

Ministry of Education and Science of Ukraine
V. N. Karazin Kharkiv National University

**ORGANIZATION OF VARIOUS TYPES OF TREATMENT
AND PREVENTIVE ASSISTANCE TO THE POPULATION.
OUTPATIENT, INPATIENT AND AMBULANCE**

Methodical recommendations
to prepare 3rd–4th year students for independent work
for the discipline of «Social Medicine, organization of health care»

Electronic resource

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О 72 **Organization** of various types of treatment and preventive assistance to the population. Outpatient, inpatient and ambulance: methodical recommendations to prepare 3rd–4th year students for independent work for the discipline of «Social Medicine, organization of health care» [Electronic resource] / compilers : O V. Bobrova, N. H. Tsukor. – Kharkiv : V. N. Karazin KhNU, 2024. – (PDF 33 p.)

The methodical recommendations set out the main aspects of the organization of various types of treatment and preventive assistance to the population. Outpatient, inpatient and ambulance. For 3rd–4th year students to prepare for independent work in the discipline «Social Medicine, organization of health care». Methodical recommendations contain a list of tasks for performing situational tasks, test questions, a list of recommended and additional literature from the main sections of the course.

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CONTENT

1.	Introduction.....	4
2.	Recommendations for studying the topic.....	5
3.	Basic theoretical material for preparation for the lesson.....	7
4.	Medical and preventive care.	8
4.1.	Types of medical and preventive care.....	8
4.2.	Key principles of management of medical and preventive care.....	9
5.	Outpatient-polyclinic care.....	9
5.1.	Main tasks of a municipal polyclinic.....	10
5.2.	Main areas of a polyclinic's activities.....	10
5.3.	Structure of a municipal polyclinic.....	11
6.	Dispensary observation (postclinical).....	12
7.	Inpatient (hospital) care.....	13
7.1.	Types of the hospital care. Hospital tasks and functions.....	14
7.2.	Areas of responsibility of the head of department, resident physician	15
7.3.	Types of hospital-replacing facilities.....	16
8.	Modern strategies in telemedicine, tasks and application.....	20
9.	Test questions for self-control	22
10.	Situational task	25
11.	Appendix 1.....	26
12.	Appendix 2.....	28
13.	Appendix 3.....	29
14.	References	30

INTRODUCTION

The curriculum of the discipline “Social medicine, organization of health care” is developed in accordance with the Educational Program of specialists’ training at the second (master's) degree for 222 "Medicine" Specialty in the field of knowledge 22 “Healthcare”.

Characteristics of the academic discipline "Social medicine, organization of health care"

Name indicators	Field of knowledge, direction of training, educational and qualification level	Characteristics of the academic discipline full-time education
3 rd -4 th	Specialty: 222 "Medicine"	Normative
		A year of training
The total number of hours is 180	Specialty: 222 "Medicine"	3 rd -4 th
		Semester
The total number of hours is 180	Specialty: 222 "Medicine"	3 rd -4 th
		Lectures
	Educational and qualification level: master's degree Qualification: doctor	30 hours
		Practical training
		60 hours
		Independent work
		90 hours
		Type of control
		Differentiated scoring

The purpose of teaching the discipline

The purpose of the "Social medicine, organization of health care" discipline is to provide sufficient knowledge of research, analysis and evaluation of public health indicators, the health care system and to improve the organization of medical care and public health structure for medical students.

RECOMMENDATIONS FOR STUDYING THE TOPIC

Lesson goal:

To study targets and main tasks of inpatient facilities, their units and functions. To know procedure for referral of patients to all type of inpatient facilities. To be able to fill in basic documentation used for accounting of the hospital. To determine and analyze of hospital performance indicators.

As a result of self-training, the student must know:

- The content and organization of work of the intern and chief physician
- Factors affecting the efficient use of hospital beds and the effectiveness of hospitals.
- The main documentation used to record the work of the hospital, the content and procedure for its completion.
- Types of hospital replacement institutions.
- The structure of day patient facilities.
- Functions of day patient facilities and a hospital at home.
- Basic documentation of the day patient facilities and hospital at home, filling it.

As a result of studying the subject, the student should be able to:

- calculate and analyze the effectiveness of the hospital according to the report of the medical institution (f. No. 20).
- know the procedure for referring patients to day care and in-patient care at home.
- calculate and analyze performance indicators of a day hospital and a hospital at home.
- complete the medical records used for analyze performance indicators of inpatient facilities
- analyze and effective use of the knowledge and skills.
- develop of measures to improve of inpatient facilities, day patient facilities and a hospital at home.

Questions for self-preparation of students for practical training:

1. The advantages of hospital-replacing forms of medical care.
2. The main forms of hospital-replacing technologies.
3. Contraindications for hospitalization in a day hospital.
4. Pros and cons of the hospital at home.
5. Characteristics of one-day hospitals.
6. Other hospital-replacing forms of medical care.
7. Indicators and analysis of hospital-replacing forms of medical care.

Methodical support:

1. Methodical literature: workbook for students (basic training);
2. Presentation materials;
3. Samples of documents: - Inpatient medical record (f.003/o); Statistical card of patient discharged from hospital (f. 066/o); Patient's informed voluntary consent to conduction of diagnosis, treatment, and to conduction of operation and anesthetization (f. 003-6/o) Medical prescription sheet (f. 003-4/o) Extract from the medical card of an outpatient (inpatient) (f. 027/o) Register of patients receiving in-patient (f. 001/o); Protocol of patho-anatomical investigation (f. 013/o);
3. Tables and formulas for calculating the performance indicators of an inpatient facilities;
4. Test tasks;
5. Lecture course.

BASIC THEORETICAL MATERIAL FOR PREPARATION TO THE LESSON

Inpatient facilities of various levels play a vital role in health service delivery systems across the Ukraine. Many countries struggle to improve hospital planning and management, at both the facility and health system level. Facility-level challenges include weak management, inefficiencies, high costs and poor clinical governance, quality and safety. At the system level, challenges include limited integration and coordination with other hospitals and primary health care, inadequate feedback mechanisms and procedures, perverse financial incentives and weak regulation. These challenges occur against the backdrop of rapid population ageing, the predominance of chronic health conditions, financial and service pressures, new medical technologies and pharmaceuticals, growing provision of private care and increasing public expectations. Given the importance of an inpatient facilities and the range of challenges, improving hospital planning and management is a critical issue for our country. Progress towards universal health coverage requires a whole-of-system approach, linking hospitals to other parts of the health system, to ensure equitable delivery of integrated, people-centered services, with due reorientation towards primary care.

Hospitals and healthcare organizations are today operating in an extremely competitive environment, with increasing pressure to improve quality and reduce costs. In responding to this dynamic situation, transformation of organization requires the will to organize delivery around the needs of patients.

MEDICAL AND PREVENTIVE CARE

Medical and preventive care is a set of activities aimed at prevention of morbidity, early diagnosis, medical aid for individuals with acute and chronic conditions, rehabilitation of patients and disabled individuals with the intent of extending their active longevity.

Types of medical and preventive care by special aspects of its provision:

- **Outpatient-polyclinic care**. Provided to the persons for periodic medical supervision, treatment at a pre-hospital stage and conducting of preventive actions. Patients get it by applying directly to out-patient-clinic or at home.
- **Inpatient care**. Provided to the patients for permanent medical supervision (observation). If necessary use of complicated methods of examination and intensive treatment, and also surgical interventions that cannot be performed on an out-patient basis.
- **Emergency medical aid** - is a medical care by the sick with emergency (urgent) diseases with a severe current and injured with accidents. It is provided institutions of emergency medical aid in the fullest possible volume at call place, during transportation and hospitalization.
- **Sanatorium and resort care** - medical care, which is carried out as a preventive, curative and rehabilitative purposes based on the use of natural healing factors in the conditions of stay in the resort, in medical and health areas, sanatorium organizations (balneological, climatic, mud hospital, sanatorium).

Types of medical care, depending on complexity of its provision

(according to foundations of the «Healthcare» Act of Ukraine (1992):

- **Primary health care** - includes consultation with a general practitioner (family doctor), diagnosis and treatment of main, the most prevalent diseases, referring patients for special aid, conducting prevention activities.
- **Secondary (specialized) care**- includes qualified consulting, diagnosis, prevention and treatment by medical specialists.

- **Tertiary (highly specialized)** is provided by doctors (possibly in groups) with adequate training in the area of diseases that are difficult to diagnose and treat, as well as rarely encountered diseases.

- **Palliative care**-is provided at the last stages of incurable diseases, includes a set of activities aimed at easing patients' physical and emotional suffering, as well as providing psychosocial and moral support to members of their families.

- **Immediate care (rescue emergency)** - is a medical aid to patients during sudden diseases with severe course, and to accident victims, aimed at saving and preservation of life of an individual in case of an emergency, as well as minimizing the consequences of such emergencies for one's health.

Key principles of management of medical and preventive care:

1. **Availability (accessibility)** of medical care;
2. **High quality** of health services;
3. **Responsibility** of medical workers;
4. **Sequence** and continuity of the out-patient and **hospital care**;
5. **Unity** of the medical and preventive care;
6. Observance of patient rights;
7. Independence of the nursing staff (exception of restrictions defined ethical and deontological regulations, principles).

OUTPATIENT-POLYCLINIC CARE

Outpatient-polyclinic care is one of the most widespread and socially significant types of medical aid to the population, being a key aspect of public medical maintenance.

It is provided in health and prevention institutions of outpatient-polyclinic type, among which the key role belongs to outpatient facilities and polyclinics.

Approximately 80% of patients begin and conclude their treatment in such institutions, and only 20% of patients are subject to hospitalization to be provided with inpatient medical and preventive care.

□ **Outpatient facility (ambulant clinic)** – is establishment that provides medical care to the patients on one or several basic medical specialties.

□ **Polyclinic** is provides medical care on many specialties.

Main tasks of a municipal polyclinic:

1. Provides of primary and secondary (specialized) medical care in out-patient clinic and at home;
2. Carrying out of dispensary observation the different contingents;
3. Carrying out of disability examination;
4. The organization and carrying out of preventive control, including and antiepidemic control;
5. Hygienic education of the population;
6. Studying of population health indicators

Main areas of a polyclinic's activities:

1. *Prevention work, including anti-epidemic efforts.*
 - vaccination;
 - hygienic education of the population;
 - dispensary observation of healthy individuals and those with risk factors;
 - sanitary and anti-epidemic efforts.
 - timely detection of infectious diseases and informing laboratory centers about an infectious patient;
 - managing patients' isolation, observing patients who are allowed contact and convalescing ones;
 - recreation and treatment efforts with the intent of preventing exacerbation and complication of diseases;
2. *Diagnostic and treatment work*
 - early detection of diseases and comprehensive timely examination of patients;
 - treatment of patients in a polyclinic and at home, including by way of day patient facilities and through home care, using an adequate set of rehabilitation treatment methods;

- providing emergency medical aid in case of a sudden deterioration of a patient's health condition;
- examination, screening and referring of patients for hospitalization;
- screening and examination of patients for sanatorium and resort treatment;
- conducting expert evaluation of temporary loss of capacity to work;
- screening and referring of patients with signs of stable loss of working capacity, to disability evaluation boards.

3. Organizational and methodological work

- analysis of public health status;
- evaluation of performance of a polyclinic, its departments and personnel;
- practical implementation of new effective forms and methods of prevention, diagnosis and treatment of diseases, as well as organizational forms and methods of work.

Structure of a municipal polyclinic:

- Administration:
 - chief doctor (if the clinic is independent);
 - head of the clinic (in each clinic with the number of doctors up to 20) - if the clinic is a structural unit of the joint hospital;
 - Deputy chief doctor for outpatient work (if there are more than 20 outpatient doctors, instead of the position the head of the outpatient clinic) - if the outpatient clinic is a structural unit of the combined hospital;
 - Deputy chief doctor for medical and social examination of temporary disability (with the number of outpatient doctors not less than 25).
- Management personnel also include:
 - department heads;
 - deputy chief doctor or manager of administrative work;
 - the chief nurse of the clinic (in independent clinics with a number of doctors of at least 30);
 - senior nurses of departments.
- Registration office**

□ **Departments:**

- Therapeutic-and-prophylactic (offices of 18-20 specialties)
- Preventive departments
- Diagnostic (X-ray, ultrasonic, functional diagnostics, endoscopy, laboratories)
- Auxiliary (therapeutic physical training, physiotherapy, reflexology)

□ **Others offices:**

- The Office of pre-doctor appointment (reception)
- The Office of rescue emergency care
- The Day hospital (clinic)
- The Office of the record and the health statistics

In outpatient clinic family doctor should examine 5 patients per 1 hour. At home: in urban area – 30 min for 1 patient, in rural area – 40 min for 1 patient.

DISPENSARY OBSERVATION (POSTCLINICAL)

Dispensary observation (postclinical) is the integrated system providing all-round, throughout the life, dynamic observation of health of each person (healthy or sick) and environmental monitoring in which it is.

Dispensary observation tasks:

- Keep of Health of the healthy people;
- Early detecting of risk factors and initial forms of diseases;
- Complete examination and treatment of patients, improvement of people of group of risk;
- Reducing morbidity with temporary inability and disability;
- Labor productivity increase.

Dispensary observation stages:

1. **Preparatory stage** - active detection, formation and record of contingents for dispensary observation;

2. **Comprehensive (Complex) examination** of persons who are subject to clinical examination;

3. Active **dynamic monitoring** and recovery of respective contingents;

4. An assessment of completeness, quality and efficiency of preventive medical examination.

According to the assessment of the state of health in the framework of the medical examination, people are divided into the corresponding **health groups**.

1. Healthy (0-1 cases of acute respiratory infections in 1 year).

2. Almost healthy (persons with risk factors, premorbid conditions, who suffer from no more than 2-3 cases of acute respiratory infections in 1 year).

3. Compensated patients (persons with chronic diseases without exacerbations in remission, 4 or more cases of acute respiratory infections in 1 year).

4. Subcompensated patients (persons with exacerbations of chronic diseases within 1 year).

5. Decompensated patients (chronic patients in the stage of decompensation).

After determining the health group for each examined patient, the doctor must develop an individual plan of preventive, therapeutic and health-improving measures, including medical recommendations on the regimen of work, rest, nutrition, and, if indicated, medical treatment, massage, physiotherapy exercises, employment, etc.

Healthy and practically healthy are transferred for accounting and observation to the polyclinic's prophylaxis department, and patients are subject to obligatory dynamic monitoring by specialist doctors of the appropriate profile.

INPATIENT (HOSPITAL) CARE

Inpatient (hospital) care is provided to patients requiring long-term (constant/permanent) follow-up, using of complicated methods of examination and intensive treatment, and also operative interventions that cannot be performed in out-patient conditions.

Patients can be treated in the hospitals with various pathological conditions or with one certain pathology.

Types of the hospital care:

1. Total health care.
2. Specialized care.

Hospitalization (admission) is carried out by doctor's referral of out-patient clinics and ambulance service, transfer from another hospital, and also at the direct address to the doctor in the presence of emergency indications.

Hospital tasks:

1. Providing of the specialized round-the-clock stationary care in sufficient volume
2. Approbation and introduction of modern methods of diagnostics, treatment and prevention.
3. Comprehensive rehabilitation treatment
4. Disability expertise
5. Hygienic education of the population

Hospital functions:

1. Medical rehabilitation
2. Preventive (prevention of infectious diseases, preventing the transition of acute diseases to chronic, reducing the incidence of temporary inability and disability)
3. Educational (training of medical personnel and advanced training of medical workers)
4. Research

Indications for referring the patient to a hospital:

1. The presence of emergency or emergency indications.
2. The need for complex research.
3. The use of intensive methods of treatment.
4. Social and living conditions of the patient.

The structural units of the hospital:

1. Reception department.
2. Medical departments.
3. Auxiliary diagnostic units.
4. Administrative divisions.

In charge of inpatient department is a head of department.

Areas of responsibility of the head of department:

- management of admission of patients to the department;
 - examination of patients admitted to the department;
 - review of justification of assigned treatment;
 - regular patient rounds with attending physician;
 - control for timely and comprehensive examination of patients;
 - facilitating consultation of patients by various specialists;
 - participation in anatomical pathology conferences;
 - composing medical report and analyzing performance effectiveness of the department;
 - monitoring doctors' performance;
 - analyzing cases of a diagnosis error;
 - conducting efforts for improving the qualification of medical staff;
 - participating in expert evaluation of temporary loss of working capacity
- Clinical work in a department is performed by a resident physician.

Areas of responsibility of the resident physician:

- patient rounds and examination;
- assigning treatment and diagnostic examination;
- keeping medical records;
- composing recommendations for further treatment in outpatient-polyclinic institutions;
- conducting working capacity loss evaluation;
- qualification improvement;
- maintaining therapeutic and protective regimen in departments;
- control for sanitary and hygienic state of the department;

– facilitating prevention of hospital-acquired infections.

The main form of government statistical reporting is «Report of curative-preventive establishment» (f. 20) that contains information about:

- health care personnel, departments, preventive examinations, conducted operations;
- activities of dispensaries, consultation offices, polyclinics, dental office, inpatient facility;
- number of patients, newborn, disabled people.

Inpatient facility performance score is assigned as a result of analyzing two groups of indicators:

1. Indicators that characterize bed capacity and its use,
2. Indicators that characterize quality of diagnostic and treatment work

Inpatient facility performance indicators are analyzed by comparing them with equivalent data on:

- this hospital for the previous year;
- other hospitals or specialized departments;
- district or republic in general.

Besides calculating and analyzing the above indicators, evaluation of performance of an inpatient facility includes *expert evaluation* of every case of:

- hospital-acquired infection;
- death due to post-operation complications;
- death after operative treatment;
- clinical and pathoanatomic diagnosis discrepancy.

Types of hospital-replacing facilities:

- 1) day hospitals in clinics;
- 2) hospitals at home.

Patients capable of active movement are sent to a day hospital in the absence of contraindications for treatment in community-acquired conditions and the need for strict bed rest.

The task of the day hospital is to provide medical care for patients who are capable of active movement, in the absence of contraindications for treatment in community-acquired conditions and the need for strict bed rest. Functions of the day hospital:

- 1) active planned recovery and treatment of dispensary patients who are often ill for a long time;
- 2) reduction of the period of temporary incapacity for work;
- 3) conducting in outpatient settings of some diagnostic studies;
- 4) expansion of the scope of surgical interventions.

All this contributes to the rational use of the bed fund.

The structure of the day hospital:

- 1) the office of the head of the department;
- 2) doctor's office;
- 3) wards for day stay of patients;
- 4) surgical dressing unit;
- 5) intensive care unit;
- 6) a room for eating;
- 7) an office of psychological unloading and rest of patients;
- 8) manipulation / treatment room;
- 9) auxiliary facilities.

Work pattern of a day patient facility is defined by the head of a health and prevention institution, taking into account the amount of conducted medical efforts — usually, there are 2 working shifts. Usually, a day patient facility works at least 10 hours a day, 6 days a week.

The advantages of hospital-replacing forms of providing medical aid are:

- reduction of costs associated with providing medical care;
- rational use of bed capacity;
- high level of medical services;
- possibility of providing health and social care;
- strengthening of consultation and diagnosis service activity.

Cost-effectiveness of hospital-replacing forms of care delivery involves a significantly lower cost of services in day hospital, as well as a shorter average length of treatment in comparison with a day and night facility.

Social efficiency is determined by the fact that treatment in a day hospital has a significant “deontological” advantage, i.e. most of the time the patient is at home, in a familiar comfortable environment, surrounded by the family and friends which increases satisfaction with health care. Medical effectiveness of hospital-replacing forms of care delivery is determined by continuity of inpatient and outpatient care, ensuring continuity of the entire treatment process.

A home hospitalization is organized for patients with acute and chronic diseases who, for health reasons, do not need hospitalization or if it is not possible due to various circumstances (for example, for patients with joint diseases, consequences of injuries, for patients with cerebrovascular diseases).

Functions of hospital at home:

- 1) the diagnosis and treatment of diseases in accordance with the indications for hospitals at home;
- 2) aftercare of the patients after the intensive treatment stage using modern means and methods of community-based medical care;
- 3) the relationship and continuity of health facilities with social protection authorities.

Advantages of hospital at home:

- 1) it is economically feasible (5 times cheaper than a 24/7-stay inpatient facility) and, assuming the circumstances are adequate, just as effective as treatment in a 24/7-stay inpatient facility;
- 2) greater psychological comfort (during treatment, patient stays in a familiar home environment).
- 3) adaptation of a patient for the actual environment he will live in.

Disadvantages of hospital at home:

- 1) it is difficult to organize medical monitoring of a patient's status, which is especially critical for severely ill ones. A doctor stays with the patient about 2–3

hours per day, while for the rest of the day (21–22 hours) the patient is attended by relatives or nurses who, usually, do not possess medical education;

2) huge labor intensity of treatment. A doctor can serve no more than 3–4 patients per day;

3) engaging additional specialists is complicated, which leads to increased treatment costs;

4) some kinds of physical treatment are impossible in home conditions.

The procedure for referring patients to a day hospital and a hospital at home.

The selection of patients for hospitalization in a day hospital is carried out by the heads of the medical departments of the outpatient clinics upon presentation:

1) district therapists,

2) district pediatricians,

3) general practitioners - family doctors,

4) other specialists of the medical institution on the basis of which it operates.

The management of the inpatient home is carried out by the head of the medical department of an outpatient clinic or polyclinic as part of a medical institution, in the district hospital, outpatient clinic - the head physician. At the suggestion of local therapists, pediatricians, general practitioners - family doctors, other specialists, he selects patients for treatment in a hospital at home.

All medical institutions regularly submit state statistical reporting forms. The main one is form No. 20 “Report of a medical institution”, which contains a large number of tables with information about:

□ medical personnel, departments, preventive examinations, operations performed;

□ activities of dispensaries, consultations, polyclinics, a dental office, a hospital;

□ number of patients, newborns, people with disabilities.

Assessment of the work of the hospital is based on the analysis of two groups of indicators, one of which characterizes the bed capacity and its use, and the other - the quality of medical diagnostic work.

Analysis of hospital performance is carried out by comparing with similar data on:

- this hospital last year;
- other hospitals or specialized departments;
- region or republic as a whole.

In addition to calculating and analyzing the above indicators, in assessing the work of the hospital, each case is expertly evaluated:

- nosocomial infection;
- death of postoperative complications;
- death after surgery;
- discrepancies in clinical and pathological diagnoses.

MODERN STRATEGIES IN TELEMEDICINE, TASKS AND APPLICATION

It should be noted that the process of introducing telemedical services has recently begun in various countries of the world. Telemedicine is a method of providing medical care over the Internet, usually via video chat. This technology has a number of advantages for both patients and medical professionals. Although there are still technical hurdles and critics, telemedicine can complement and improve the overall patient experience. Rising health care costs and the need for better care are prompting more hospitals to explore the benefits of telemedicine. They want better contact between doctors and remote patients and better utilization of medical facilities. Here, telemedicine also facilitates better communication, which has resulted in fewer readmissions and full patient adherence to their prescription treatment plans.

The increased contact advantage of telemedicine also extends to communication between physicians. Doctors can use telemedicine to create support networks to share their skills and provide better health care.

Regular hospital visits can be expensive, particularly in rural areas, due to travel costs. In the era of the Covid-19 Pandemic, where physical interaction

becomes risky, people prefer telemedicine. Fortunately, medical visits can be reduced when telemedicine services are used through video conferencing or other virtual technologies. Thus, telemedicine saves both the patient's and the health care provider time and the cost of the treatment. Furthermore, due to its fast and advantageous characteristics, it can streamline the workflow of hospitals and clinics. This disruptive technology would make it easier to monitor discharged patients and manage their recovery. As a result, it is sufficient to state that telemedicine can create a win-win situation. The paper identifies seventeen significant applications of telemedicine in Healthcare. Telemedicine is described as a medical practitioner to diagnose and treat patients in a remote area. Using health apps for scheduled follow-up visits makes doctors and patients more effective and improves the probability of follow-up, reducing missing appointments and optimising patient outcomes. Patients should have an accurate medical history and show the doctor any prominent rashes, bruises, or other signs that need attention through the excellent quality audio-video system. Further, practitioners need file management and a payment gateway system. Telemedicine technologies allow patients and doctors both to review the treatment process. However, this technology supplements physical consultation and is in no way a substitute for a physical consultation. Today this technology is a safe choice for patients who cannot go to the doctor or sit at home, especially during a pandemic.

TEST QUESTIONS FOR SELF-CONTROL

1. The most popular type of medical care that covered approximately 80 % of the total health services in the majority of the countries of the world?
 - A) Stationary
 - B) Medical-diagnostic
 - C) Outpatient
 - D) Preventive
 - E) Emergency
2. The dispensary method has certain sequence of carrying out. At what stage are determined the groups of persons, subject to obligatory medical checks?
 - A) At a stage of dynamic observation
 - B) At the preparatory stage
 - C) At a stage of carrying out of preventive medical examinations
 - D) At an evaluation stage of quality of prophylactic medical examination
 - E) At the recovery stage
3. Medical care that includes consultation of the doctor, simple diagnostics and treatment of the basic most widespread diseases, traumas and poisonings, and also preventive actions, is called:
 - A) Emergency medical care
 - B) Primary medical care
 - C) The First medical care
 - D) Secondary medical aid
 - E) Tertiary medical care
4. Secondary medical-prophylactic care is:
 - A) Qualified consultation, diagnostics, prophylaxis and treatment by doctors-experts
 - B) Treatment of the most widespread diseases
 - C) Consultation by doctor of general practice (family doctor)
 - D) Emergency medical care
 - E) Simple diagnostics
5. Which of the following does not relate to the preventive direction of polyclinic work?

- A) Sanitary-educational work
 - B) Anti-epidemic work
 - C) Preventive medical examination
 - D) Diagnostic of diseases
 - E) Sanitary-and-hygienic work
6. Category of the polyclinic is defined:
- A) By number of structural subdivisions
 - B) By number of medical personnel
 - C) By number of doctor's personnel
 - D) By number of hospital beds
 - E) By number of visits per shift
7. Which of the following does not concern to the main tasks of the admission department (reception)?
- A) Examination of work capacity
 - B) Establishing of the preliminary diagnosis
 - C) Determination of the profile of specialized department and referral to it
 - D) Provision of necessary medical care
 - E) Reception, registration and distribution of the patients entering the hospital
8. The data were obtained about quantity of the patients treated throughout year and mid-annual quantity of beds (cots) at the end of the year in the hospital. Which of indicators can be calculated from these data?
- A) Bedspace of the hospital
 - B) Mid-annual bed occupancy
 - C) Bed turnover
 - D) Average duration of stay of patients in a hospital
 - E) Average duration of idle time of bed
9. To the functional duties of the attending physician are all listed, except:
- A) Realization of diagnostics and treatment of patients in a hospital
 - B) Realization of examination of temporary incapacity for work
 - C) Discharges patients from hospital

D) Representation of patients to Medical consultative board and Disability Determination Services

E) Dispensary observation of chronic patients

10. According to the report of the hospital the information on quantity of the operated patients and on quantity died after operation was obtained. Which indicator can be calculated from these data?

A) Standardized lethality

B) Postoperative lethality

C) Postoperative death rate

D) Total mortality

E) The Indicator of late hospitalization from the disease beginning

11. The medical documentation of a hospital concern:

A) The case record

B) Statistical record of patient, discharged from hospital

C) Medication administration record

D) Pathology record

E) All of the above

12. Which of the listed functions of the hospital includes diagnosis and provision of the specialized round-the-clock stationary care in sufficient volume, complex regenerative treatment, and disability examination (working capacity examination)?

A) Preventive

B) Organizational-methodical

C) Research

D) Therapeutic and recovery

E) Educational

Keys: 1- C, 2-B, 3-B, 4-A, 5- D, 6-E, 7-A, 8-C, 9-E, 10-B, 11-E, 12-D

SITUATIONAL TASK

Calculate and evaluate the indicators of performance of day patient facilities and home care, using the following data.

District	Served population (total)	Including children aged up to 17 years	Day patient facilities			Home care	
			Number of beds	Number of treated patients	Including treated children at the age of up to 17 years	Number of treated patients	Including those with circulatory system diseases
1	88 100	14 700	295	12 000	800	7 324	2 600
2	84 500	11 300	224	10 050	466	5 220	1 900

Day patient facility performance indicators

1. Availability of beds to the population in day patient facilities:

$$\frac{\text{Number of beds in day patient facilities}}{\text{Served population}} \times 10\,000 = \text{_____} \text{ per } 10\,000$$

2. Number of treated patients in day patient facilities:

$$\frac{\text{Number of treated patients}}{\text{Served population}} \times 100 = \text{_____} \%$$

3. Number of treated ill children in day patient facilities:

$$\frac{\text{Number of treated ill children}}{\text{Child population (up to 17 years)}} \times 100 = \text{_____} \%$$

Home care performance indicators

1. Number of treated patients in home care:

$$\frac{\text{Number of treated patients}}{\text{Served population}} \times 100 = \text{_____} \%$$

2. Structure of treated patients by category of disease:

$$\frac{\text{Number of treated patients with circulatory system diseases}}{\text{Number of treated patients}} \times 100 = \text{_____} \%$$

Appendix 1

FORMULAS FOR CALCULATING THE PERFORMANCE INDICATORS OF AN INPATIENT FACILITIES

4. Annual average occupancy of a bed:

$$\frac{\text{Number of spent bed days per year}}{\text{Annual average number of beds}} = \text{_____} \text{ days.}$$

5. Bed turnover:

Number of patients who have been discharged and those who have died during the year

Annual average number of beds

6. Average duration of stay in the inpatient facility::

Number of spent bed days per year

Number of patients who have gone through the inpatient facility (discharged and deceased) = _____ days.

7. Share of the patients discharged with recovery:

Number of patients discharged with recovery _____ x 100

Number of all discharged patients

8. Share of the patients discharged with improvement:

Number of patients discharged with improvement _____

Number of all discharged patients

9. Share of the patients discharged without change in health condition:

Number of patients discharged without change in health condition _____ x 100

Number of all discharged patients

10. Share of clinical and pathoanatomic diagnosis discrepancies (misdiagnosis):

Number of diagnosis discrepancies _____

Number of all pathoanatomic diagnoses

11. Hospital lethality:

Number of patients who have died in the inpatient facility _____

Number of patients who have gone through the inpatient facility (discharged and deceased)

NB! Lethality (deadliness) is an indicator calculated as a ratio of the number of deceased due to particular illness and the number of afflicted with this illness.

Lethality should not be confused with mortality, which is a ratio of the number of deceased due to this illness and the average population.

12. Complaints submitted by the population:

Number of complaints _____ x 10 000 = _____ per 10 000
Served population

13. Average number of operations per one occupied surgeon position:

Number of operations conducted during the year _____ = _____ operations
Number of surgeon positions

14. Urgency of surgical aid:

Number of patients admitted to inpatient facility after 24 hours or more have passed since the diagnosis _____ x 100 = _____ %
Number of patients brought for emergency aid _____

15. Surgical activity:

Number of patients operated upon _____ x 100 = _____ %
Number of patients of the surgery department

16. Frequency of post-operation complications:

Number of post-operation complications _____ x 100 = _____ %
Number of patients operated upon

17. Post-operation lethality:

Number of patients operated upon, who have died _____ x 100 = _____ %
Number of patients operated upon

Day hospital performance indicators

1. Availability of beds to the population in day patient facilities:

$$\frac{\text{Number of beds in day patient facilities}}{\text{Served population}} \times 10\,000 = \text{_____ per } 10\,000$$

2. Number of treated patients in day patient facilities:

$$\frac{\text{Number of treated patients}}{\text{Served population}} \times 10\,00 = \text{_____ \%}$$

3. Number of treated ill children in day patient facilities:

$$\frac{\text{Number of treated ill children}}{\text{Child population (up to 17 years)}} \times 10\,00 = \text{_____ \%}$$

Hospital at home performance indicators

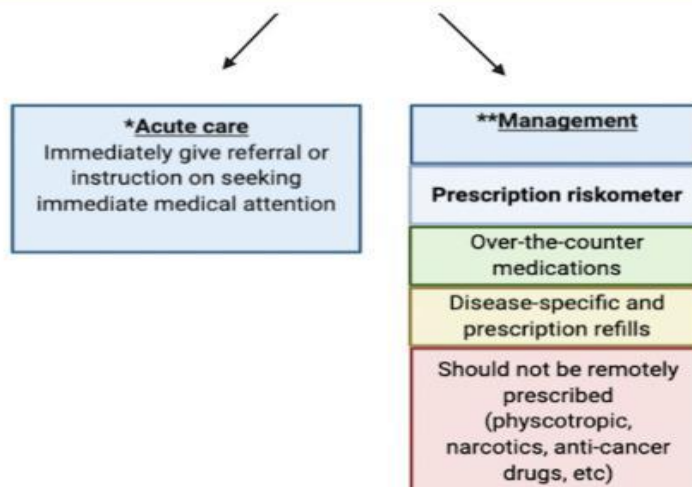
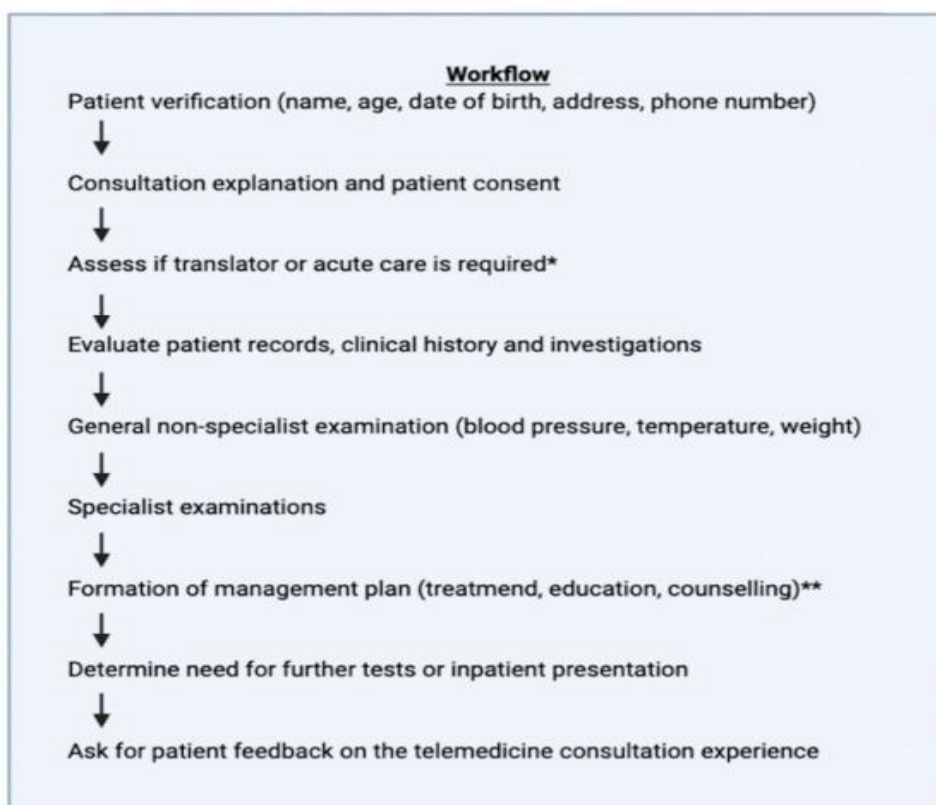
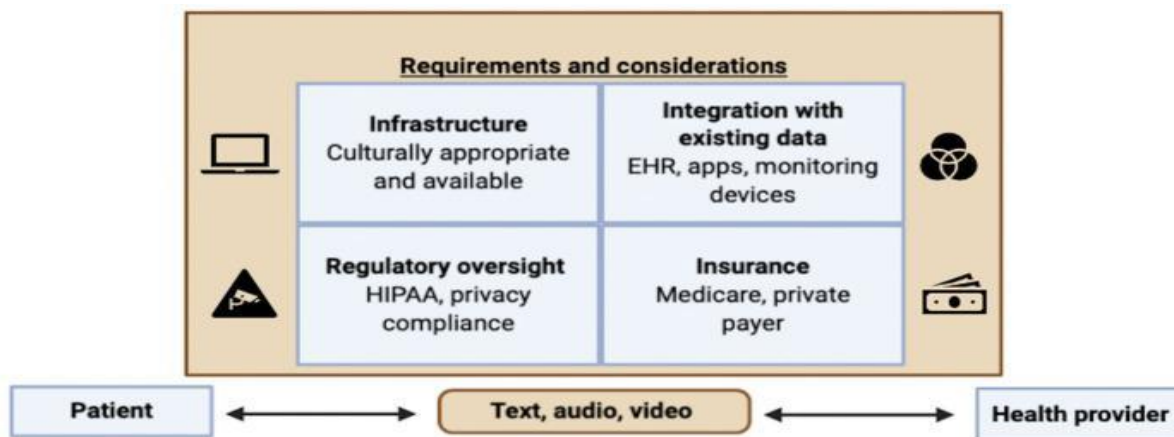
3. Number of treated patients in home care:

$$\frac{\text{Number of treated patients}}{\text{Served population}} \times 10\,00 = \text{_____ \%}$$

4. Structure of treated patients by category of disease:

$$\frac{\text{Number of treated patients with circulatory system diseases}}{\text{Number of treated patients}} \times 100 = \text{_____ \%}$$

Appendix 2



Appendix 3

Ministry of Health of Ukraine Medical facility name, address Identification code <u> I I I I I I I I I </u>		MEDICAL RECORDS Form of primary records №003/a Approved by the Ministry of Health of Ukraine 26.07.1999 №184					
INPATIENT MEDICAL RECORD № _____							
Hospitalization							Department _____ ward № _____
data	(day, month, year)				(hours, minutes)		Hospitalization for this disease in this year : for the first time – 1, for the second time – 2
The patient spent _____ bed-days.			Transferred to the department _____				
Blood group _____		Rhesus factor _____			RW _____ (day, month, year)		
Hypersensitivity or intolerance to the drug _____ (the name of the drug, the nature of side effects)							
1. Last name, first name, middle name _____							
2. Gender: mail – 1, female – 2		3. Age _____ (day, month, year, children under 1 year – months, children under 1 month - days)					
4. Urban resident – 1, or rural resident – 2		_ Address of the patient: _____ (country, region, street, house, flat)					

5. Name and address of the place of work, occupation (study, a children's institution) _____ _____							
(for the disabled - the type and group of the disability, invalids of war – yes - 1, no - 2 <input type="checkbox"/>)							
6. . Who wrote referral _____ (medical facility name)							
7. Terms of hospitalization : emergency hospitalization – 1,(until 6 hours ; 7 – 24 hours ; later 24 hours.), planned hospitalization – 2 <input type="checkbox"/>							
8. Diagnosis of the medical facility that referred the patient: _____ _____							
9. Admission diagnosis _____ _____							
10. Hospital diagnosis _____ _____							
Date of diagnosis: _____				Name of the doctor _____ (signature)			
11. Final hospital diagnosis: _____							
a) Predominant diagnosis _____ _____ Cod by ICD-10 1 _ 1 _ 1 _ 1 _ 1							
b) Complications _____ _____							
c) Accompanying illnesses _____ _____							

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Електронне навчальне видання комбінованого використання
Можна використовувати в локальному та мережному режимі

Боброва Оксана Вячеславівна
Цукор Наталія Григорівна

**ОРГАНІЗАЦІЯ РІЗНИХ ВИДІВ
ЛІКУВАЛЬНО-ПРОФІЛАКТИЧНОЇ ДОПОМОГИ
НАСЕЛЕННЮ. АМБУЛАТОРНО-ПОЛІКЛІНІЧНА
ДОПОМОГА, СТАЦІОНАРНА ТА ШВИДКА ДОПОМОГА**

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«Соціальна медицина, організація охорони здоров'я»

(Англ. мовою)

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