

Title	Evaluation of patients with respiratory insufficiency
Description	<ul style="list-style-type: none"> • Rapid evaluation with the 'ABCD' approach; • Take a focused history of a patient with respiratory insufficiency in an Emergency Room, Coronary Care Unit, ward or urgent outpatient clinic (outside Operating Room and Intensive Care settings) ; • Perform a physical exam, including 'ABCD' and vital signs; • Order and interpret <i>basic</i> diagnostic tests (blood, chest X-ray, ECG); • Draft and rank a differential diagnosis in a patient with respiratory insufficiency; • Propose initial management and treatment plans. <p>This EPA does <u>not</u> comprise:</p> <ul style="list-style-type: none"> • Care for the patient (nearly) in a cardiopulmonary resuscitation setting • Care for paediatric patients with respiratory instability (< 16 years) • Interpretation of advanced diagnostic tests (Ventilation-Perfusion scans, spirometry)
Link to competency domains	<p>CanMEDS (Dutch KNMG version):</p> <ul style="list-style-type: none"> • Medical Expert: applies diagnostic, therapeutic, preventive repertoire (1.2) • Communicator: creates effective therapeutic relationships (2.1), reports adequately on a case, orally and in writing (2.4) • Collaborator: consults others effectively (3.1) • Scholar: appraises medical information critically (4.1) • Health Advocate: recognises determinants of disease (5.1) • Manager: works effectively within a system (6.2) • Professional: adequate (inter-)professional conduct (7.2), discerns limits of competence (7.3)
Required knowledge, skills, and attitudes (level of doctor in postgraduate year 1)	<p><u>Knowledge</u></p> <ul style="list-style-type: none"> • Knowledge of normal ranges for blood pressure, heart rate, respiratory rate, saturation and temperature; • Knowledge of relevant criteria and scores (e.g. SIRS-criteria, Wells score; GOLD-criteria; Pneumonia Severity Index; Pneumonia Likelihood Ratio; AMBU-65 and CURB-65; ALI/ARDS); • Knowledge of criteria for ventilation and admission to ward or ICU; • Knowledge of (results of) relevant diagnostic tests (i.e. laboratory blood tests, blood gas analysis, chest X-ray and systematic interpretation, ECG); • Knowledge of results of pleural fluid investigations (chemistry, microbiology); • Knowledge of most important disorders leading to respiratory insufficiency; • Knowledge of options in additional diagnostic testing (e.g. rapid PCR tests, viral, bacterial and fungal tests, CT scan, VP scan);

	<ul style="list-style-type: none"> • Knowledge of indications for ventilation; • Knowledge of indications and techniques of oxygen therapy (F_iO₂, nasal cannulae, non-rebreathing mask, CPAP, Venturi, Optiflow); • Knowledge of indications for chest drains; • Knowledge of indications for bronchoscopy; • Knowledge of initial pharmacological treatment of important disorders leading to respiratory insufficiency. <p><u>Skills</u></p> <ul style="list-style-type: none"> • Performs and interprets a systematic physical exam according to 'ABCD' and monitoring of vital signs; • Asks timely for help/supervision; • Takes a focused history and performs a focused physical exam in patients with respiratory insufficiency; • Performs a blood gas analysis; • Interprets result of a blood gas analysis; • Connects patient to monitoring such as ECG/telemetry, non-invasive blood pressure, pulse oximetry, and interprets findings; • Interprets 12-lead ECG: myocardial ischemia, rhythm- and conduction disorders; • Recognises myocardial ischemia, rhythm- and conduction disorders on telemetry monitor; • Writes an order for chest X-ray; • Systematic interpretation of chest X-ray and recognition of relevant radiologic findings; • Interprets findings of pleural fluid tests; • Sites a peripheral intravenous catheter; • Drafts and ranks a differential diagnosis and provides a probable diagnosis in a patient with circulatory insufficiency; • Proposes a management plan; • Proposes orders regarding treatment; • Reports in medical record and provides a structured handover. <p><u>Attitudes</u></p> <ul style="list-style-type: none"> • Discerns and acknowledges personal limits of knowledge, skill and capability and can adequately reflect on this; • Is set to short cycles of assessment, treatment, and re-assessment; • Reveals professional role and level; • Collaborates with ward staff; • Professional conduct towards patient and/or relatives; • Uses Evidence Based Medicine.
Information to assess progress	<p><u>Workplace assessment</u></p> <ul style="list-style-type: none"> • Mini-CEXs with regard to the evaluation of patients with or without vital instability, including indicating necessity for (acute) intervention and with regard to discernment of personal limits of capability; • Multisource feedback: performance as a team member in urgent and non-urgent settings;

	<p><u>Assessment of knowledge, skills and attitudes</u></p> <ul style="list-style-type: none"> • Knowledge examination (written, variety of formats); • Clinical reasoning and know-how (case-based discussions); • Demonstration of isolated skills in non-clinical setting (Objective structured examination of skills); • Reflection forms regarding performance, difficult moments, discernment of limitations. <p><u>Assessment of clinical performance</u></p> <ul style="list-style-type: none"> • Simulation of acute care settings.
Target level of supervision (entrustment)	Indirect supervision (immediately available): evaluation and initial management, awaiting arrival of help/supervisor
When is unsupervised practice expected?	At the end of DTY Acute Care