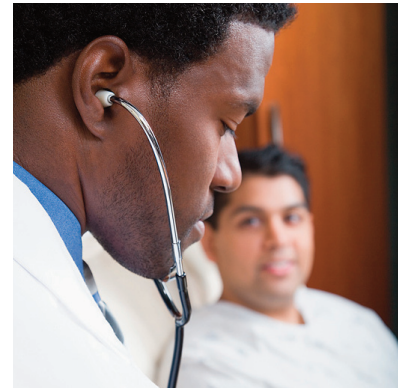




USMLE[®] Physician Tasks/Competencies



A Joint Program of the Federation of State Medical Boards
of the United States, Inc., and the National Board of Medical Examiners[®]

USMLE Physician Tasks/Competencies provides an outline of the tasks and competencies assessed throughout the sequence of USMLE examinations.

While this outline is common to all exams, each Step has test specifications specific to that Step. Each Step exam emphasizes certain parts of the tasks/competencies outline, and no single examination includes assessment of all topics in the outline.

USMLE Physician Tasks/Competencies
TCOM1

Medical Knowledge/Scientific Concepts

Applying foundational science concepts

Patient Care: Diagnosis

History and physical examination

Laboratory and diagnostic studies

Diagnosis

Prognosis/outcome

Patient Care: Management

Health maintenance and disease prevention

Pharmacotherapy

Clinical interventions

Mixed management

Surveillance for disease recurrence

Communication and Interpersonal Skills

Fostering the relationship

Gathering information

Providing information

Making decisions

Supporting emotions

Enabling patient behaviors

Using a translator

Professionalism, including Legal and Ethical Issues

Professionalism/legal/ethical issues in interaction with patients and families

Professionalism/legal/ethical issues in interactions with patients and families related to death and dying

Professionalism/legal/ethical issues in interactions with other health professionals

Systems-based Practice, including Patient Safety

Complexity/Systems thinking

Quality improvement

Patient safety

Health care policy and economics

Practice-based Learning

Understanding and application of principles of biostatistics, and epidemiology

Application of information from studies or other written material to patient care

Understanding of the principles of research ethics and regulatory issues

Applying Foundational Science Concepts

Identifies the cause/causal agent or predisposing factor(s) or, given an effect, determines the cause.

Identifies the underlying processes/pathways that account for, or contribute to, the expression or resolution of a given condition.

Recognizes or evaluates given clinical or physical findings to identify the underlying anatomic structure or physical location.

Recognizes the mechanisms of action of various drugs; selects from an option set list of drugs based on mechanism of action.

Diagnosis: Obtaining and Predicting History and Physical Examination

Knows signs/symptoms of selected disorders.

Knows individual's risk factors for development of selected conditions. Given current symptoms in presented history, identifies other pertinent factors in the history.

Given a specific problem, knows what to ask in obtaining further pertinent additional history.

Predicts the most likely additional physical finding; selects either the finding itself or the appropriate examination technique that would result in the finding.

Diagnosis: Selecting and Interpreting Laboratory and Diagnostic Studies

Selects most appropriate laboratory or diagnostic study, including neuropsychiatric testing, or the study most likely to establish/confirm the diagnosis.

Interprets laboratory or other study findings appropriate for the context.

Predicts the most likely laboratory or diagnostic study result given a particular context.

Selects most appropriate laboratory or diagnostic study after a change in patient status.

Diagnosis: Formulating the Diagnosis

Selects the most likely diagnosis.

Assesses the developmental level of the patient.

Diagnosis: Determining Prognosis/Outcome

Recognizes factors in the history, physical or laboratory study findings that affect patient prognosis or outcome, or determine therapy.

Interprets laboratory or other diagnostic study results and identifies current/future status of patient.

Recognizes associated conditions of a disease, including complications, or indicators of potential complications, of a given disease.

Recognizes characteristics of disease relating to natural history or course of disease, including progression, severity, duration, and transmission of disease from a specific patient.

Management: Health Maintenance & Disease Prevention

Knows risk factors for conditions amenable to prevention or detection in an **asymptomatic** patient, and knows the potential condition itself.

Knows pertinent incidence statistics and identifies patient groups at risk; knows incidence of symptoms/dangerous disorders among various groups.

Knows common screening tests for conditions amenable to prevention or detection in an asymptomatic patient or population.

Selects appropriate preventive agent or technique. Knows vaccination schedules.

Knows appropriate counseling (and reassuring, comforting) of patient or family regarding current and future problems, including risk factors related to present encounter.

Educates patients on screening, health maintenance, self-care.

Assesses the developmental level of a healthy patient.

Management: Selecting and Monitoring Pharmacotherapy

Selects most appropriate pharmacotherapy.

Assesses patient adherence with treatment regimen, recognizes techniques to increase adherence or understanding of the disease state, and knows how adherence may be affected by providing instructions with therapy.

Recognizes factors that alter drug dosing requirements for a patient.

Knows adverse effects of various drugs, or recognizes signs and symptoms of drug reactions and drug-drug interactions resulting from polypharmacy in the therapeutic regimen and knows steps to prevent polypharmacy including lab studies to monitor therapy.

Knows contraindications of various medications.

Modifies therapeutic regimen within the context of continuing care; selects appropriate modifications in therapeutic regimen based on specific patient factors including concomitant medications, age, gender, body mass index, renal insufficiency, hepatic dysfunction, etc.

Knows appropriate monitoring to evaluate effectiveness of drug therapy or to monitor for the adverse effects of drug therapy in a patient that has not had a recurrence or progression of disease.

Management: Selecting Clinical Interventions/treatment

Knows most appropriate management of selected conditions, including recognizing misuse of medication or drug or alcohol use.

Knows immediate management or priority in management, specifically in emergency or acute cases.

Knows most appropriate follow-up or monitoring approach regarding the management plan.

Evaluates severity of patient condition in terms of need for referral for surgical treatments/procedures versus other nonsurgical options.

Knows appropriate surgical management.

Knows pre/post surgical or procedural management.

Knows indications for admission to the hospital or to other appropriate setting. Knows appropriate non-hospital health care settings for patient, eg, when appropriate to admit to hospice.

Knows most appropriate discharge planning.

Knows components of rehabilitation program.

Knows appropriate use and procedures regarding hospice care.

Educates patient or family regarding self-care.

Knows relevant roles of allied health personnel.

Management: Selecting Clinical Interventions (mixed management)

Selects most appropriate management option from set of mixed management options (eg, a mix of diagnostic studies and therapies).

Management: Monitoring/surveillance for Disease Recurrence or Progression

Knows the indications for surveillance for recurrence or progression of disease following treatment.

Monitoring chronic disease in a stable patient where a change in patient status might cause a change in therapy.

Knows most appropriate long-term treatment or management goals.

Communication and Interpersonal Skills

Fostering the relationship

Gathering information

Providing information

Making decisions

Supporting emotions

Enabling patient behaviors

Using a translator

Professionalism, Including Legal and Ethical Issues

Understanding and applying principles of professionalism, legal and ethical issues in interaction with patients

Knows the guidelines for obtaining informed consent for treatment including children and adolescents, third party permission, and emergent situations.

Recognizes need for third-party permission for treatment in medical emergencies.

Knows guidelines for treatment of minors with/without notification of parents.

Knows definitions of competence and sanity.

Knows the guidelines for involuntary admission.

Knows guidelines for confidentiality of medical records.

Knows guidelines for physician/patient relationship.

Knows issues related to cultural competence and can apply knowledge in specific patient situations.

Understanding and applying legal and ethical issues related to death and dying

Assesses degree of disclosure to terminally ill patients.

Recognizes patient's right to refuse treatment or testing (patient autonomy); knows issues of advance directives and Living Wills.

Assesses quality of life decisions.

Knows appropriate prescriptive practices; knows appropriate use of opioids in terminally ill patients.

Knows definition of and legal issues regarding brain death.

Knows management of terminally ill patients related to treating chronic pain, and recognizing patient's expression of fear of pain, injury, or death; knows how to comfort patient or family during crisis such as trauma or death.

Understanding and applying professionalism, legal, and ethical issues in dealing with physicians and other health professionals

Knows guidelines for reporting findings to proper authorities.

Knows Good Samaritan laws.

Recognizes physician error and negligence.

Recognizes and deals appropriately with impaired physician.

Systems-based Practice, including Patient Safety

Complexity/Systems thinking

Quality improvement

Patient safety

Health care policy and economics

Practice-Based Learning

Understanding and application of the principles of biostatistics and epidemiology

Understands and can apply principles of epidemiology and population health, including health status indicators, outbreak investigation, points of intervention.

Understands and can apply principles of study design and study flaws.

Understands and can apply the principles of screening and other tests.

Understands use and interpretation of statistical principles and measures of association.

Is able to make decisions about patient care based on results of study or other written materials

Understands the principles of research ethics and regulatory issues