Definition
Multimorbidity refers to the simultaneous presence of at least three chronic diseases, none of which are necessarily of central clinical importance. Connections between the diseases may or may not exist by way of common risk factors or secondary illnesses.

Epidemiology/Challenges facing health care
The multimorbid patient population is very heterogeneous in terms of the combination and severity of illnesses as well as the consequences for the individual and their care. The prevalence of multimorbidity increases with age; in older individuals it is 55-98%. Multimorbidity is associated with functional limitations, reduced quality of life, increased mortality and high levels of health service utilization. With increasing multimorbidity, syndromes (such as immobility, incontinence and insomnia) which can no longer be clearly assigned to or influenced by targeted treatment of the underlying diseases may develop.

DEGAM philosophy on multimorbidity/meta-algorithm
In the DEGAM guideline for multimorbidity, care is oriented toward patient preferences and the joint prioritization of treatment goals rather than the guidelines for the individual underlying diseases. Of key importance is finding balance between prognostic factors and patient wishes to maintain autonomy and quality/length of life. Guidelines for individual diagnoses can play only a subordinate role in this approach. By focusing on the "big picture," our guideline intends to protect against the simultaneous application of multiple disease-specific guidelines in multimorbid patients. In this way, the guideline for multimorbidity provides a margin of discretion and room for freedom in shared decision-making regarding the medical care of multimorbid patients.

Recommendations
The patient-centered care of patients with multimorbidity includes intensive doctor-patient communication, joint decision-making and joint definition of goals. Therefore, sufficient time should be budgeted for care. A prerequisite for patient-centered communication in multimorbidity is the use of clear, empathetic, understandable and direct language.

It should be clarified with patients whether and how they would like to include people they trust, including loved ones and other healthcare professionals, in their care.

In the case of patients with multiple morbidities, the main concerns of the consultation should be identified.

Patients with multimorbidity should be asked about their individual needs and goals, treatment preferences and health priorities; these should be documented. This particularly includes clarifying the importance of:

- Maintenance of social/economic roles: professional/work activities, participation in social activities and family life;
- Prevention of specific events (e.g. stroke);
- Minimizing drug side effects;
- Reducing the burden of treatment;
- Prolongation of life.

Re-evaluation of patient and physician priorities is an essential prerequisite for decision-making. Decisions should be made in the context of patient preferences, which often only become clear in the course of the discussion and joint prioritization of treatment goals. These preferences may regard either increasing or decreasing the intensity of treatment.

The patients' priorities (e.g. fear of loss of autonomy) and the doctor's objectives (e.g. prevention of avoidable, potentially dangerous complications) should be reconciled.

The extent to which existing health problems impact daily life should be discussed in order to determine the burden of disease in patients with multimorbidity. Specific areas to address include:

- Mental health
- The interaction of existing health problems
- The impact of disease burden on well-being and quality of life.

Patients with multimorbidity should be asked about psychological factors and comorbidities such as anxiety, depression and chronic pain as well as their treatment (if applicable). This information should be documented as part of the basic medical history.

To determine the burden of treatment, the extent to which existing health problems impact daily life should be discussed with patients with multimorbidity. The following should be determined:

- Number, type and location of medical appointments
- Number, type and dosing schedule of medications being taken
- Any negative effects resulting from medications
- Non-pharmacological treatments such as diet, exercise programs and psychological treatment
- Any impact of treatment on mental health or well-being.

The personal resources of patients with multimorbidity should be evaluated; for example:

- Health literacy (the patient's ability to find, understand, evaluate and use health information),
- Adaptation strategies,
- Learning skills,
- Financial situation,
- Living conditions and
- Social support.

Patients with multimorbidity should be informed adequately, openly and objectively about diagnostic and therapeutic options as well as their interaction with existing diseases and potential impact on quality of life.

In order to achieve mutually agreed-upon treatment goals, aspects such as the following should be taken into account:

- Ways to maximize the benefits of current treatments
- Treatments that may be discontinued due to limited benefits
- Treatments and follow-up treatments that cause a high level of stress
- Medications associated with an increased risk of adverse events (e.g. falls, gastrointestinal bleeding, acute kidney injury)
- Non-drug treatments as possible alternatives to certain medications
- Ways to coordinate or reduce the number of follow-up medical appointments.

It should be ascertained whether other health professionals have been consulted since the last visit and what resulted from these consultations.

In the case of pharmacological treatment, medication review should be conducted at each visit and misunderstandings about drug indication, effect and method of intake/application should be clarified. If multiple healthcare professionals are involved in the treatment of patients with multimorbidity, all parties involved (patient, specialists, general practitioner, relatives, nursing staff) should come to an agreement regarding diagnostics and therapy.
Meta-algorithm for the care of multimorbid patients

The meta-algorithm describes a high-level thought process which takes the whole person into account. It presents a generalized perspective of the situation of a patient with multimorbidity. From the start, three primary aspects of the patient perspective are taken into account and reconciled with the patient's history and preferences. The decision-making processes portrayed remain independent of individual diseases. This abstract meta-algorithm can be "filled out" with specific problems concerning an individual patient with multimorbidity. It can then serve as a guide for subsequent thought processes and actions and provide transparency and justification for decisions made.

It should always first be assessed whether the presenting symptom or current reason for consultation is connected to a previously known aetiology or diagnosis. This assessment results either in a diagnostic pathway to identify the (new) aetiology of the complaint, the ruling out of avoidable and potentially dangerous complications, or a generalized approach in the context of comprehensive disease management.