Health systems are subject to increasing profit orientation. Patients are seen as consumers who are free to make their own decisions. Health-related information is often interest-driven. Early detection and screening tests, laboratory analyses, imaging techniques, new pharmaceuticals as well as new and specialist expertise are overestimated. Potential harm or lack of evidence is rarely addressed. This guideline summarizes the most important guideline recommendations on the overuse and underuse of health care. The aim is to achieve better, fairer, safer and more people-friendly medicine.

Definitions
A need for healthcare refers to a condition, the treatment of which is expected to provide health benefits. Overuse refers to a use that goes beyond satisfying needs. The services provided are usually without sufficient benefit or not indicated. Underuse occurs if healthcare is not provided, or only provided partially when there is an acknowledged need, even though it is available and sufficiently proven benefits and efficacy.

Overdiagnosis refers to diagnostic measures that are not needed to detect a disease or take a decision on therapy, or where the benefits do not outweigh the resulting harm. This constitutes overuse. The harm caused by excessive diagnostic procedures also includes overdiagnosis and its consequences, particularly overtreatment.

Selection of recommendations
Primary care physicians have a mediating role between patients and other specialists. They view the individual as a whole and are therefore best able to assess his or her needs in an individual case. This guideline is intended to assist in this context and draw attention to areas where, to the best of current judgement, the overuse and underuse of health care is very likely to occur. To this end, all the strong recommendations from the relevant guidelines (DEGAM, NVL) were evaluated by a panel of clinically active general practitioners. The selection and prioritisation criteria included the assessment of relevance for the overuse and underuse of health care, the quality of the evidence base, the strength of recommendations and the classification with regard to overarching health care goals. High-priority recommendations were included in this guideline. The recommendations should help to reflect one’s own medical practice as well as possible. The recommendations in this short version are from the German guideline, “Protection against the overuse and underuse of health care”. They are explained and justified there and in the guidelines mentioned there.

Table: Prioritized guideline recommendations to protect against the overuse and/or underuse of health care

<table>
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<tr>
<th>DEGAM or NVL Guideline</th>
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Prevention of skin cancer
In agreement with international institutions, the German College of General Practitioners and Family Physicians (DEGAM) and the German Society of Oto-Rhino-Laryngology, Head and Neck Surgery (DGHNO) continue to assess the evidence for the benefit of general skin cancer screening compared to opportunistic screening as insufficient. Since the introduction of skin cancer screening, skin cancer mortality in Germany has not decreased. Therefore, no-cancer skin cancer screening should not be offered. In individual cases, screening for skin cancer can be performed after a balanced explanation of the advantages and disadvantages, particularly in people at increased risk.

Cough
In adult patients with acute cough without red flags, a thorough medical history and symptom-oriented clinical examination are sufficient to establish the diagnosis. The most common cause of acute cough in adult patients is a self-limiting respiratory viral infection. When a clinical diagnosis of cold or acute bronchitis is made, blood tests, sputum diagnosis and chest X-rays should be omitted in adult patients without red flags.

Colds and acute bronchitis in adult patients without red flags should not be treated with antibiotics. In adult patients with an acute respiratory tract infection, pneumonia is very unlikely if the vital signs (temperature, respiratory rate and heart rate) are normal and a pulmonary auscultation is unremarkable.

In the decision-making process for the hospitalization of a patient with community-acquired pneumonia, the CURB-65 score appears to overestimate risk in primary care. Supplementary individual risk assessment is therefore useful in this context.

Chronic Coronary Heart Disease (CHD)
Patients with a strong suspicion of stenosing CHD after a non-invasive diagnostic work-up (see Chapter A Diagnostic Work-Ups in (Suspected) CHD (2016)) should be advised using “Decision-making aid: Protection against coronary heart disease – do I need cardiac catheterization?” (see Figure 4). The counselling should be documented.

Patients who are not willing to undergo bypass surgery with the aim of prolonging their life or who have a contraindication for the surgery should not receive an invasive diagnostic work-up to resolve the diagnosis of coronary morphology.

Patients should be informed that there is no evidence from randomized trials for a possible survival benefit of percutaneous coronary intervention (PCI) or “Decision-making aid: suspected coronary artery disease - do I need cardiac catheterization?" (see Figure 4). The counselling should be documented.
### DEGAM Guidelines

**Protection against the overuse and underuse of health care – deciding together**

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**Concept and scientific editing**
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053-045

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<th>Chronic coronary heart disease (CHD)</th>
<th>PCS59 inhibitors should not be used routinely in patients with CHD unless the PCS59 inhibitors are used to avoid lipid apheresis (in accordance with the German Drug Directive, AMRi).</th>
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<td>Dementia</td>
<td>The Drug Directive only permits the prescription of anti-dementia drugs at the expense of the statutory health insurance (GKV/SH) system if follow-up examinations are carried out and these examinations do not show clear deterioration. Before treatment, the affected persons and, if necessary, their family members/relatives should therefore be informed that a follow-up examination is planned and may lead to an interruption of treatment.</td>
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<td>Lower back pain</td>
<td>Transdermal opioids should not be used for the treatment of acute and subacute non-specific lower back pain. NSAIDs should not be administered parenterally. Analgesic therapy using intravenous, intramuscular or subcutaneous administration, local anesthetics, glucocorticoids and mixed infusions should not be used to treat non-specific lower back pain.</td>
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<td>Care of Patients with Chronic kidney disease (CKD)</td>
<td>In adult patients who are permanently taking nephroprotective medications, kidney function should be checked at least once a year. In patients with CKD (GFR &lt; 60 ml/min/1.73 m2), an evaluation of whether the dosage should be adjusted or if there is a contraindication should be performed before prescribing any new medication.</td>
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### Long-term primary care

**Sore throat**
If antibiotic therapy for the treatment of bacterial tonsillitis/angina is ineffective after 3-4 days, it may be discontinued (after medical re-evaluation and consideration of differential diagnoses) to minimize the risk of a development of resistance and undesirable side effects.

- There is no need for a routine follow-up visit with a physician and follow-up examinations after successful treatment of sore throat.
- Re-evaluation should be performed if the condition of a patient with sore throat deteriorates or does not improve after 3-4 days. The following should be considered:
  - Differential diagnoses such as infectious mononucleosis
  - Symptoms or signs indicating a more serious or systemic disease
  - Previous treatment with antibiotics that can lead to resistance

**Type 2 Diabetes**
People with type 2 diabetes and their physician should jointly agree and prioritize individual therapy goals initially and repeatedly during the course of the disease.

- Therapy goals agreed individually with the patient should be evaluated regularly and as needed during the course of treatment and followed up or adjusted according to the results.
- Prior to any escalation of therapy, the reasons for non-achievement of previously agreed therapy goals should be evaluated and considered.

- In people with type 2 diabetes, therapy de-escalation or a change in the therapy strategy should be regularly assessed, especially:
  - If the negative effects of the therapy on the safety and quality of life of the person concerned outweigh the positive effects;
  - If the individual situation suggests that prognostic aspects play a lesser role than current quality of life;
  - If the individual therapy target was not achieved;
  - In cases of multimorbidity and polypharmacy;
  - If acute illnesses occur.

- De-escalation of insulin therapy should be evaluated in individuals with type 2 diabetes in the following situations:
  - If the indication (e.g. acute illness, metabolic dysfunction, deterioration of renal function) no longer exists;
  - The target values of glucose metabolism are reached or if the values are lower than the target values;
  - Hypoglycemia occurs;
  - The individual therapy goal changes (e.g. as a result of multimorbidity).

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## DEGAM or NVL Guideline

### Multimedications
The medication should be assessed in a structured manner, e.g., using an instrument such as the modified Medication Appropriateness Index (MAI)*, with special consideration of:
- PIM lists/anticholinergic load, QTc time prolonging drugs,
- Underuse,
- Adherence.

Each medication review should clarify whether medications are missing or whether they can be discontinued or the dose adjusted.

The medication plan should always be complete and up to date, with the standardised German medication plan (BMP) being the preferred format. Coordination is the responsibility of the primary care physician/primary responsible for the patient’s care. The medication plan must be presented at each consultation and at the pharmacy.

The coordinating physician should ensure that each patient with multi-medication has an up-to-date medication plan.

### Dementia
If one person in the family has dementia, this usually affects the whole family.

The subjective suffering of relatives, friends, and acquaintances as a result of the index person’s dementia is often greater than that of the affected person. In the primary care of persons with dementia, a special focus should be placed on the specific risks of the other family members as a particularly vulnerable group.

### Lower back pain
Opioid therapy should be re-evaluated regularly for acute, non-specific lower back pain after four weeks at the latest, and for chronic lower back pain after three months at the latest.

If the agreed treatment goal is not achieved, the opioid therapy should be discontinued.

A physician should take on the role of a so-called gatekeeper for the overall care process. That physician is the first point of contact for the patient and coordinates all the treatment steps.

### Multimorbidity
The following aspects should be addressed when determining patient preferences and values:

- Patients should be encouraged to express their personal goals and priorities. This includes clarifying the importance of:
  - Maintaining the social role: in professional and work activities, participation in social activities, family life;
  - Prevention of specific events (e.g., stroke);
  - Minimizing drug side effects;
  - Reducing the burden of treatments;
  - Life extension.

- Expert consensus: Together with the patient, a decision should be made as to whether their partner, family members/relatives or caregivers should be involved in important care decisions and to what extent.

- If multiple health care professions are involved in the treatment of patients with multimorbidity, the parties involved (the patient, specialists, primary care physician, family members/relatives, the nursing staff) should consult each other regarding guidelines and therapy.

### Care of Patients with Chronic kidney disease (CKD)
Patients with chronic kidney disease (CKD) (glomerular filtration rate (GFR) < 60 ml/min) should have a medication review of the long-term medication carried out at least once a year.

*The recommendations are from the 4th update of the Living Guideline (LG) in 02/2023. All the other recommendations were reviewed in 2023. Version 5.0, First publication 06/2019, Revision of 02/2023, Next revision planned for 02/2024.