU

An important part of the project is development of new medical error cases in different subject matter by each of the partner universities. Originally it was suggested that ZSMU will develop 6 cases, 4 of them – internal diseases cases, and 2 – surgery cases.

Cases' topics:

Week 1 - Cardiology (acute myocardial infarction management in diabetic patients with uncertain clinical presentation)
Week 2 - Rheumatology (Systemic connective tissue diseases, SLE differential diagnosis)
Week 3 - Pulmonology (Management of the patient with pulmonary consolidation)
Week 4 - Bacterial complications after abdominal surgery
Week 5 - Pulmonary embolism
Week 6 - Acute abdominal syndrome (differential diagnosis and management)

However, after several online discussions with partners, we decided to focus 6 cases on various surgery issues. Thus, ZSMU plans to develop the following new medical error cases:

№	Name of units	Number of hours	Number of days	The title of the cases
Surgery				

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1.	**Week 1. Abdominal surgery**	10 hours	3 days	**1. Acute abdominal syndrome (acute appendicitis)**
2.	**Week 2. Abdominal surgery**	10 hours	3 days	**2. Mesenterial thrombosis**
3.	**Week 3. Abdominal surgery**	10 hours	3 days	**3. Acute intestinal obstruction**
4.	**Week 4. Acute abdominal syndrome**	10 hours	3 days	**4. Acute abdominal syndrome (perforative ulcer)**
5.	**Week 5. Bacterial complications after surgery**	10 hours	3 days	**5. Bacterial complications after surgery**
6.	**Week 6. Pulmonary embolism**	10 hours	3 days	**6. Pulmonary embolism**

The same scheme as for pediatric cases will be used:

- 6 cases during 7 weeks
- 6 PBL hours for each case
- 2 lectures per each case
- 1 expert session per each case

Thus, for each surgery case 18 hours (12 class and 6 independent) or 0.6 credits is provided. It is intended that the same students of the 2nd medical faculty will study on new cases but during the 2017/2018 academic year (6th year).

4.3.2. BSMU

Introduction of new developed cases during the project is planned in the credit-module system for students of VI course, specialty “Pediatrics”. According to the working training curriculum the sixth year, students study the following subjects at the General medical practice: internal medicine (4 weeks - 109 hours), family medicine – general practices (1 week - 90 hours), phthisiology (45 hours), infectious diseases (2 weeks - 160 hours). Future pediatricians on the six course studying the differential diagnosis, patient management, and emergency care in cardiology and rheumatology (54 hours), endocrinology (11 hours), haematology (11 hours), phthisiology (45 hours), infectious diseases with HIV (160 hours).

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It is planned to develop 6 new cases of the following topics: cardiology (Cardialgia), rheumatology (Fever and rash), endocrinology (Polyuria), hematology (Pallor of skin), infectious diseases with HIV infection (Diarrhea) and pulmonology and phthysiology (Dyspnea, cough). These cases will be implemented in thematic modules to increase the knowledge of internal medicine and infectious diseases and motivation for further analysis of possible medical errors.

4.4. Vietnam

4.4.1. HMU

Hanoi Medical University plan to develop new VP cases in Infectious Diseases for Year 5 or 6 MD students in either Preventive Medicine or General Practitioner. Students will take lectures in classes at the University Campus and will take clinical practice training at the National Hospital for Tropical Diseases. The course lasts for 12 weeks and students will be exposed to 6 new VP cases.

The tentative VP cases include health problems which are highly burden in Vietnam, including (1) HIV, (2) HBV/ HCV, (3) Dengue, (4) streptococcus-meningitis, (5) Viral hepatitis, and (6) typhoid.

DATE	TASK	RESPONSIBLE PERSONS
26-29/12/2016	Training for tutors to create new infectious cases on OpenLabyrinth	Tutors in Pediatric Department, qualified tutors in Infectious Department.
1/1-15/2/2017	Write 6 infectious cases: (1) HIV, (2) HBV/ HCV, (3) Dengue, (4) streptococcus meningitis, (5) Viral hepatitis, and (6) typhoid.	MD. Thu, Ha, Truong, Dat, Duyet, Hoa
16-28/2/2017	Advice from experts	Kinh, Huy, Hung, Phuc, Ngan
1/3-15/3	Advice from experts of the project	
16-31/3	Modify and complete infectious cases	Tutors in Infectious department
4/2017	Pilot on fifth year HMU students.	Tutors in Infectious department

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4.4.2. HUMP

Following the application of 6 paediatric cases in the academic year 2016-2017, the Hue UMP plans to extend this teaching/learning method to other clinical disciplines as well including internal medicine, OB&GYNE, and Surgery in the academic year 2017-2018.

The overall curriculum of these disciplines includes 21 credits of internal medicine; 15 credits of surgery; 12 credits of OB&GYN. These disciplines are divided from basics to advanced levels and are taught from year fourth to year sixth.

Internal medicine curriculum

The internal medicine curriculum includes 11 credits of theory and 10 credits of clinical practices. It is divided to 9 disciplines including basic internal medicine 1-2 and pathological internal medicine 1-7. It covers three levels of clinical competency including symptomatology, pathology, and treatment of all aspects of internal medicine including cardiovascular, respiratory, digestive, nephro-urology, neurology, musculoskeletal systems. The theoretical credits are taught in classroom while clinical disciplines are taught in hospital settings on real patients. Although, the curriculum seems to be comprehensive however, practice on real patients is too dangerous and does not facilitate students practice clinical reasoning skills. For this instance, integrated application of PBL-D using virtual patients to the current internal curriculum seems to be a good supplementation to train clinical reasoning skills.

We have discussed with internal medicine department and decided to start integrating 2 internal cases entitled diabetes and approaching a chest pain patient to the clinical curriculum in the academic year 2017-2018. These cases were selected because of their commonality and high risk of making mistakes in diagnosis and treatment. The cases are comprehensive and require students' basic competences of symptomatology, diagnosis, and treatment. Therefore, we decided to integrate these cases to the sixth year curriculum where students will be spent all time for practice in clinics.

Basic Internal medicine1&2 (Int1&Int2)

No	Unit	Int1 (leacture contact hours)	Int2 (clinical hours)	VP case
1	Introduction to internal medicine	3	8	
2	Respiratory syndroms and symptoms	6	16	
3	Indocrine syndroms and symptoms	5	13	Diabetes melitus
4	Digestive syndroms and symptoms	6	20	
5	Cardiovascular syndroms and symptoms	7	18	Chest pain

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6	Urology syndroms and symptoms	4	12	
7	Muscalskeletal and joint syndroms and symptoms	2	4	
8	Fever diagnosis	1	4	
9	Neurology	11	25	
	Total	**45**	**120**	

Internal medicine3,4 (Pathological internal medicine)

No	Unit	Int1 (leacture contact hours)	Int2 (clinical hours)	VP case
1	Lobar pneumonia	2	5	
2	Asthma	2	5	
3	COPD	2	5	
4	Acute repiratory failure	1	4	
5	Acute cholangitis and cholecystitis	2	5	
6	Gastitis	1	4	
7	Stomach ulcers	2	4	
8	Rheumatic heart diseases	1	4	
9	Mitral valve stenosis	1	4	
10	Hypertension	2	5	
11	Heart failure	1	4	
12	Abnormal ECG	2	5	
13	Kidney failure	2	4	

14	Acute nephritis	2	4	
15	Acute tubulo-intestitial nephritis	1	4	
16	***Diabetes***	***2***	***5***	***Diabetes melitus***
17	Basedow	2	5	
18	Rheumatoid arthritis	2	4	
	Total	30	80	

Internal medicine5,6 (Pathological internal medicine)

No	Unit	Int5 (leacture contact hours)	Int6 (clinical hours)	VP case
1	Chronic respiratory failure	2	7	
2	Lung abscess	2	6	
3	Bronchiectasis	1	6	
4	Primary liver cancer	1	6	
5	Irritable bowel syndrome	2	6	
6	Cirrhosis, hepatic encephalopathy	2	7	
7	Acute and chronic pancreatitis	2	6	
8	***Coronary insufficiency***	***3***	***6***	***Chest pain***
9	***Acute myocardial infarction***	***1***	***6***	
10	Pericarditis	1	7	
11	Heart defects	1	6	
12	Baterial endocarditis	2	8	
13	Artherosclerosis	1	6	

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14	Diabes insipidus	1	6	
15	Goite simple	1	6	
16	Hypothyroidism	2	6	
17	Goute	2	6	
18	Acute, chronic kidney failure	3	6	
19	Uniary stone	1	6	
20	Pyelonephritis	1	6	
	Total	30	120	

Internal medicine7,8 (Pathological internal medicine)

No	Unit	Int7 (leacture contact hours)	Int8 (clinical hours)	VP case
1	Primary lung cancer	2	5	
2	Teatosis	2	5	
3	Gastroesophageal cancer	2	5	
4	Chronic hepatitis	2	5	
5	Chronic enteristis	2	5	
6	Myocardial diseases	2	5	
7	Arrhythmia	2	5	
8	Obesity	2	5	

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9	Adrenal insufficiency	2	5	
10	Hypoglycaemia	2	5	
11	Adrenalcortical hypereactivity	2	5	
12	Osteoarthritis	2	5	
13	Lupus erythematosus	2	5	
14	Secondary nephritis	2	5	
15	Kidney diseases and pregnant	1	5	
16	Kidney and drug	1	5	
	Total	**30**	**80**	

1. Surgery

The surgical curriculum includes 8 theoretical credits and 7 clinical practices credits. It is structured of 5 topics including basic surgery 1-2, pathological internal medicine 1-5. It covers three levels of clinical competency including symptomatology, pathology, and treatment of all aspects of surgery including cardiovascular and thoracic surgery, digestive, nephro-urology, neurology, orthopaedic, etc. The theoretical credits are taught in classroom while clinical credits are taught in hospital settings on real patients. Similarly to the internal curriculum, students' practicing on real patients is too dangerous and does not facilitate students practice clinical reasoning skills. Thus, we decided to integrate PBL-D using virtual patients to the current surgical curriculum in order to provide a safe learning environment for facilitating students to practice surgical clinical reasoning skills.

We have discussed with surgical department and decided to integrate 2 cases entitled acute appendicitis and perforated gastric or duodenal ulcer. These cases were selected because of their commonality and high risk of making mistakes in diagnosis and treatment. We decided to integrate these cases to the sixth year curriculum where students will be spent all time for practice in clinics.

Basic Surgery1&2 (Surg1&Surg2)

No	**Unit**	**Surg1 (leacture contact**	**Surg2 (clinical hours)**	**VP case**

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		hours)		
1	Abdominal injury examination	2	4	
2	Peritonaeum bleeding syndrom	2	3	
3	Ileus syndrom	2	4	
4	Perineal, retum and anus examnination	2	4	
5	Surgical obstructive jaundice	2	3	
6	Hepatobiliary examination	2	3	
7	Herniation examination	2	3	
8	Kidney examination	2	3	
9	Genital examination	2	3	
10	Heamaturia examination	2	3	
11	Urinary retention examination	2	3	
12	Surgical clinical records	2	4	
13	Chest injury examination	2	4	
14	Vascular examination	2	3	
15	Examination of burns	2	3	
16	Surgical infection	2	4	
17	Examination of articulation	1	4	
18	Examination of bone fracture	2	4	
19	Preoperative and postoperative patient preparation	2	4	
20	Peripheral nervous system examination	2	4	

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21	Traumatic brain injury examination	2	3	
22	Backbone examination	2	4	
23	Basic functional probes in surgery	2	3	
	Total	**45**	**80**	

Surgery1-5

No	Unit	Leacture contact hours)	Clinical hours	VP case
1	Digestive surgery	25	45	Acute appendicitis Perforated gastric or duodenal ulcer
2	Nephro-urological surgery	10	15	
3	Cardiovascular and thoracic surgery	10	20	
4	Orthopedics	30	45	
	Total	**75**	**125**	

OB&GYN

The OB&GYN curriculum include 7 theory credits and 5 clinical practical credits. The skillslab training using simulated patients has been applied to teaching and learning in the OB&GYN skillslab for several years. However, it is mostly focused on procedural skills rather than reasoning skills. We plan to integrate 2 OB&GYN cases to the curriculum for training clinical reasoning skills including postpartum haemorrhage and preeclampsia.

OB&GYN 1

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No	Topics	Contact hours		
		Theory	Clin. Practice	VP case
1	Introduction to OB&GYN	1		
2	Pelvis	2	8	
3	Physiology of the female reproductive system	2	2	
4	Pregnancy physiology	2	2	
5	Anatomy and physiology changes in pregnancy	2	4	
6	Full term baby characteristics	2	6	
7	Diagnosis of pregancy	1	4	
8	Dagnosis of fetal presentation	1	6	
9	Physiology of labor	2	4	
10	Delivery of cephalic presentation	2	10	
11	Normal placenta and postpartum	2	8	
12	Menstrual and pregant hygiene	1	2	
13	Safe motherhood management	2	8	
14	High risk pregnancy	2	6	
15	Multiple birth	2	6	
16	Newborn care	2	8	
17	Breast feeding	2	6	

OB&GYN 2

No		Contact hours

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		Theory	Clin. practice	VP case
1	Difficult birth	4	10	
2	Breech presentation	2	6	
3	Facial, shoulder, brow and other complicated presentation	2	8	
4	Monitoring and ultrasound in OB	4	16	
5	Polyhydoramnios, oligohydramnios	2	6	
6	Extrauterin pregnancy	2	6	
7	Stillbirth	2	6	
8	Anterior placenta	2	6	
9	Abruption placenta	2	6	
10	Uterus rupture	2	6	
11	Postterm pregnancy	2	6	
12	Miscarry and preterm birth	4	8	

OB&GYN 3

No	Topics	Contact hours		
		Theory	Clin. practice	VP case
1	Pregnant vomitting	1	2	
2	Puerperal eclampsia and preeclampsia	3	10	Preeclampsia
3	Postpartum bleeding	2	10	Postpartum hemorrhage
4	Abnormal postpartum	4	10	

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5	Heart diseases and pregnancy	2	4	
6	Acute pulmonary oedema in OB	2	2	
7	Shock in OB	2	8	
8	Urinary infection and pregancy	2	4	
9	Anaemia, malaria, diabetes, and pregnancy	4	8	
10	Appendicitis and pregnancy	1	2	
11	Pregancy failure	2	10	
12	Newborn resuscitation	2	10	
13	Common diseases in newborn	1	6	
14	Reproductive health	2	4	

5. Appendix

AMU - Paediatric cases

month	week	day	dates	days of week	Unit	08.00-08.50	09.00-09.50	10.00-10.50	11.00-11.50	12.00-12.50	13.00-13.50	14.00-14.50	15.00-15.50
September	1	1	1	Thursday	Physiology and patology of newborn and infants	Lecture 2				Practice session			
		2	2	Friday		Case 1 (1) Neonatology Day 1							
	2	3	5	Monday		Case 1 (1) Neonatology Day 2			Practice session				
		4	6	Tuesday		Practice session							
		5	7	Wednesday		Case 2 (4) Growth Day 1							
		6	8	Thursday		Case 2 (4) Growth Day 2			Practice session				
		7	9	Friday	Respiratory diseases	Lecture 2					Practice session		
	3	8	12	Monday		Practice session							
		9	13	Tuesday		Case 3 (2) Difficulty in breathing Day 1							
		10	14	Wednesday		Case 3 (2) Difficulty in breathing Day 2			Practice session				
		11	15	Thursday		Practice session							
		12	16	Friday		Practice session							
	4	13	19	Monday	Cardiovascular diseases	Lecture 2				Practice session			
		14	20	Tuesday		Case 4 (6) Blue baby Day 1							
		15	21	Wednesday		Case 4 (6) Blue baby Day 2			Practice session				
		16	22	Thursday		Practice session							
		17	23	Friday		Practice session							
	5	18	26	Monday		Practice session							
		19	27	Tuesday	Diseases of the digestive system	Lecture 2					Practice session		
		20	28	Wednesday		Case 5 (3) Vomiting y Day 1							
		21	29	Thursday		Case 5 (3) Vomiting Day 2			Practice session				
		22	30	Friday		Practice session							
October	6	23	3	Monday		Practice session							
		24	4	Tuesday		Practice session							
		25	5	Wednesday	Diseases of urinary system	Practice session							
		26	6	Четверг		Practice session							
		27	7	Friday		Practice session							
	7	28	10	Monday		Practice session							
		29	11	Tuesady		Practice session							
		30	12	Wednesday	Diseases of hemic system	Practice session							
		31	13	Thursday		Practice session							
		32	14	Friday		Practice session							
	8	33	17	Monday		Practice session							
		34	18	Tuesday		Practice session							
		35	19	Wednesday	Children's infectious diseases	Lecture 2				Practice session			
		36	20	Thursday		Practice session							
		37	21	Friday		Case 6 (5) Seizures Day 1							
	9	38	24	Monday		Case 6 (5) Seizures Day 2			Practice session				
		39	25	Tuesday		Lecture 2				Practice session			
		40	26	Wednesday		Lecture 2				Practice session			
		41	27	Thursday		Practice session							
		42	28	Friday		Practice session							
	10	43	31	Monday		Practice session							
November		44	1	Tuesday		Practice session							
		45	2	Wednesday		Practice session							
			3										
			4										
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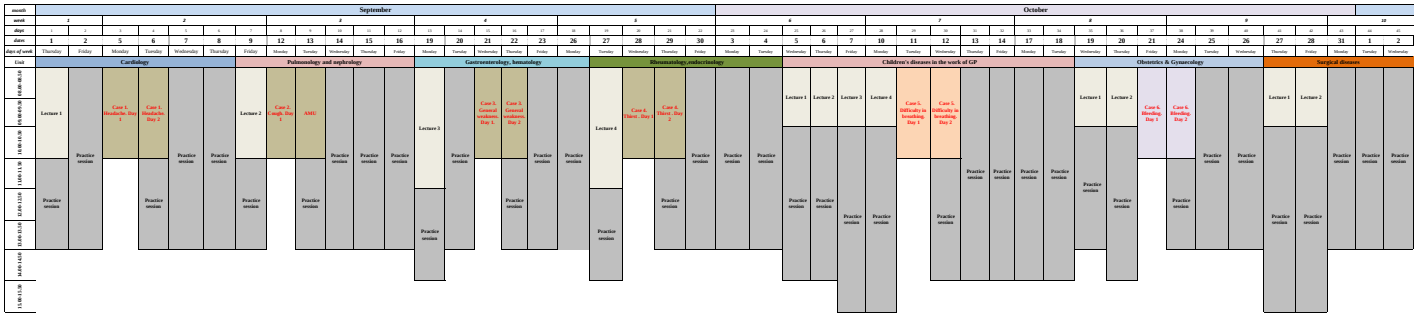
- New cases map



Случай

KSMU - Paediatric case map

	Duration	Beginning and end	1	2	3	4	5	6	7	8	9
			01/09/2016	02/09/2016	05/09/2016	06/09/2016	07/09/2016	08/09/2016	09/09/2016	12/09/2016	13/09/2016
			Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	Friday	Monday	Tuesday
			Physiology and pathology of newborns and infants. Organization of pediatric services								
1	3	8.00-8.50	Lecture 1. Introduction into pediatrics. Programme of WHO and UNICEF for reducing morbidity and mortality in children. WHO program on breast feeding	**Case 1 (4) Growth Day 1**	**Case 1 (4) Growth Day 2**	Self-directed learning. Neonatal septic-purulent diseases	**Case 2 (1) Neonatology Day 1**	**Case 2 (1) Neonatology Day 1**	Practice session Diseases related to disorders of calcium-phosphorus metabolism	Lecture 4 Diagnosis, treatment and prevention of diseases of the respiratory system in children with position of evidence-based medicine	**Self-directed learning Bronchitis, bronchiolitis .**
1		8.55-9.45									Practice session. Acute pneumonia . Features of pneumonia caused by various pathogens .
1		9.50-10.40	Practice session The organization of pediatric care. Newborns. A full-term baby. Premature baby. Infants primary nursing							Practice session Bronchitis, bronchiolitis.	
10.40-11.00											
		11.00-11.50	Pratice session The organization of pediatric care. Newborns. A full-term baby. Premature baby. Infants primary nursing	Self-directed learning on case	Lecture 2 Features of the newborn child. Term and preterm baby. Hemolytic disease of the newborn. Intrauterine infection in children.	Self-directed learning. Neonatal septic-purulent diseases	Self-directed learning on case	Self-directed learning. Protein-energy deficiency.	Self-directed learning. The diseases related to disorders of calcium-phosphorus metabolism.	Practice session Bronchitis, bronchiolitis.	Tutorial Acute pneumonia . Features of pneumonia caused by various pathogens .
		11.55-12.45	Self-directed learning. The organization of pediatric care. Newborns. A full-term baby. Premature baby. Infants primary nursing	Self-directed learning on case		Lecture 3 Chronic nutritional disorders in children.	Self-directed learning on case			Practice session Bronchitis, bronchiolitis.	**Self-directed learning Acute pneumonia . Features of pneumonia caused by various pathogens.**
12.45-13.15											
		13.15-14.05	Self-directed learning. The organization of pediatric care. Newborns. A full-term baby. Premature baby. Infants primary nursing	Self-directed learning on case	Practice session Neonatal septic-purulent diseases	Lecture 3 Chronic nutritional disorders in children.	Self-directed learning on case	Self-directed learning. Protein-energy deficiency.	Self-directed learning. The diseases related to disorders of calcium-phosphorus metabolism.	**Self-directed learning. Bronchitis, bronchiolitis.**	**Self-directed learning Acute pneumonia . Features of pneumonia caused by various pathogens.**
		14.10-15.00			Practice session Neonatal septic-purulent diseases	Practice session Protein-energy malnutrition.					
		15.05-15.55									

10	11	12	13	14	15	16	17	18	19
14/09/2016	15/09/2016	16/09/2016	19/09/2016	20/09/2016	21/09/2016	22/09/2016	23/09/2016	26/09/2016	27/09/2016
Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	Friday	Monday	Tuesday
Respiratory diseases									
Self-directed learning. Acute pneumonia . Features of pneumonia caused by various pathogens .	**Case 3 (2) Difficulty in breathing Day 1**	**Case 3 (2) Difficulty in Breathing Day 2**	**Self-directed learning Allergic respiratory diseases**	**Self-directed learning Bronchial asthma**	**Self-directed learning. Respiratory distress syndrome**	**Self-directed learning Congenital heart defects.**	Practice session Rheumatic fever	**Case 4 (6) Blue baby Day 1**	**Case 4 (6) Blue baby Day 2**
Self-directed learning. Acute pneumonia . Features of pneumonia caused by various pathogens .									
Practice session. Chronic bronchopulmonary diseases .							**Self-directed learning Rheumatic fever**		
Practice session. Chronic bronchopulmonary diseases .	Self-directed learning on case	Practice session Allergic respiratory diseases	**Self-directed learning Allergic respiratory diseases**	**Self-directed learning Bronchial asthma**	Lecture 5 Diagnosis, treatment and prevention of diseases of the cardiovascular system in children with evidence-based medicine	**Self-directed learning Congenital heart defects.**	**Self-directed learning Rheumatic fever**	Self-directed learning	Practice sesson Non-rheumatic carditis.
Practice session. Chronic bronchopulmonary diseases .		Practice session Allergic respiratory diseases	Practical session. Bronchial asthma	Practice sesson Respiratory distress syndrome .		Practice sesson Rheumatic fever			
Self-directed learning Chronic bronchopulmonary diseases .	Self-directed learning on case	Practice session Allergic respiratory diseases	Practical session. Bronchial asthma	Practice sesson Respiratory distress syndrome .	Practice session Congenital heart defects.	Practice sesson Rheumatic fever		Self-directed learning	Practical sesson Non-rheumatic carditis.
Self-directed learning Chronic bronchopulmonary diseases .			Practical session. Bronchial asthma	Practice sesson Respiratory distress syndrome .					
Self-directed learning Chronic bronchopulmonary diseases .									

20	21	22	23	24	25	26	27	28	29
28/09/2016	29/09/2016	30/09/2016	03/10/2016	04/10/2016	05/10/2016	06/10/2016	07/10/2016	10/10/2016	11/10/2016
Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	Friday	Monday	Tuesday
Diseases of the cardiovascular system									
Self-directed learning Non-rheumatic carditis.	**Self-directed learning Diffuse diseases of connective tissue. Systemic lupus erythematosus, systemic scleroderma, dermatomyositis , periarteritis nodosa.**	**Self-directed learning Circulatory failure**	Practice sesson Functional disorders of the digestive system.	**Case 5 (3) Vomiting Day 1**	**Case 5 (3) Vomiting Day 2**	**Self-directed learning Chronic gastritis , gastroduodenitis.**	**Self-directed learning. Peptic ulcer and 12 duodenal ulcer .**	**Self-directed learning. Dysfunction of the biliary tract . Dysfunction of the biliary tract .**	**Self-directed learning. Malabsorption syndrome in children.**
			Practice sesson Functional disorders of the digestive system.				**Self-directed learning. Peptic ulcer and 12 duodenal ulcer .**		
			Practice sesson Functional disorders of the digestive system.				**Self-directed learning. Peptic ulcer and 12 duodenal ulcer .**		
Self-directed learning Non-rheumatic carditis.	**Self-directed learning Diffuse diseases of connective tissue. Systemic lupus erythematosus, systemic scleroderma, dermatomyositis , periarteritis nodosa.**	**Self-directed learning Circulatory failure**	Practice sesson Functional disorders of the digestive system.	Self-directed learning on case	Practice sesson Chronic gastritis , gastroduodenitis	**Self-directed learning Chronic gastritis , gastroduodenitis.**	**Self-directed learning. Peptic ulcer and 12 duodenal ulcer .**	**Self-directed learning. Dysfunction of the biliary tract . Dysfunction of the biliary tract .**	Lecture 7 Diagnosis, treatment and prevention of diseases of the urinary system in children with evidence-based medicine (pyelonephritis) .
Practice sesson Diffuse diseases of connective tissue. Systemic lupus erythematosus, systemic scleroderma, dermatomyositis , periarteritis nodosa.	Practice sesson circulatory failure	Lecture 6 Diagnosis, treatment and prevention of diseases of the cardiovascular system in children with evidence-based medicine.	**Self-directed learning. Functional disorders of the digestive system.**		Practice sesson Chronic gastritis , gastroduodenitis	Practical sesson Peptic ulcer and 12 duodenal ulcer.	Practice sesson Dysfunction of the biliary tract . Dysfunction of the biliary tract .	Practical sesson Malabsorption syndrome in children.	
Practice sesson Diffuse diseases of connective tissue. Systemic lupus erythematosus, systemic scleroderma, dermatomyositis , periarteritis nodosa.	Practice sesson circulatory failure	Lecture 6 Diagnosis, treatment and prevention of diseases of the cardiovascular system in children with evidence-based medicine.	**Self-directed learning. Functional disorders of the digestive system.**	Self-directed learning on case	Practical sesson Chronic gastritis , gastroduodenitis	Practice sesson Peptic ulcer and 12 duodenal ulcer.	Practice sesson Dysfunction of the biliary tract . Dysfunction of the biliary tract .	Practice sesson Malabsorption syndrome in children.	Practice sesson Infections of the urinary system . Pyelonephritis . Cystitis.
Practice sesson Diffuse diseases of connective tissue. Systemic lupus erythematosus, systemic scleroderma, dermatomyositis , periarteritis nodosa.			**Self-directed learning. Functional disorders of the digestive system.**		Practice sesson Chronic gastritis , gastroduodenitis	Practice sesson Peptic ulcer and 12 duodenal ulcer.	Practice sesson Dysfunction of the biliary tract . Dysfunction of the biliary tract .	Practice sesson Malabsorption syndrome in children.	
			Self-directed learning. Functional disorders of the digestive system.				Practice sesson Dysfunction of the biliary tract . Dysfunction of the biliary tract .	Practice sesson Malabsorption syndrome in children.	

30	31	32	33	34	35	36	37	38	39
12/10/2016	13/10/2016	14/10/2016	17/10/2016	18/10/2016	19/10/2016	20/10/2016	21/10/2016	24/10/2016	25/10/2016
Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	пятница	Monday	Tuesday
Digestive system disease				Endocrine and blood system			Infectious disease		
Self-directed learning. Infections of the urinary system . Pyelonephritis . Cystitis.	**Self-directed learning. Glomerulonephritis. Nephrotic syndrome .**	**Self-directed learning. Hereditary nephritis .**	**Self-directed learning. The syndrome of renal insufficiency .**	Practice sesson Thrombocytopenic purpura . Hemorrhagic vasculitis.	Practice sesson The syndrome of anemia in children . Iron-deficiency anemia.	Lecture 9 Gene and chromosomal disease in children.	Lecture 10 Introduction to infectious diseases in children. IMCI .	Practice sesson Diphtheria in children	Practice sesson Parainfluenza, adenovirus infection in children
				Self-directed learning. Thrombocytopenic purpura . Hemorrhagic vasculitis.		Practice sesson Diabetes. Thyroid disease .	Lecture 11 Diseases that occur with the angina syndrome	Self-directed learning. The principles of laboratory diagnostics and treatment of diphtheria in children	Practice sesson Parainfluenza, adenovirus infection in children "
				Self-directed learning. Thrombocytopenic purpura . Hemorrhagic vasculitis.			Practice sesson Organization of children's infectious diseases service	Self-directed learning. The principles of laboratory diagnostics and treatment of diphtheria in children	Self-directed learning The true and false croup in children
Self-directed learning. Infections of the urinary system . Pyelonephritis . Cystitis.	**Self-directed learning. Glomerulonephritis. Nephrotic syndrome.**	**Self-directed learning. Hereditary nephritis .**	**Self-directed learning. The syndrome of renal insufficiency .**	Self-directed learning. Thrombocytopenic purpura . Hemorrhagic vasculitis.	Self-directed learning. The syndrome of anemia in children . Iron-deficiency anemia.	Practice sesson Diabetes. Thyroid disease .	Self-directed learning Management of the patient with management sheet.	Self-directed learning. The principles of laboratory diagnostics and treatment of diphtheria in children	Lecture 12 Diseases that occur with rash syndrome
Practice sesson Glomerulonephritis. Nephrotic syndrome .	Practice sesson Hereditary nephritis .	Practice sesson The syndrome of renal insufficiency .	Lecture 8 Diagnosis, treatment and prevention of diseases of the hematopoietic and endocrine systems in children with evidence-based medicine	Self-directed learning. Thrombocytopenic purpura . Hemorrhagic vasculitis.		Self-directed learning Diabetes. Thyroid disease .	Self-directed learning Management of the patient with management sheet.	Practical lesson Flu.	Practice sesson Measles , rubella in children
Practice sesson Glomerulonephritis. Nephrotic syndrome .	Practice sesson Hereditary nephritis .	Practice sesson The syndrome of renal insufficiency .	Lecture 8 Diagnosis, treatment and prevention of diseases of the hematopoietic and endocrine systems in children with evidence-based medicine	Practice sesson Hemophilia. Hematological malignancies in children. Leukemia.	Self-directed learning. The syndrome of anemia in children . Iron-deficiency anemia.	Self-directed learning Diabetes. Thyroid disease .	Practice sesson The principles of diagnosis and treatment of angina syndrome in children	Self-directed learning IMCI with acute respiratory viral infection	Practice sesson Measles , rubella in children
Practice sesson Glomerulonephritis. Nephrotic syndrome .			Practice sesson Thrombocytopenic purpura . Hemorrhagic vasculitis.	Practice sesson Hemophilia. Hematological malignancies in children. Leukemia.			Practice sesson Diphtheria in children	Self-directed learning IMCI with acute respiratory viral infection	Self-directed learning. Scarlet fever in children
			Practice sesson Thrombocytopenic purpura . Hemorrhagic vasculitis.	Practice sesson Hemophilia. Hematological malignancies in children. Leukemia.			Practice sesson Diphtheria in children		

40	41	42	43	44	45				
26/10/2016	27/10/2016	28/10/2016	31/10/2016	01/11/2016	02/11/2016	03/11/2016	04/11/2016	05/11/2016	06/11/2016
Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	четверг	пятница	суббота	воскресенье
	Viral hepatitis and acute intestinal infections in children								
Self-directed learning. Herpes infection , chicken pox in children	Lecture 13 Viral hepatitis in children	Practice sesson Cholera in children.	Practice sesson. Enterovirus infection in children "	Case 6 (3) Seizures Day 1	Case 6 (3) Seizures Day 2				
Self-directed learning. Herpes infection , chicken pox in children	Practice sesson Viral hepatitis A and E in children	Self-directed learning. IMCI for diarrhea in children.	Practice sesson. Enterovirus infection in children "						
Practice sesson Meningococcal disease in children	Self-directed learning. Viral hepatitis B , C and D in children "	Self-directed learning. IMCI for diarrhea in children.	Practice sesson. Enterovirus infection in children "						
Practice sesson Meningococcal disease in children	Self-directed learning. Viral hepatitis B , C and D in children "	Lecture 14 Nosocomial infections .	Self-directed learning. Enterovirus infection in children "	Self-directed learning on case	Practice sesson Poliomyelitis in children (paralytic forms)				
Self-directed learning Mumps infection in children	Practice sesson Principles of diagnosis of viral hepatitis in children	Practice sesson. Invasive diarrhea in children . Dysentery. IMCI .	Self-directed learning. Enterovirus infection in children "		Practice sesson Poliomyelitis in children (paralytic forms)				
Self-directed learning Mumps infection in children	Lecture 14. Diseases that occur with diarrhea syndrome	Self-directed learning. Invasive diarrhea in children . Dysentery. IMCI .	Self-directed learning colibacillosis in children.		Self-directed learning. Non-paralytic poliomyelitis in children				
Self-directed learning Mumps infection in children	Practice sesson Secretory diarrhea in children . Rotavirus gastroenteritis	Practice sesson. Salmonellosis in children	Self-directed learning colibacillosis in children.		Self-directed learning. Non-paralytic poliomyelitis in children				
self-directed learning. Whooping cough.	Practice sesson Secretory diarrhea in children . Rotavirus gastroenteritis		Practice sesson Poliomyelitis in children (paralytic forms)		Self-directed learning. Non-paralytic poliomyelitis in children				

07/11/2016	08/11/2016	09/11/2016	10/11/2016	11/11/2016	12/11/2016	13/11/2016	14/11/2016	15/11/2016	16/11/2016
понедельник	вторник	среда	четверг	пятница	суббота	воскресенье	понедельник	вторник	среда

17/11/2016	18/11/2016	19/11/2016	20/11/2016	21/11/2016	22/11/2016	23/11/2016	24/11/2016	25/11/2016	26/11/2016
четверг	пятница	суббота	воскресенье	понедельник	вторник	среда	четверг	пятница	суббота

KSMU - new cases maps

GP Schedule for the 5th year students

	Date		03/11/2017	06/11/2017	07/11/2017	08/11/2017	09/11/2017	10/11/2017	13/11/2017	14/11/2017	15/11/2017
	days of the week		Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday
	Duration	Time	1	2	3	4	5	6	7	8	9
1	3	8.00-8.50	Lecture The concept of general medical practice. Principles of the organization of primary health care (PHC).	Practice session Acute coronary syndrome in the practice of GPs.	Practice session Hypertension in the practice of GPs.	Case 1 Chest pain	Practice session Arrhythmias syndrome in the practice of GPs.	Practice session Metabolic syndrome in the practice of GPs.	Case 1 Chest pain	Lecture Medicine based on the evidence in the work of GPs.	Lack of blood in the practice of GPs. Self-directed learning
1		8.55-9.45	Lecture Principles of interpersonal communication and counseling of patients by the general practitioner.								
1		9.50-10.40	Lecture Medical labor examination.							Lecture Identification of risk factors, the principles of early detection and prevention of socially significant diseases.	
10.40-11.00											
	2	11.00-11.50	Lecture Medical labor examination.	Acute coronary syndrome in the practice of GPs. Self-directed learning	Hypertension in the practice of GPs. Self-directed learning	Self-directed learning on case	Arrhythmias syndrome in the practice of GPs. Self-directed learning	Metabolic syndrome in the practice of GPs. Self-directed learning	Practice session Lack of blood circulation in the practice of GPs.	Lecture Identification of risk factors, the principles of early detection and prevention of socially significant diseases.	Practice session Diabetes in the practice of GPs.
		11.55-12.45	Lecture Principles of dynamic observation in an outpatient setting.							Lecture Organization, implementation and monitoring of screening programs	
12.45-13.15											
	4	13.15-14.05	Lecture Principles of dynamic observation in an outpatient setting.	Acute coronary syndrome in the practice of GPs. Self-directed learning	Hypertension in the practice of GPs. Self-directed learning	Self-directed learning on case	Arrhythmias syndrome in the practice of GPs. Self-directed learning	Metabolic syndrome in the practice of GPs. Self-directed learning	Practice session Lack of blood circulation in the practice of GPs.	Lecture Organization, implementation and monitoring of screening programs	Practice session Diabetes in the practice of GPs.
		14.10-15.00									Diabetes in the practice of GPs. Self-directed learning
		15.05-15.55									
		16.00-16.50									

16/11/2017	17/11/2017	20/11/2017	21/11/2017	22/11/2017	23/11/2017	24/11/2017	27/11/2017	28/11/2017	29/11/2017
Thursday	Friday	Monday	Tuesday	Wednesday	Thuersday	Friday	Monday	Tueday	Wednesday
10	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**
Diabetes in the practice of GPs. Self-directed learning	Practice session Pneumonia in the practice of GPs.	Practice session The syndrome of bronchial obstruction in the practice of GPs.	Case 2 Breathlessness	The syndrome of bronchial obstruction in the practice of GPs. Self-directed learning	Case 2 Breathlessness	Practice session The syndrome of gastric dyspepsia in practice GPs	Case 3 Bleeding	Intestinal dyspepsia syndrome in the practice of GPs. Self-directed learning	Case 3 Bleeding
Lecture The course of disease in children, adolescents and pregnant women. Tactics GPs.	Pneumonia in the practice of GPs. Self-directed learning	Practice session The syndrome of bronchial obstruction in the practice of GPs.	Self-directed learning on case	Practice session Syndromes of lesions of the urinary system in the work of GPs.	Syndromes of lesions of the urinary system in the work of GPs. Self-directed learning	Practice session intestinal dyspepsia syndrome in the practice of GPs.	Self-directed learning on case Self-directed learning on case	Practice session Syndromes of pancrease damage, bile passage in GPs practice	Practice session Liver damage in GPs practice
Lecture The course of disease in children, adolescents and pregnant women. Tactics GPs.	Pneumonia in the practice of GPs. Self-directed learning	Practice session The syndrome of bronchial obstruction in the practice of GPs. The syndrome of bronchial obstruction in the practice of GPs. Self-directed learning	Self-directed learning on case	Practice session Syndromes of lesions of the urinary system in the work of GPs.	Syndromes of lesions of the urinary system in the work of GPs. Self-directed learning	Practice session intestinal dyspepsia syndrome in the practice of GPs. The syndrome of gastric dyspepsia in practice GPs Self-directed learning	Self-directed learning on case Self-directed learning on case	Practice session Syndromes of pancrease damage, bile passage in GPs practice Syndromes of pancrease damage, bile passage in GPs practice Self-directed learning	Practice session Liver damage in GPs practice СРСП Синдромы поражения печени в практике ВОП. Liver damage in GPs practice

30/11/2017	01/12/2017	04/12/2017	05/12/2017	06/12/2017	07/12/2017	08/12/2017	11/12/2017	12/12/2017	13/12/2017
Tursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday
20	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**
Practice session Anemic syndrome in practice GPs	Practice session Hemoblastosis in practice GPs	Practice session Acute rheumatic fever, PHD in practice GPS	Case 4 Intoxication	Cardiac defect in practice GPs Self-directed learning	Case 4 Intoxication	Syndrom of thyroid gland in practice GPs. Obesity Self-directed learning	Principles of preventive medical examination of children Self-directed learning	Practice session Feeding of children at preschool and school age	Practice session Organization of general health help to newborns
Anemic syndrome in GPs practice Self-directed learning	Hemoblastosis in GPs practice Self-directed learning	Practice session Cardiac defect in GPs practice	Самостаятельная работа по случаю Independent work on the occasion of	Практическое занятие Practical lesson Суставной синдром в практике ВОП. Остеопороз. Нарушения функции суставов. Articular syndrome in GPs practice. Osteoporosis. Dysfunction of articulations	Практическое занятие Practical lesson Синдром поражения щитовидной железы в практике ВОП. Ожирение. Syndrom of thyroid gland in practice GPs. Obesity	Лекция Lection Структура организации работы и медицинское обслуживание детей в детских дошкольных учреждениях и школах. The structure of work organization and medcal service of children in infant intuitions and schools Лекция Lection Диспансерное наблюдение и реабилитация часто болеющих детей врачом общей практики. Dispensary observation and rehabilitation of sickly children by genreal practioner	Практическое занятие Practical lesson Организация рационального вскармливания детей раннего возраста. Organization of rational infant feeding	СРСП Организация рационального вскармливания детей раннего возраста. Organization of rational infant feeding	СРСП Организация лечебно-профилактической помощи новорожденным. Organization of general health help to newborns
Anemic syndrome in GPs practice Self-directed learning	Hemoblastosis in GPs practice Self-directed learning	Practice session Cardiac defect in GPs practice	Self-directed learning on case	Practice session Articular syndrome in GPs practice. Osteoporosis. Dysfunction of articulations	Practice session Syndrom of thyroid gland in practice GPs. Obesity	Lecture Dispensary observation and rehabilitation of sickly children by genreal practioner	Practice session Organization of rational infant feeding	Organization of rational infant feeding Self-directed learning	Organization of general health help to newborns Self-directed learning
		Acute rheumatic fever, PHD in practice GPS Self-directed learning	Self-directed learning on case	Articular syndrome in GPs practice. Osteoporosis. Dysfunction of articulations Self-directed learning			Principles of clinical examination of healthy children Self-directed learning	Feeding of children at preschool and school age Self-directed learning	

14/12/2017	15/12/2017	18/12/2017	19/12/2017	20/12/2017	21/12/2017	22/12/2017	25/12/2017	26/12/2017	27/12/2017
Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday
30	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**
Lecture Principles of dispancery observation of children with chronic diseases Lecture Immunoprophylaxis in work GPs	Case 5 Diarrhea	Practice session Immunoprophylaxis. Preventive medical examination of children with baseline pathology. Incipient clinical laboratory diagnostic of anemia, rachitis	Preventive medical examination of children with baseline pathology. Incipient clinical laboratory diagnostic of diatezis, chronicle difficulties in nutrition Self-directed learning	Case 5 Diarrhea	WHO programs in the integration of patient management at young ages Self-directed learning	GPs Role in the prevention of surgical diseases and complications Self-directed learning	Practice session The course of patients with wounds and wound infection in ambulance conditions	Practice session Earlier diagnosis of pre-cancerous and cancerous diseases in GPs practice	Practice session Rehabilitation of surgical patient in postoperative period in ambulance conditions. Prophylaxis of postoperative complications
Практическое занятие Practical lesson Иммунопрофилактика в работе ВОП. Immunoprophylaxis in work GPs	Самостаятельная работа по случаю Independent work on the occasion of	Практическое занятие Диспансеризация детей с фоновой патологией. Ранняя клинико-лабораторная диагностика аномалий конституции, хронических расстройств питания. Practical lesson. Preventive medical examination of children with baseline pathology. Incipient clinical laboratory diagnostic of diatezis, chronicle difficulties in nutrition	Практическое занятие Practical lesson Программы ВОЗ по интегрированному ведению больных детского возраста (ОРИ). WHO programs in the integration of patient management at young ages	Практические занятия Программы ВОЗ по интегрированному ведению больных детского возраста (ОКИ). Practical lesson WHO programs in the integration of patient management at young ages	Лекция Lection Особенности оказания помощи хирургическим больным в условиях ПМСП. The course of rendering aid to surgical patients in the case of PHC Лекция Lection Роль ВОП в профилактике хирургических заболеваний и их осложнений. GPs Role in the prevention of surgical diseases and complications	Практическое занятие Practical lesson Понятие «малой хирургии», тактика ВОП. Принципы диагностики и ведения больных с наиболее распространенными хирургическими заболеваниями в амбулаторных условиях. Concept of "minor surgery", GPs course. The principles of diagnosis and management of patients with the most common surgical diseases in ambulatory conditions	СРСП Тактика ведения больных с ранами и раневой инфекцией в амбулаторных условиях. The course of patients with wounds and wound infection in ambulance conditions	СРСП Ранняя диагностика предраковых и раковых заболеваний в практике ВОП. Earlier diagnosis of pre-cancerous and cancerous diseases in GPs practice	СРСП Реабилитация хирургических больных в послеоперационном периоде в амбулаторных условиях. Профилактика послеоперационных осложнений. Rehabilitation of surgical patient in postoperative period in ambulance conditions. Prophylaxis of postoperative complications
Practice session Immunoprophylaxis in work GPs	Self-directed learning on case	Practice session Preventive medical examination of children with baseline pathology. Incipient clinical laboratory diagnostic of diatezis, chronicle difficulties in nutrition	Practice session WHO programs in the integration of patient management at young ages	Practice session WHO programs in the integration of patient management at young ages	Lecture GPs Role in the prevention of surgical diseases and complications	Practice session Concept of "minor surgery", GPs course. The principles of diagnosis and management of patients with the most common surgical diseases in ambulatory conditions	The course of patients with wounds and wound infection in ambulance conditions Self-directed learning	Earlier diagnosis of pre-cancerous and cancerous diseases in GPs practice Self-directed learning	Rehabilitation of surgical patient in postoperative period in ambulance conditions. Prophylaxis of postoperative complications Self-directed learning
	Self-directed learning on case	Preventive medical examination of children with baseline pathology. Incipient clinical laboratory diagnostic of anemia, rachitis Self-directed learning	WHO programs in the integration of patient management at young ages Self-directed learning			Concept of "minor surgery", GPs course. The principles of diagnosis and management of patients with the most common surgical diseases in ambulatory conditions Self-directed learning			

28/12/2017	29/12/2017	01/01/2018	02/01/2018	03/01/2018	04/01/2018
Thursday	Friday	Monday	Tuesday	Wednesday	Thursday
40	**41**	**42**	**43**	**44**	**45**
Lecture Organization of ambulatory obstetric-gynecologic service. GPs role in safety of human and familty reproductive health	Case 6 Acute abdomen	Gravida management in ambulatory conditions. Maternity patient management in ambulatory conditions. Self-directed learning	Practice session Menstrual disorders in different age group. Tactics of GPs	Case 6 Acute abdomen	Family planning counseling Self-directed learning
Lecture Main principles of family planning counseling					
Практическое занятие Practical lesson Ведение беременной в амбулаторных условиях.Ведение родильницы в амбулаторных условиях. Gravida management in ambulatory conditions. Maternity patient management in ambulatory conditions.	Самостаятельная работа по случаю Independent work on the occasion of	Практическое занятие Practical lesson Воспалительные заболевания женской половой сферы в работе ВОП. Inflammatory diseases of female genitale sphere	СРСП Нарушения менструального цикла в различные возрастные периоды. Тактика ВОП. Menstrual disorders in different age group. Tactics of GPs	Практическое занятие Practical lesson Консультирование по вопросам планирования семьи. Family planning counseling	СРСП Участие в работе школ молодых родителей с написанием отчета. Participation in the school work of young parents with writing report
	Самостаятельная работа по случаю Independent work on the occasion of				
Gravida management in ambulatory conditions. Maternity patient management in ambulatory conditions. Self-directed learning	Self-directed learning on case	Practice session Inflammatory diseases of female genitale sphere	Menstrual disorders in different age group. Tactics of GPs Self-directed learning	Practice session Family planning counseling	Participation in the school work of young parents with writing report Self-directed learning
		Inflammatory diseases of female genitale sphere Self-directed learning			

ZSMU - Paediatric cases map

TIMETABLE TAME 2016 (autumn semester)										
Week 1										
	Monday		Tuesday		Wednesday		Thursday		Friday	
Group	8.30-10.10	12.00-15.45	8.30-10.10	13.15-16.15	8.30-11.30	12.00-15.45	8.30-10.10	13.15-14.55	8.30-10.10	12.00-15.45
1	Lecture Surgery (regional hospital)	Practical classes*	Practical classes*		Case 1 (Neonato-logy)	Practical classes*	Practical classes*	Lecture "Problems of prematurity. Transition at birth." (hospital №5)	Lecture "Respiratory distress syndrome" (aud.11)	Practical classes*
2		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
3		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
4		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
Week 2										
	Monday		Tuesday		Wednesday		Thursday		Friday	
Group	8.30-10.10	12.00-15.45	8.30-10.10	13.15-16.15	8.30-11.30	12.00-15.45	8.30-10.10	13.15-14.55	8.30-10.10	12.00-15.45
1	Lecture Oncology	Practical classes*	Practical classes*	Case 1 (Neonato-logy)	Case 2 (Growth)	Practical classes*	Practical classes*	Lecture "Normal growth in childhood. Hormonal and Nutritional causes of disordered growth"(hospital №5)	Lecture "Cystic fibrosis. Coeliac disease." (aud.11)	Practical classes*
2		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
3		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
4		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
Week 3										
	Monday		Tuesday		Wednesday		Thursday		Friday	
Group	8.30-10.10	12.00-15.45	8.30-10.10	13.15-16.15	8.30-11.30	12.00-15.45	8.30-10.10	13.15-14.55	8.30-10.10	12.00-15.45
1	Lecture Surgery (regional hospital)	Practical classes*	Practical classes*	Case 2 (Growth)	Case 3 (Difficulty in Breathing)	Practical classes*	Practical classes*	Lecture "Stridor and wheeze causes. Childhood asthma"(hospital №5)	Lecture "Pneumonia. Bronchiolitis"(aud.11)	Practical classes*
2		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
3		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
4		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*
Week 4										
	Monday		Tuesday		Wednesday		Thursday		Friday	
Group	8.30-10.10	12.00-15.45	8.30-10.10	13.15-16.15	8.30-11.30	12.00-15.45	8.30-10.10	13.15-14.55	8.30-10.10	12.00-15.45
1	Lecture Oncology	Practical classes*	Practical classes*	Case 3 (Difficulty in Breathing)	Case 4	Practical classes*	Practical classes*	ure "VSD, Fallot's tetralogy and er heart defects"(hospital №5)	ture "Presurgical management l surgical treatment of children with CHD"(aud.11)	Practical classes*
2		Practical classes*	Practical classes*		(Blue baby)	Practical classes*	Practical classes*			Practical classes*
3		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*

4		Practical classes*	Practical classes*			Practical classes*	Practical classes*	Lect oth		Lec anc	Practical classes*
Week 5											
	Monday		Tuesday		Wednesday		Thursday		Friday		
Group	8.30-10.10	12.00-15.45	8.30-10.10	13.15-16.15	8.30-11.30	12.00-15.45	8.30-10.10	13.15-14.55	8.30-10.10	12.00-15.45	
1	Lecture Surgery (regional hospital)	Practical classes*	Practical classes*	Case 4	Case 5 (Vomiting)	Practical classes*	Practical classes*	Lecture "Causes of vomiting, diarrhea, abdominal pain and distension"(hospital №5)	Lecture Infectious diseases (aud.11)	Practical classes*	
2		Practical classes*	Practical classes*	(Blue baby)		Practical classes*	Practical classes*			Practical classes*	
3		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*	
4		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*	
Week 6											
	Monday		Tuesday		Wednesday		Thursday		Friday		
Group	8.30-10.10	12.00-15.45	8.30-10.10	13.15-16.15	8.30-11.30	12.00-15.45	8.30-10.10	13.15-14.55	8.30-10.10	12.00-15.45	
1	Lecture Oncology	Practical classes*	Practical classes*	Case 5 (Vomiting)	Case 6 (Seizures)	Practical classes*	Practical classes*	Lecture "Types of seizure in childhood. Emergency management of seizures"(hospital №5)	Lecture "Meningitis and encephalitis"(aud.11)	Practical classes*	
2		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*	
3		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*	
4		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*	
Week 7											
	Monday		Tuesday		Wednesday		Thursday		Friday		
Group	8.30-10.10	12.00-15.45	8.30-10.10	13.15-16.15	8.30-11.30	12.00-15.45	8.30-10.10	13.15-14.55	8.30-10.10	12.00-15.45	
1	Lecture Surgery (regional hospital)	Practical classes*	Practical classes*	Case 6 (Seizures)		Practical classes*	Practical classes*	Lecture Anaestesiology (hospital №5)	Lecture Infectious diseases (aud.11)	Practical classes*	
2		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*	
3		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*	
4		Practical classes*	Practical classes*			Practical classes*	Practical classes*			Practical classes*	

Notes:

*- topics' names for practical session depends on the cycle. Exact cycle's list with dates will be available in August, 2016

ZSMU - New cases map

4p	01.09 - 10.09 Hygiene and Ecology Case #1. Acute abdominal syndrome (acute appendicitis)	11.09 - 16.09 Phthisiology Case #2. Mesenterial thrombosis	17.09 - 30.09 Internal Medicine Case #3. Acute intestinal obstruction	01.10 - 05.10 Infectious diseases Case #4. Acute abdominal syndrome (perforative ulcer)	06.10 - 14.10 Oncology Case #5. Bacterial complications after surgery	15.10 - 26.10 General practice family medicine Case #6. Pulmonary embolism	27.10 - 05.11 Social Medicine	06.11 - 12.11 Functional diagnostics	13.11 - 25.12 Pediatrics			**4p**
5p	01.09 - 18.09 Pediatric Surgery Case #1. Acute abdominal syndrome (acute appendicitis)	21.09 - 29.09 Oncology Case #2. Mesenterial thrombosis	30.09 - 06.10 Functional diagnostics Case #3. Acute intestinal obstruction	07.10 - 14.10 Surgery Case #4. Acute abdominal syndrome (perforative ulcer)	15.10 - 26.10 Hygiene and Ecology Case #5. Bacterial complications after surgery	27.10 - 05.11 General practice family medicine Case #6. Pulmonary embolism	06.11 - 12.11 Pediatric Critical Care Medicine	13.11 - 25.12 Pediatrics				**5p**
6p	01.09 - 10.09 General practice family medicine Case #1. Acute abdominal syndrome (acute appendicitis)	11.09 - 18.09 Cardiology Case #2. Mesenterial thrombosis	21.09 - 28.09 Surgery Case #3. Acute intestinal obstruction	29.09 - 16.10 Pediatric Surgery Case #4. Acute abdominal syndrome (perforative ulcer)	19.10 - 23.10 Pediatric Critical Care Medicine Case #5. Bacterial complications after surgery	26.10 - 29.10 Phthisiology Case #6. Pulmonary embolism	30.10 - 12.11 Internal Medicine	13.11 - 25.12 Pediatrics				**6p**
7p	01.09 - 22.09 Obstetrics Case #1. Acute abdominal syndrome (acute appendicitis)	23.09 - 02.10 General practice family medicine Case #2. Mesenterial thrombosis	05.10 - 16.10 Internal Medicine Case #3. Acute intestinal obstruction	19.10 - 05.11 Pediatric Surgery Case #4. Acute abdominal syndrome (perforative ulcer)	06.11 - 17.11 Hygiene and Ecology Case #5. Bacterial complications after surgery	Case #6. Pulmonary embolism	30.11 - 08.12 Oncology	09.12 -15.12 Pediatric Critical Care Medicine	16.12 - 21.12 Phthisiology	22.12 - 25.12 Cardiology		**7p**
8p	01.09 - 21.09 Children's Infectious diseases Case #1. Acute abdominal syndrome (acute appendicitis)	22.09 - 28.09 Functional diagnostics Case #2. Mesenterial thrombosis	29.09 - 20.10 Obstetrics Case #3. Acute intestinal obstruction	21.10 - 29.10 Oncology Case #4. Acute abdominal syndrome (perforative ulcer)	30.10 - 05.11 Pediatric Critical Care Medicine Case #5. Bacterial complications after surgery	06.11 - 25.11 Pediatric Surgery Case #6. Pulmonary embolism	26.11 - 03.12 Surgery	04.12 - 09.12 Phthisiology	10.12 - 21.12 Hygiene and Ecology	22.12 - 25.12 Social Medicine		**8p**
9p	01.09 - 14.09 Internal Medicine Case #1. Acute abdominal syndrome (acute appendicitis)	15.09 - 21.09 Functional diagnostics Case #2. Mesenterial thrombosis	22.09 - 12.10 Children's Infectious diseases Case #3. Acute intestinal obstruction	13.10 - 20.10 Cardiology Case #4. Acute abdominal syndrome (perforative ulcer)	21.10 - 11.11 Obstetrics Case #5. Bacterial complications after surgery	12.11 - 17.11 Phthisiology Case #6. Pulmonary embolism	18.11 - 27.11 Hygiene and Ecology	30.11 - 17.12 Pediatric Surgery	18.12 - 22.12 Infectious diseases	23.12 - 25.12 Oncology		**9p**

BSMU - Paediatric cases map

	1 week					2 week					3 week					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	01/09/2016	02/09/2016	05/09/2016	06/09/2016	07/09/2016	08/09/2016	09/09/2016	12/09/2016	13/09/2016	14/09/2016	15/09/2016	16/09/2016	19/09/2016	20/09/2016	21/09/2016	22/09/2016
	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday
	Differential diagnosis of the most common respiratory diseases in children. Emergency aid for basic emergency conditions.							Differential diagnosis of the most common diseases of the circulatory system in children. Emergency aid for basic emergency conditions.								
8:30 - 10:00	Differential diagnosis of cough syndrome in children.	Differential diagnosis of dyspnea syndrome. Pneumonia in children. Complications of pneumonia. Emergency care for acute respiratory failure in children.	Differential diagnosis of respiratory and skin allergies in children.	Case - pulmonology 1	Differential diagnosis of bronchial obstruction syndrome in children. Asthma. First aid at status asthmaticus.	Case - pulmonology 2	Differential diagnosis of bronchopulmonary dysplasia in children. Differential diagnosis of cyanosis syndrome and chronic cough. Chronic bronchopulmonary diseases in children. Differential diagnosis of hereditary and congenital diseases of bronchopulmonary system in children.	Differential diagnosis of fever of unknown origin, non-infectious rash. Systemic connective tissue diseases in children.	Differential diagnosis of systemic vasculitis in children.	Differential diagnosis of articular syndrome in children. Juvenile rheumatoid arthritis, reactive arthritis. Syndrome of joint hypermobility.	Case - cardiology 1	Differential diagnosis of cardiomegaly in children. Inflammatory heart diseases. Emergency care for acute heart failure.	Differential diagnosis of heart murmurs. Congenital and acquired heart diseases, cardiomyopathy, abnormalities of the chordal-valvular apparatus in children. The syndrome of heart failure.	Case - cardiology 2	Differential diagnosis of cardiac arrhythmias and conduction disorders in children. Emergency aid for paroxysmal rhythm disturbances and Adams-Stokes - syndrome.	Differential diagnosis of blood hypertension syndrome.
10:00 - 10:15																
10:15 - 12:00	Differential diagnosis of cough syndrome in children.	Differential diagnosis of dyspnea syndrome. Pneumonia in children. Complications of pneumonia. Emergency care for acute respiratory failure in children.	Differential diagnosis of respiratory and skin allergies in children.	Case - pulmonology 1	Differential diagnosis of bronchial obstruction syndrome in children. Asthma. First aid at status asthmaticus.	Case - pulmonology 2	Differential diagnosis of bronchopulmonary dysplasia in children. Differential diagnosis of cyanosis syndrome and chronic cough. Chronic bronchopulmonary diseases in children. Differential diagnosis of hereditary and congenital diseases of bronchopulmonary system in children.	Differential diagnosis of fever of unknown origin, non-infectious rash. Systemic connective tissue diseases in children.	Differential diagnosis of systemic vasculitis in children.	Differential diagnosis of articular syndrome in children. Juvenile rheumatoid arthritis, reactive arthritis. Syndrome of joint hypermobility.	Case - cardiology 1	Differential diagnosis of cardiomegaly in children. Inflammatory heart diseases. Emergency care for acute heart failure.	Differential diagnosis of heart murmurs. Congenital and acquired heart diseases, cardiomyopathy, abnormalities of the chordal-valvular apparatus in children. The syndrome of heart failure.	Case - cardiology 2	Differential diagnosis of cardiac arrhythmias and conduction disorders in children. Emergency aid for paroxysmal rhythm disturbances and Adams-Stokes - syndrome.	Differential diagnosis of blood hypertension syndrome.
12:00 - 12:15																
12:15 - 14:05	Differential diagnosis of cough syndrome in children.	Differential diagnosis of dyspnea syndrome. Pneumonia in children. Complications of pneumonia. Emergency care for acute respiratory failure in children.	Differential diagnosis of respiratory and skin allergies in children.	Self-directed learning.	Differential diagnosis of bronchial obstruction syndrome in children. Asthma. First aid at status asthmaticus.	Self-directed learning.	Differential diagnosis of bronchopulmonary dysplasia in children. Differential diagnosis of cyanosis syndrome and chronic cough. Chronic bronchopulmonary diseases in children. Differential diagnosis of hereditary and congenital diseases of bronchopulmonary system in children.	Differential diagnosis of fever of unknown origin, non-infectious rash. Systemic connective tissue diseases in children.	Differential diagnosis of systemic vasculitis in children.	Differential diagnosis of articular syndrome in children. Juvenile rheumatoid arthritis, reactive arthritis. Syndrome of joint hypermobility.	Self-directed learning.	Differential diagnosis of cardiomegaly in children. Inflammatory heart diseases. Emergency care for acute heart failure.	Differential diagnosis of heart murmurs. Congenital and acquired heart diseases, cardiomyopathy, abnormalities of the chordal-valvular apparatus in children. The syndrome of heart failure.	Self-directed learning.	Differential diagnosis of cardiac arrhythmias and conduction disorders in children. Emergency aid for paroxysmal rhythm disturbances and Adams-Stokes - syndrome.	Differential diagnosis of blood hypertension syndrome.
14:05 - 15:00	Self-directed learning.	Self-directed learning.	Self-directed learning.													Self-directed learning.

4 week				5 week					6 week					7 week				
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
23/09/2016	26/09/2016	27/09/2016	28/09/2016	29/09/2016	30/09/2016	03/10/2016	04/10/2016	05/10/2016	06/10/2016	07/10/2016	10/10/2016	11/10/2016	12/10/2016	13/10/2016	17/10/2016	18/10/2016	19/10/2016	20/10/2016
Friday	Monday	Tuesday	Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	Monday	Tuesday	Wendsday	Thursday
	Differential diagnosis of the most common digestive diseases in children. Emergency aid for basic emergency conditions.							Differential diagnosis of the most common diseases of the endocrine system and metabolism in children. Emergency aid for basic emergency conditions										Differential diagn
Differential diagnosis of the syndrome of pain in the heart region and arterial hypotension. Autonomous nervous system dysregulation in children and adolescents.	Differential diagnosis of abdominal pain syndrome and dyspeptic symptoms. Functional and organic diseases of the esophagus, stomach and duodenum in children.	Emergency aid for basic emergency conditions.	Differential diagnosis of the syndrome of regurgitation and cyclic vomiting. Functional gastrointestinal disorders in young children.	Differential diagnosis hepatolienal syndrome and portal hypertension. Hepatobiliary diseases in children. First aid in acute liver failure.	Differential diagnosis of malabsorption syndrome, pancreatic diseases in children.	Differential diagnosis of the syndrome of chronic constipation. Functional and organic bowel disease in children.	Case - gastroenterology 2	Differential diagnosis of goiter syndrome, hypo and hyperthyroidism.	Differential diagnosis hypothalamic-pituitary diseases in children.	Differential diagnosis of the syndrome of premature puberty. Disorders of sexual development in children. Differential diagnosis of obesity in children. Metabolic syndrome.	Differential diagnosis of protein-energy and vitamins deficiency in children. Hypo- and hyperparathyroidism syndrome.	Case - growth 1	Differential diagnostics of diseases of the adrenal glands.	Case - growth 2	Differential diagnosis of the syndrome of hyperglycemia. Diabetes mellitus in children.	Differential diagnosis of acute and chronic complications of diabetes in children. The syndrome of hypoglycemia.	Preterm children and children born with low birth weight.	Differential diagnosis of perinatal hypoxic lesions and traumatic injuries of the nervous system in newborns.
Differential diagnosis of the syndrome of pain in the heart region and arterial hypotension. Autonomous nervous system dysregulation in children and adolescents.	Differential diagnosis of abdominal pain syndrome and dyspeptic symptoms. Functional and organic diseases of the esophagus, stomach and duodenum in children.	Case - gastroenterology 1	Differential diagnosis of the syndrome of regurgitation and cyclic vomiting. Functional gastrointestinal disorders in young children.	Differential diagnosis hepatolienal syndrome and portal hypertension. Hepatobiliary diseases in children. First aid in acute liver failure.	Differential diagnosis of malabsorption syndrome, pancreatic diseases in children.	Differential diagnosis of the syndrome of chronic constipation. Functional and organic bowel disease in children.	Case - gastroenterology 2	Differential diagnosis of goiter syndrome, hypo and hyperthyroidism.	Differential diagnosis hypothalamic-pituitary diseases in children.	Differential diagnosis of the syndrome of premature puberty. Disorders of sexual development in children. Differential diagnosis of obesity in children. Metabolic syndrome.	Differential diagnosis of protein-energy and vitamins deficiency in children. Hypo- and hyperparathyroidism syndrome.	Case - growth 1	Differential diagnostics of diseases of the adrenal glands.	Case - growth 2	Differential diagnosis of the syndrome of hyperglycemia. Diabetes mellitus in children.	Differential diagnosis of acute and chronic complications of diabetes in children. The syndrome of hypoglycemia.	Preterm children and children born with low birth weight.	Differential diagnosis of perinatal hypoxic lesions and traumatic injuries of the nervous system in newborns.
Differential diagnosis of the syndrome of pain in the heart region and arterial hypotension. Autonomous nervous system dysregulation in children and adolescents.	Differential diagnosis of abdominal pain syndrome and dyspeptic symptoms. Functional and organic diseases of the esophagus, stomach and duodenum in children.	Self-directed learning.	Differential diagnosis of the syndrome of regurgitation and cyclic vomiting. Functional gastrointestinal disorders in young children.	Differential diagnosis hepatolienal syndrome and portal hypertension. Hepatobiliary diseases in children. First aid in acute liver failure.	Differential diagnosis of malabsorption syndrome, pancreatic diseases in children.	Differential diagnosis of the syndrome of chronic constipation. Functional and organic bowel disease in children.	Self-directed learning.	Differential diagnosis of goiter syndrome, hypo and hyperthyroidism.	Differential diagnosis hypothalamic-pituitary diseases in children.	Differential diagnosis of the syndrome of premature puberty. Disorders of sexual development in children. Differential diagnosis of obesity in children. Metabolic syndrome.	Differential diagnosis of protein-energy and vitamins deficiency in children. Hypo- and hyperparathyroidism syndrome.	Self-directed learning.	Differential diagnostics of diseases of the adrenal glands.	Self-directed learning.	Differential diagnosis of the syndrome of hyperglycemia. Diabetes mellitus in children.	Differential diagnosis of acute and chronic complications of diabetes in children. The syndrome of hypoglycemia.	Preterm children and children born with low birth weight.	Differential diagnosis of perinatal hypoxic lesions and traumatic injuries of the nervous system in newborns.
Self-directed learning.	Self-directed learning.		Self-directed learning.		Self-directed learning.	Self-directed learning.		Self-directed learning.	Self-directed learning.	Self-directed learning.	Self-directed learning.		Self-directed learning.		Self-directed learning.	Self-directed learning.	Self-directed learning.	Self-directed learning.

8 week					9 week						
36	37	38	39	40	41	42	43	44	45	44	
21/10/2016	24/10/2016	25/10/2016	26/10/2016	27/10/2016	28/10/2016	31/10/2016	01/11/2016	02/11/2016	03/11/2016	04/11/2016	
Friday	Monday	Tuesday	Wendsday	Thursday	Friday	Monday	Tuesday	Wendsday	Thursday	Friday	
iosis of the most common diseases of children neonatal age.							Pediatric infectious disease				
Differential diagnosis of respiratory distress syndrome in infants.	Differential diagnosis of hemorrhagic syndrome in newborns.	Case - neonatology 1	Differential diagnosis of neonatal jaundice.	Case - neonatology 1	Differential diagnosis of inflammatory diseases of the skin and subcutaneous tissue in infants. Omphalitis of newborns. Sepsis of newborns.	Differential diagnosis of intrauterine (TORCH) infections.	Case – infection 1	Differential diagnosis of HIV / AIDS in children.	Case – infection 2	The differential diagnosis between diseases with exanthema syndrome	
Differential diagnosis of respiratory distress syndrome in infants.	Differential diagnosis of hemorrhagic syndrome in newborns.	Case - neonatology 1	Differential diagnosis of neonatal jaundice.	Case - neonatology 1	Differential diagnosis of inflammatory diseases of the skin and subcutaneous tissue in infants. Omphalitis of newborns. Sepsis of newborns.	Differential diagnosis of intrauterine (TORCH) infections.	Case – infection 1	Differential diagnosis of HIV / AIDS in children.	Case – infection 2	The differential diagnosis between diseases with exanthema syndrome	
Differential diagnosis of respiratory distress syndrome in infants.	Differential diagnosis of hemorrhagic syndrome in newborns.	Self-directed learning.	Differential diagnosis of neonatal jaundice.	Self-directed learning.	Differential diagnosis of inflammatory diseases of the skin and subcutaneous tissue in infants. Omphalitis of newborns. Sepsis of newborns.	Differential diagnosis of intrauterine (TORCH) infections.	Self-directed learning.	Differential diagnosis of HIV / AIDS in children.	Self-directed learning.	The differential diagnosis between diseases with exanthema syndrome	
Self-directed learning.	Self-directed learning.		Self-directed learning.		Self-directed learning.	Self-directed learning.		Self-directed learning.		Self-directed learning.	

BSMU - new cases map

	1 week						2 week					3 week					4 week					5 week					6 week					7 week					8 week					9 week				
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Dates	01/09/2017	04/09/2017	05/09/2017	06/09/2017	07/09/2017	08/09/2017	11/09/2017	12/09/2017	13/09/2017	14/09/2017	15/09/2017	18/09/2017	19/09/2017	20/09/2017	21/09/2017	22/09/2017	25/09/2017	26/09/2017	27/09/2017	28/09/2017	29/09/2017	02/10/2017	03/10/2017	04/10/2017	05/10/2017	09/10/2017	10/10/2017	11/10/2017	12/10/2017	13/10/2017	17/10/2017	18/10/2017	19/10/2017	20/10/2017	23/10/2017	24/10/2017	25/10/2017	26/10/2017	27/10/2017	30/10/2017	31/10/2017	01/11/2017	02/11/2017	03/11/2017	06/11/2017
Days of week	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday
	Internal medicine																														Internal medicine														
module	Cardiology and rheumatology											surgery														Endocrinology and haematology							Infection diseases										pulmonology and phthysiology		
9:00 - 10:30	Practice session	Practice session	Practice session	Practice session	Case - cardiology 1 - Cardialgia	Case - cardiology 2 - Cardialgia	Practice session	Practice session	Practice session	Practice session	Case - rheumatology 1 - fever and rash	Case - rheumatology 2 - fever and rash	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Case - endocrinology 1 - Polyuria	Case - endocrinology 2 - Polyuria	Practice session	Practice session	Practice session	Case - haematology 1 - Pallor of skin	Case - haematology 2 - Pallor of skin	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Case - infection 1 - Diarrhea	Case - infection 2 - Diarrhea	Practice session	Practice session	Practice session	Case - pulmonology 1 - Dyspnea, cough	Case - pulmonology 2 - Dyspnea, cough
10:30 - 10:45																																												
10:45 - 12:00	Practice session	Practice session	Practice session	Practice session	Case - cardiology 1 - Cardialgia	Case - cardiology 2 - Cardialgia	Practice session	Practice session	Practice session	Practice session	Case - rheumatology 1 - fever and rash	Case - rheumatology 2 - fever and rash	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Case - endocrinology 1 - Polyuria	Case - endocrinology 2 - Polyuria	Practice session	Practice session	Practice session	Case - haematology 1 - Pallor of skin	Case - haematology 2 - Pallor of skin	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Case - infection 1 - Diarrhea	Case - infection 2 - Diarrhea	Practice session	Practice session	Practice session	Case - pulmonology 1 - Dyspnea, cough	Case - pulmonology 2 - Dyspnea, cough
12:45 - 13:20																																												
13:20 - 14:05	Practice session	Practice session	Practice session	Practice session	Self-directed learning.	Self-directed learning.	Practice session	Practice session	Practice session	Practice session	Self-directed learning.	Self-directed learning.	Practice session	Practice session	Self-directed learning.	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Self-directed learning.	Self-directed learning.	Practice session	Practice session	Self-directed learning.	Self-directed learning.	Self-directed learning.	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Practice session	Self-directed learning.	Self-directed learning.	Practice session	Practice session	Practice session	Self-directed learning.	Self-directed learning.
14:05 - 15:00	Self-directed learning.	Self-directed learning.	Self-directed learning.	Self-directed learning.			Self-directed learning.		Self-directed learning.	Self-directed learning.							Self-directed learning.																		Self-directed learning.	Self-directed learning.	Self-directed learning.	Self-directed learning.	Self-directed learning.	Self-directed learning.	Self-directed learning.			Self-directed learning.	Self-directed learning.	Self-directed learning.			

Hanoi Medical University curriculum mapping

Paediatric cases

week	***44***						***45***						
day	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***
dates	1	2	3	4	5	6	7	8	9	10	11	12	13
days of week	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit	Neonatology and emergency						Pathology and treatment of Respiratory diseases						
07.00-07.50	Lecture	Case 1: Neonatal (Day 1)	Case 1: Neonatal (Day 2)	Practice session			Lecture	Case 2: Difficulty in breathing (Day 1)	Case 2: Difficulty in breathing (Day 2)	Practice session	Internship		
08.00-08.50													
09.00-09.50													
10.00-10.50													
13.30-14.20	Practice session	Practice session	Practice session	Summary and feedback			Practice session	Practice session	Practice session	Summary session	Summary and feedback		
14.30-15.20													
15.30-16.20													
16.30-17.20													

week	***46***	***47***

day	***14***	***15***	***16***	***17***	***18***	***19***	***20***	***21***	***22***	***23***	***24***	***25***	***26***	***27***
dates	14	15	16	17	18	19	20	21	22	23	24	25	26	27
days of week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit	Pathology and treatment of Digestive diseases							Development and Mental health						
07.00-07.50	Lecture	Case 3: Vomitting (Day 1)	Case 3: Vomitting (Day 2)	Practice session	Internship			Lecture	Case 4: Growth (Day 1)	Case 4: Growth (Day 2	Practice session	Internship		
08.00-08.50														
09.00-09.50														
10.00-10.50														
13.30-14.20	Practice session	Practice session	Practice session	Summary session	Summary and feedback			Practice session	Practice session	Practice session	Summary session	Summary and feedback		
14.30-15.20														
15.30-16.20														
16.30-17.20														

week	48						
day	***42***	***43***	***44***	***45***	***46***	***47***	***48***
dates	11	12	13	14	15	16	17

days of week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit							
07.00-07.50	**Evaluation and Report**						
08.00-08.50							
09.00-09.50							
10.00-10.50							
13.30-14.20							
14.30-15.20							
15.30-16.20							
16.30-17.20							

Hanoi Medical University new cases

month	**February, 2018**																												**March, 2018**			
week																																
day	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*21*	*22*	*23*	*24*	*25*	*26*	*27*	*28*	*29*	*30*	*31*	*32*
dates	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	1	2	3	4
days of week	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit																																
07.00-07.50	Lecture	Lecture			Lecture	Lecture	Lecture	Lecture	Lecture			Lecture	Case 1 (Viral Hepatitis)	Lecture	Case 2 (Dengue hemorhagic fever)	Summary session			Lecture	Case 3 (HIV)	Lecture	Case 4 (Meningitis and endophthalmitis caused by Streptococcus suis)	Summary session			Lecture	Case 5 (Tetanus)	Lecture	Case 6 (Typhoid)	Summary session		
08.00-08.50																																
09.00-09.50																																
10.00-10.50																																
13.30-14.20	Lecture	Lecture			Lecture	Lecture	Lecture	Lecture	Lecture			Practice session	Practice session	Practice session	Practice session	Summary and feedback			Practice session	Practice session	Practice session	Practice session	Summary and feedback			Practice session	Practice session	Practice session	Practice session	Summary and feedback		
14.30-15.20																																
15.30-16.20																																
16.30-17.20																																

Hue UMP curriculum mapping

1.1. Timetables for Integration of 6 pediatric cases to current Basic Pediatrics module (P2) for year fourth GP students from December, 2016 to January 2017

week	***52th/2016***						***1st/2017***						
day	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***
dates	1	2	3	4	5	6	7	8	9	10	11	12	13
days of week	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit	Neonatalogy and emergency						Pathology and treatment of Respiratory diseases						
07.00-07.50	Lecture	Case 1: Neonatal (Day 1)	Case 1: Neonatal (Day 2)	Practice session			Lecture	Case 2: Difficulty in breathing (Day 1)	Case 2: Difficulty in breathing (Day 2)	Practice session	Internship		
08.00-08.50													
09.00-09.50													
10.00-10.50													
13.30-14.20	Practice session	Practice session	Practice session	Summary and feedback			Practice session	Practice session	Practice session	Summary session	Summary and feedback		
14.30-15.20													
15.30-16.20													
16.30-17.20													

week	***2nd/2017***							***3rd/2017***						
day	***14***	***15***	***16***	***17***	***18***	***19***	***20***	***21***	***22***	***23***	***24***	***25***	***26***	***27***

dates	14	15	16	17	18	19	20	21	22	23	24	25	26	27
days of week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit	Pathology and treatment of Digestive diseases							Development and Mental health						
07.00-07.50	Lecture	Case 3: Vomitting (Day 1)	Case 3: Vomitting (Day 2)	Practice session	Internship			Lecture	Case 4: Growth (Day 1)	Case 4: Growth (Day 2	Practice session	Internship		
08.00-08.50														
09.00-09.50														
10.00-10.50														
13.30-14.20	Practice session	Practice session	Practice session	Summary session	Summary and feedback			Practice session	Practice session	Practice session	Summary session	Summary and feedback		
14.30-15.20														
15.30-16.20														
16.30-17.20														

week	4th/2017						
day	***42***	***43***	***44***	***45***	***46***	***47***	***48***
dates	11	12	13	14	15	16	17
days of week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Unit			
07.00-07.50	**Evaluation and Report**		
08.00-08.50			
09.00-09.50			
10.00-10.50			
13.30-14.20			
14.30-15.20			
15.30-16.20			
16.30-17.20			

Hue UMP curriculum mapping

1.1. Timetables for Integration of 6 new cases (Internal medicine, OB&GYN, and Surgery) to current curiculum for year fourth GP students from October to November 2018

week	***44th/2018***						***45th/2018***						
day	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***
dates	1	2	3	4	5	6	7	8	9	10	11	12	13
days of week	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit	Clinical Internal medicine						Clinical Internal medicine						
07.00-07.50	Lecture	Case 1: Diabetes melitus (Day 1)	Case 1: Diabetes melitus (Day 2)	Practice session			Lecture	Case 2: Chest pain (Day 1)	Case 2: Chest pain (Day 2)	Practice session	Internship		
08.00-08.50													
09.00-09.50													
10.00-10.50													
13.30-14.20	Practice session	Practice session	Practice session	Summary and feedback			Practice session	Practice session	Practice session	Summary session	Summary and feedback		
14.30-15.20													
15.30-16.20													
16.30-17.20													

week	46th/2018							47th/2018						
day	14	15	16	17	18	19	20	21	22	23	24	25	26	2
dates	14	15	16	17	18	19	20	21	22	23	24	25	26	2
days of week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sun
Unit	Clinical OB&GYN							Clinical OB&GYN						
07.00-07.50	Lecture	Case 3: Postpartum hemorrhage (Day 1)	Case 3: Postpartum hemorrhage (Day 2)	Practice session	Internship			Lecture	Case 4: Preeclamsia (Day 1)	Case 4: Preeclamsia (Day 2	Practice session	Internship		
08.00-08.50														
09.00-09.50														
10.00-10.50														
13.30-14.20	Practice session	Practice session	Practice session	Summary session	Summary and feedback			Practice session	Practice session	Practice session	Summary session	Summary and feedback		
14.30-15.20														
15.30-16.20														
16.30-17.20														

week	48th/2018							49th/2018						
day	14	15	16	17	18	19	20	21	22	23	24	25	26	27
dates	14	15	16	17	18	19	20	21	22	23	24	25	26	27

days of week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit	Clinical Surgery							Clinical Surgery						
07.00-07.50	Lecture	Case 5: Acute appendicitis (Day 1)	Case 5: Acute appendicitis (Day 2)	Practice session	Internship			Lecture	Case 6: Perforated gastric or duodenal ulcer (Day 1)	Case 6: Perforated gastric or duodenal ulcer (Day 2	Practice session	Internship		
08.00-08.50														
09.00-09.50														
10.00-10.50														
13.30-14.20	Practice session	Practice session	Practice session	Summary session	Summary and feedback			Practice session	Practice session	Practice session	Summary session	Summary and feedback		
14.30-15.20														
15.30-16.20														
16.30-17.20														

week	50th/2018						
day	***42***	***43***	***44***	***45***	***46***	***47***	***48***
dates	11	12	13	14	15	16	17
days of week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Unit							

07.00-07.50	Evaluation and Report		
08.00-08.50			
09.00-09.50			
10.00-10.50			
13.30-14.20			
14.30-15.20			
15.30-16.20			
16.30-17.20			