M102 NHG GUIDELINE ON MEDICALLY UNEXPLAINED SYMPTOMS (MUS)

This guideline should be quoted as:
NHG GUIDELINE ON MEDICALLY UNEXPLAINED SYMPTOMS (MUS)

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Key messages

- Medically unexplained symptoms (MUS) are defined as physical symptoms persisting for more than several weeks and for which adequate medical examination has not revealed a condition that adequately explains the symptoms.
- Estimating the severity of MUS is based on exploration of five symptom dimensions, namely the somatic, cognitive, emotional, behavioural and social dimensions.
- A good doctor-patient relationship and communication are essential for the treatment of MUS.
- Management is focused on providing information and advice with a view to increasing activities in a time-contingent manner.

INTRODUCTION

The NHG Guideline on MUS provides recommendations for the diagnosis and treatment of adult patients with medically unexplained symptoms (MUS). MUS is defined as physical symptoms that have existed for more than several weeks and for which adequate medical examination has not revealed any condition that sufficiently explains the symptoms.

MUS is a working hypothesis based on the (justified) assumption that somatic/psychological pathology has been adequately ruled out. Any change in symptoms could be a reason to revise the working hypothesis.

After formulating the working hypothesis, the general practitioner will estimate the severity of the MUS. This guideline distinguishes between mild, moderate and severe MUS. The severity of the MUS guides the treatment.

This guideline is based on the multidisciplinary guideline on medically unexplained symptoms and somatoform disorders\(^1\) and follows as closely as possible other NHG Guidelines on symptoms and conditions that could include MUS (see ‘Diagnostic Recommendations’). The guideline does not cover a specific symptom or illness, but does provide treatment recommendations for cases in which no specific somatic condition is found, the symptoms do not disappear or are associated with functional limitations, and the patient continues to contact the general practitioner for these symptoms.

The guideline does not discuss the management of specific somatoform disorders. For diagnostic and therapeutic recommendations for patients with hypochondriasis, we refer to the NHG Guideline on anxiety.

Patient contribution

The NHG Guidelines provide guidance for treatment by the GP; therefore, the GP holds a central position. However, patient factors always influence treatment. For practical reasons, this aspect is not emphasized repeatedly in this guideline, but is mentioned explicitly at this point. Wherever possible, the GP creates a treatment plan in consultation with the patient, taking the patient’s specific situation into account and acknowledging the patient’s own responsibilities, with adequate information provision being a prerequisite for success.

GP’s considerations

The GP’s personal insight is a key aspect in all guidelines. Weighing relevant factors in specific situations can justify reasoned deviations from the treatment policy described below. Nonetheless, this guideline is meant to serve as a standard and aid.

Delegating tasks

NHG Guidelines are written for GPs. This does not mean the GP must perform all tasks personally. Certain tasks may be delegated to the doctor’s assistant, practice support staff or practice nurse, as long as they are provided with support in the form of clear working agreements, defining the conditions under which the GP must be consulted, and as long as the GP retains quality control. As the decision on whether or not to delegate is strongly dependent on the local situations, the guidelines do not contain any concrete recommendations in this area.

BACKGROUND

Experiencing physical symptoms is a part of normal life; approximately 90% of the general population report in surveys that they have experienced at least 1 physical symptom in the past 2 weeks. Whether or not people visit their doctor for physical symptoms appears to be more strongly correlated to the significance of the symptom to them personally and their ideas concerning these symptoms, rather than the severity of their symptoms. In several non-Western cultures, expressing physical symptoms is the most common method of indicating distress.\(^2\)

Almost all types of symptoms that patients present to their GPs could – either quickly, or over time and after further analysis – turn out to be symptoms that cannot be (adequately) explained by a specific medical condition. Even if symptoms or combinations of symptoms initially appear to be strongly indicative of a specific condition (for example, the combination of diarrhoea, trembling, weight loss and hot flushes is suggestive of hyperthyroidism), adequate examination will often reveal that the patient does not have this disease. In case of common symptoms, such as fatigue, stomach pain, back pain, dizziness and nausea, the general practitioner will often not find a disease that can explain those symptoms.\(^3\)

Terminology

Many terms are used to describe this large group of physical symptoms for which doctors cannot find a satisfactory explanation. Historically, symptoms that regularly cluster together were frequently grouped into syndromes, such as irritable bowel syndrome (IBS), fibromyalgia and chronic fatigue syndrome. However, many of the existing syndromes show significant overlap in their symptoms, and virtually every specialism has its own syndrome.\(^4\) This raises the question whether the clustering of MUS into distinct syndromes are an artefact of medical specialisation and whether these symptoms are in fact different syndromes or just one.\(^5\)

Furthermore, one could also group

these symptoms into clusters based on localization: gastro-intestinal, cardiopulmonary, musculoskeletal and general non-specific. If the MUS are not grouped into syndromes or clusters, there are also various terms to describe the separate physical symptoms, such as physically unexplained symptoms, functional symptoms, psychosomatic symptoms or somatoform symptoms.

For this guideline, we decided to adhere to the terminology in the multidisciplinary guideline and to use the term medically unexplained symptoms (MUS) for physical symptoms that persist for more than several weeks and for which adequate medical examination has not revealed a medical condition that adequately explains the symptoms. This description is not very specific as far as the duration of the symptoms is concerned, as the average episode duration varies per type of symptoms, and also because the moment of presentation to the general practitioner can vary significantly.

For some patients with physical symptoms a somatic condition can be identified, but if the symptoms are more severe or more persistent or limit functioning to a greater extent than expected based on the condition in question, they too are referred to as MUS.

MUS can be divided into mild MUS, moderate MUS and severe MUS depending on the duration of the symptoms, the number of symptoms and the impact of the symptoms on daily life. This is a sliding scale of severity without clearly defined cut-off points.

Epidemiological data
Occurrence of MUS
There is no ICPC code for MUS. Therefore, derived codes – for example symptom coding – must be used when studying the occurrence of MUS.

Up to 40% of the consultations in general practice concern physical symptoms for which no (adequate) somatic condition can be found. Persistent, severe MUS are much less common and have a prevalence of 2.5%.

Doctors often indicate that immigrant patients visit their general practitioner more often due to MUS than non-immigrant patients. However, this has only been confirmed for refugees. Various causes are listed for this, such as a history of violence experiences, a different perception of disease in which often no distinction is made between body and mind, and the attention, advantages and (legal, social and/or societal) recognition that can be obtained with physical symptoms.

Combination with anxiety disorders and/or depression
There is no firm association with anxiety disorders and/or depression for the mild forms of MUS. In patients with severe forms of MUS, the risk of a depression or anxiety disorder is over three times higher than in patients without MUS. More than a quarter of these patients suffer from both depression and anxiety disorder.

Pathophysiology
There is no clear explanation for the origin of MUS. Over the years, various explanatory models have been drawn up to explain the origin and persistence of MUS. These models are usually theoretical in nature and only based on empirical research to a limited extent. Every society has its own explanatory models. Non-Western cultures often do not distinguish between body

Abstract

This guideline of the Dutch College of General Practitioners (NHG) concerns the diagnosis and management of adult patients with medically unexplained symptoms (MUS). It is based on the Dutch multidisciplinary guideline on MUS and somatoform disorders, and where possible refers to other guidelines produced by the College on MUS-related symptoms and disorders. The guideline is not about a specific symptom or disease, but provides tools on how to manage patients whose symptoms are persistent and lead to functional impairment, even though investigations have not identified a specific underlying medical condition. These patients continue to seek medical care.

MUS is a working diagnosis based on the assumption that somatic/psychiatric pathology has been adequately excluded. If symptoms change, the working diagnosis may need to be revised. After establishing the diagnosis, the general practitioner (GP) must estimate the severity of MUS, as further management depends on symptom severity. This guideline distinguishes between mild, moderate, and severe MUS. Treatment is tailored to the individual patient. The main objectives of treatment are to define the problem in a way that is acceptable to both the patient and the doctor; to reduce unnecessary anxiety and discomfort, despite the presence of symptoms; and to improve the patient’s functioning in somatic, cognitive, emotional, behavioural, and social dimensions.

Treatment proceeds in a stepwise fashion (stepped care), starting with the lightest possible effective treatment. In step 1, the GP treats the patient, in step 2 the GP works together with or refers the patient to other primary care professionals (e.g., physiotherapist, psychologist), and in step 3 treatment is provided by multidisciplinary teams or treatment centres. If results are unsatisfactory, then treatment is intensified. If a patient presents with moderate or severe MUS, the GP can consider starting more intensive treatment (step 2 or even 3 if necessary) simultaneously with step 1.

Main messages
- MUS is defined as physical symptoms that last for longer than a few weeks and which cannot be satisfactorily explained after adequate medical examination.
- Assessment of MUS severity is based on five dimensions of symptoms, i.e. the somatic, cognitive, emotional, behavioural, and social dimensions.
- Good doctor–patient relationship and communication are essential for the management of MUS.
- Management is focused on providing information and advice with a view to increasing activities in a time-contingent manner.
and mind. People often look for external causes of their problems. Cultural differences and other differences affect the applicability of some explanatory models.13

**Natural course and prognosis**

In 50 to 75% of people diagnosed with MUS by the general practitioner, the symptoms will decrease over the course of 12 to 15 months. However, in 10 to 30%, the symptoms will increase over time. The number of symptoms, duration and severity at presentation to the general practitioner are factors associated with a less favourable course of MUS in patients in primary care.13 A positive perception of the doctor-patient relationship (by patient and/or doctor) has a favourable effect on the prognosis of MUS.14

**Factors that affect occurrence and persistence**

Psychosocial stressors (negative life events, difficult living conditions, work-related problems, stress, trauma, sexual abuse) appear to play a causal role in both the explained and unexplained symptoms; on their own these factors are not a good predictor of MUS.15

Factors that play a role in MUS can be categorised into predisposing, exacerbating and maintaining factors. Predisposing factors are mainly susceptibility/nature and possibly also poor health literacy.16 Exacerbating factors vary in nature: a severe gastrointestinal infection appears to precede the symptoms in some people with IBS, but the symptoms can also be induced by a significant life event. Maintaining factors are often behavioural factors that can inhibit recovery, for example, reduced exercise can result in maintenance of low back pain, and continuously seeking help can maintain symptoms of anxiety. This causes vicious circles.

**Doctor-patient relationship**

The doctor-patient relationship is often pressured during consultations with patients with MUS. The patient often feels that he/she is not being taken seriously, not understood and remains anxious, whilst the doctor begins to feel powerless and irritated and is unable to come to a shared understanding of the symptoms and problems with the patient. Doctors also experience (diagnostic) uncertainty, and (unjustly) feel that they should not show their uncertainty to patients with MUS. The doctor-patient relationship is strengthened by taking the patient and his or her symptoms seriously and by showing empathy. A good doctor-patient relationship results in patient satisfaction and improved health outcomes. By contrast, a poor doctor-patient relationship results in symptoms being reported more frequently and in increased consultation rates.14

**Diversity**

The care provider should also be open to the MUS patient’s ‘culture’ in the broadest sense of the word, regardless of whether this culture concerns the patient’s ethnicity, age, gender or socio-economic status.

A number of specific points of attention can be listed for immigrant patients. Firstly, the immigrant life in itself can be a stress factor. In addition, language problems and cultural differences – particularly for non-Western immigrants – can place significant demands on the communication skills of the general practitioner.

**DIAGNOSTIC GUIDELINES**

Starting point of the guideline is the situation in which the general practitioner becomes able to formulate the working hypothesis ‘MUS’. In other words, the guideline assumes that somatic/psychological pathology that could be responsible for the symptoms has been reasonably ruled out in preceding consultations. The general practitioner can use the NHG Guidelines that provide diagnostic recommendations for symptoms that often do not have a somatic cause [table 1].13 MUS always remains a working hypothesis, as in a limited number of cases it could become clear over time that the symptoms were in fact caused by somatic pathology. It is particularly important to be wary of this if alarming symptoms or changes in the pattern of symptoms occur.18 Focus on the somatic dimension of the symptoms and considering physical re-examination and additional investigations remains important for patients with MUS. Particularly if the symptoms change. Therefore, the somatic dimension has been included in the exploration of symptoms.

**Exploration of symptoms**

After forming the working hypothesis of MUS, the general practitioner should start additional exploration of the symptoms aimed at getting a fuller understanding of the patient and his or her MUS, identifying prognostically favourable or unfavourable factors (that inhibit recovery) and estimating the severity of the MUS. Allowing the patient to speak for a few minutes without interruption can help to broaden the exploration of symptoms. This method can reveal relevant starting points (clues) for the treatment. They could consist of words used by the patient, but also of non-verbal behaviour (body language) that is noted during the consultation.19 Explicitly asking the patient whether he or she has any specific questions also forms part of the complete exploration of symptoms.

The acronym SCEBS can assist the general practitioner in determining whether all symptom dimensions have been explored. SCEBS stands for the somatic, cognitive, emotional, behavioural and social dimensions.

These dimensions originate from the biopsychosocial model.14

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**Table 1 Guidelines about symptoms that often cannot be adequately explained in a somatic context**

| NHG Guideline on irritable bowel syndrome (M71) |
| NHG Guideline on dyspepsia (M36) |
| NHG Guideline on non-specific low back pain (M54) |
| NHG Guideline on headache (M19) |
| NHG Guideline on sleep problems (M23) |
| NHG Guideline on dizziness (M75) |
Somatic dimension
Check the following aspects of the symptom(s):
• symptom cluster (gastro-intestinal, cardio-pulmonary, musculoskeletal, general non-specific (i.e. fatigue, headache, dizziness, concentration/memory problems));
• nature, location, duration, severity and pattern of the symptoms;
• accompanying symptoms;
• use of medication (including non-prescription treatment and potentially addictive drugs such as benzodiazepines and analgesics).

Focussing on the somatic aspects of the symptom demonstrates to the patient that his or her symptoms and their burden are recognised and taken seriously.

Cognitive dimension
Ask about:
• the patient’s ideas about the origin and persistence of his/her symptoms (frame of reference);
• what the patient thinks he/she can do to influence these aspects;
• why the patient thinks that he/she cannot or can no longer perform certain activities or jobs;
• the patient’s expectations concerning the contribution by the general practitioner or other care providers in managing the symptoms.

Exploration of these aspects often allows the general practitioner to identify certain patient perspectives that could prevent recovery: catastrophising thoughts (“I’ll never get back to work with these back issues” or “my brother/neighbour never got over this either”), disease attributions (“such severe pain must mean that my neck has been damaged in some way”), or ideas about dealing with the symptoms (“I must not bear weight on my leg until it is completely healed”).

Emotional dimension
Ask about the emotional consequences of the symptom(s):
• What feelings and emotions does the patient experience as a result of the symptoms? Some patients become depressed or anxious as a result of the symptoms, whilst others feel desperate, despondent or rebellious.
• Is the patient very anxious about the symptoms? What exactly is he/she worried about? What is the reason for these concerns?

Symptoms and the thoughts and concerns about the symptoms can be associated with anxiety, fear or a depressive mood. The general practitioner can use a questionnaire as a tool to create room to discuss distress (‘being unable to cope’), anxiety and feelings of depression.

Behavioural dimension
Ask about the behavioural consequences of the symptom(s):
• avoiding weight bearing or movement, or other avoidance behaviour;
• sick leave;
• ignoring the symptom and carrying on, which causes overburdening;
• other behaviour that could inhibit the recovery.

Also focus on the help-seeking behaviour:
• Does the patient seek medical assistance quickly or does he/she try to solve the problems by him/herself for a long period?
• Does he/she visit different doctors/care providers for the same problem?
• What did the patient do in order to resolve the symptoms, which measures has he/she taken?

Also look at non-verbal behaviour during the consultation (for example, a patient with back pain who does not sit upright in the chair).

Social dimension
Ask about the social consequences of the symptom(s):
• What are the consequences of the symptoms on those around him/her?
• How do they respond: (overly) concerned, negative or supportive?
• What effect do the symptoms have on the patient’s functioning at home and at work?

The general practitioner can adjust the order of questions to account for differences between a collectivistic culture and the Western individualistic culture for patients with a different cultural background: first ask about social reactions and consequences, then ask about the patient’s own ideas, concerns and emotions. The use of a professional interpreter – via the telephone if necessary – is recommended. Wherever possible, avoid asking a child or another family member to act as an interpreter, in order to increase the chances of uncovering psychosocial problems. Visit www.huisarts-migrant.nl for more information about caring for immigrant patients with MUS.

Additional psychological disorders
Based on the exploration of symptoms, the general practitioner will determine whether any additional psychological disorders are suspected. This particularly includes psychological disorders that affect the physical symptoms, such as depression and anxiety disorders (see the relevant NHG Guidelines).

If there is concern about the presence of a psychiatric condition (such as a somatisation disorder), the patient can be referred to a psychiatrist for diagnosis. The general practitioner can also ask a psychiatrist for advice at this stage, potentially in the form of a joint consultation with the patient, the general practitioner and the psychiatrist. Preferably, the general practitioner should refer to a psychiatrist who works together with other therapists with experience in treating patients with MUS.

Physical examination, additional investigations and diagnostic referral
Physical examination is indicated if the exploration of symptoms reveals that the symptoms have changed in nature and when alarming symptoms occur. Additional investigations or diagnostic referral to a specialist can also be considered for the same reasons. For the most common symptoms, indications for referral can be found in the previ-
ously mentioned NHG Guidelines.

If the general practitioner starts to doubt the working hypothesis of MUS due to an altered pattern of symptoms, and in order to rule out somatic pathology again, it is important that he/she explains thoroughly to the patient why additional investigations are being performed. The same applies to a diagnostic referral to a specialist. This usually serves to further reduce the small chance of pathology. Laboratory tests performed with a low prior chance of disease have a relatively high risk of false positive test results.73

If the patient specifically asks for additional investigations or referral while there is no indication for this, the general practitioner will explain that he/she does not think additional investigations are necessary and does not expect them to provide any new findings. However, he can follow the patient’s request in order to try to reassure the patient. It is important in that case to explain to the patient in advance what a negative test result would mean and what the next steps would be in that case.73 When referring a patient to a medical specialist at the request of the patient, it is important to formulate a clear question in the referral letter – ideally drafted by the patient and the general practitioner together – with the request that the patient be referred back to the general practitioner if no abnormalities are found. This in order to prevent the patient being passed from one specialist to the next.

**Evaluation**

Based on the exploration of the symptoms and the presence of any additional psychological problems, the general practitioner will evaluate the severity of the MUS, taking into consideration the prognostic factors.

**Prognostic factors**

A short duration of the symptoms, few different symptoms and few functional limitations are seen as prognostically favourable. Long persistence of symptoms and presentation of many different symptoms are prognostically unfavourable factors.14 Furthermore, experiencing several functional limitations (for example: not being able to work, loss of social activities, inability to perform family duties) is also prognostically unfavourable for a number of MUS.14

**Evaluation of the severity**

Based on the outcome of the exploration of the prognostic factors, the general practitioner can determine the approximate location of this patient on the severity scale from mild via moderate to severe MUS, as explained in the introduction.

**Mild MUS:**
- slight functional limitations; and
- one or several MUS within one or two symptom clusters (gastro-intestinal, cardio-pulmonary, musculoskeletal, general non-specific [i.e. fatigue, headache, dizziness, concentration/memory problems]).

**Moderate MUS:**
- moderate functional limitations; and
- several MUS in at least three symptom clusters; and/or
- duration of symptoms longer than expected, depending on the normal course of the relevant symptom.

**Severe MUS:**
- severe functional limitations; and
- MUS in all symptom clusters; and/or
- duration of symptoms longer than three months.

**Comorbid depression and/or anxiety disorder**

Although physical symptoms accompanying depression or an anxiety disorder can often be explained as part of the psychiatric diagnosis, they are sometimes caused by two co-existing conditions.

Making a dual diagnosis of MUS in combination with a depression or anxiety disorder can be useful if:
- the physical symptoms are more pronounced than would be consistent with depression or an anxiety disorder;
- the physical symptom was already present before the depression or anxiety disorder started;
- both are of a severity that requires separate treatment.

**THERAPEUTIC RECOMMENDATIONS**

Treatment of patients with MUS requires an individual approach. The most important goals of the therapeutic recommendations are:
- finding a definition of the problem that is acceptable for both the patient and the general practitioner;
- reducing unnecessary concern and functional limitations, despite the presence of symptoms;
- improving the functioning of the patient in the somatic, cognitive, emotional, behavioural and social dimensions.

The treatment is a so-called ‘stepped care’ process, in which the general practitioner starts with the mildest possible effective treatment (table 2). If this step does not provide adequate results, the treatment is intensified in step 2.21 In the event of moderate or severe MUS at first presentation, the general practitioner can consider combining step 1 with immediate initiation of more intensive treatment (step 2 or possibly step 3). Consider the patient’s ethnic-cultural background in all steps.21

**STEP 1**

Step 1 includes a number of activities that the general practitioner can spread over several consultations: (1) using the exploration of symptoms to identify and discuss the factors that could inhibit recovery, (2) education and advice (also with regard to drug treatment), (3) Formulation of a shared time-contingent plan and (4) follow-up appointments during which the general practitioner will monitor the plan and patient’s functioning. A new exploration of symptoms is performed if the recovery stagnates. As MUS always remains a working hypothesis, the general practitioner will perform a new exploration of symptoms, targeted...
physical examination and additional investigations if changes in the symptoms make this necessary.

Step 1 usually involves patients with MUS who experience mild functional limitations and who suffer from 1 or several symptoms in 1 or 2 symptom clusters (gastro-intestinal, cardio-pulmonary, musculoskeletal, general non-specific (i.e.: fatigue, headache, dizziness, concentration/memory problems)).

• Conclude the exploration of symptoms and any physical examination and/or additional investigations
As part of the education process, the general practitioner will summarise the findings of the symptom exploration (SCEBS), the physical examination and any additional diagnostic tests. It is important to discuss clearly what was found and mention explicitly what was not found. If possible, the general practitioner should include expectations or anxieties that have previously been expressed by the patient.

• Shared definition of the problem
Try to come to a shared definition of the problem together with the patient, for example “your back pain started after your move, your spine has recovered, but the pain has stayed, and prevent you from performing a number of activities that you would now like to start again”. It is important to recognise the symptoms and the fact that the patient is troubled by them.

Education and advice

Next, provide the patient with targeted and tangible information that links up with the information that the general practitioner obtained during the diagnostic exploration of the somatic, cognitive, emotional, behavioural and social dimensions of the symptoms.

Avoid repeatedly reassurance of anxious patients with general statements. It is very important that the patient’s anxiety is treated seriously and in a sensitive manner. Patients who notice that the doctor listens to and recognises their problems feel that they are being taken more seriously and are more readily reassured.

It is preferable to list the symptom(s) as far as possible in descriptive terms and to avoid explanations that the patient could interpret as a disease. General practitioners tend to reassure patients by telling them which severe conditions have not been found. If a patient is not specifically worried about a certain condition, such an explanation (“you do not have lung cancer”) can cause additional anxiety. As negative explanations or normalisation have the disadvantage of making the patient feel that he/she is not being taken seriously or making the patient more anxious, the general practitioner should use positive terms wherever possible. Do not say “we did not find anything”, “it’s nothing” or “we cannot find anything”, but rather say “your back is straight and can make all normal movements”. In contrast, for patients who have a specific fear of a certain condition (for example, cancer) it is important to explain what they do not have (“you do not have lung cancer, which is what you were so afraid of”). People with limited health skills (among immigrants and people with low literacy skills, for instance) have little knowledge about the normal functioning of the human body. An explanation can help in this case.

When providing specific and tangible information, the general practitioner can use the various explanatory models that provide recommendations for the treatment of MUS. Link this in with the words, images and key points that were noted during the exploratory phase. Ensure that you select a model that fits both the general practitioner and this patient, and find and use your own words when using the model.

In addition to the oral information provided, the general practitioner can refer the patient to information about MUS on the NHG public website www.thuisarts.nl or give the patient the relevant text (previously called the NHG patient letter) to take home (via the HIS or the NHG ConsultWijzer [consult-

<table>
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<th>Step</th>
<th>Recommendation</th>
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<td>Step 1 Patient with mild MUS By general practitioner</td>
<td>Conclude exploration of symptoms and potentially perform a physical examination and/or additional investigations. Shared definition of problem, based on exploration of symptoms. Education and advice: ■ education and explanation; ■ discussion of factors that inhibit recovery; ■ advice. Formulation of a shared time-contingent plan. Follow-up: ■ monitor progress of plan and repeat exploration of symptoms if recovery stagnates; ■ if the symptoms change, repeat exploration of symptoms and perform a targeted physical examination and additional investigations if necessary.</td>
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<td>Step 2 Patient with moderate MUS In collaboration with other primary care providers</td>
<td>Collaboration with/referral to: ■ (psychosomatic) physiotherapist or exercise therapist; ■ mental health nurse practitioner or social psychiatric nurse in primary care; ■ primary care psychologist trained in cognitive behavioural therapy.</td>
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<tr>
<td>Step 3 Patient with severe MUS In collaboration with secondary care providers</td>
<td>Collaboration with/referral to: ■ multidisciplinary teams/treatment centres.</td>
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tation tool). This patient information is based on the NHG Guideline.

**Discussing factors that inhibit recovery**
Discuss the factors that can inhibit recovery that were observed during the exploration of symptoms in the various SCEBS dimensions, and provide concrete advice based on these factors.

**Somatic factors**, such as a comorbid somatic condition or a sleep disorder, can result in persistence of MUS. If present, the general practitioner will optimise the treatment of these factors.

**Cognitive factors**, such as patients’ negative thoughts and ideas about the symptoms, can influence recovery negatively. The general practitioner discusses the negative effects of catastrophising beliefs such as “it will never get any better” and asks the patient to consider alternatives such as replacing the negative thoughts with realistic neutral or positive thoughts like “I do have pain, but I am still able to do my job”. Challenging and adjusting such negative thoughts has a positive effect on recovery.

**Emotional factors**, such as worry, fear of disease, fear of movement and hopelessness, can make the original symptoms worse. The general practitioner has made an inventory of these emotional factors in the diagnostic phase. The general practitioner uses this information to provide targeted and tangible information and advice. If the patient is worried or afraid of disease, the general practitioner will explore what the patient is worried about and in what way he/she can be reassured. With fear of movement, the conviction that pain is a signal of a (serious) condition often plays a role. In that case, the general practitioner will explain that pain usually does not indicate danger or a severe condition and that this is true for the patient in this case too. For patients suffering from feelings of depression or hopelessness, the general practitioner can use the NHG Guideline on depression.

**Behavioural factors**, such as avoiding activities or being too active, are virtually always present with long-term MUS. The general practitioner explains what the effect of this behaviour is on the MUS, explores which behavioural changes the patient is motivated to make, and provides targeted and tangible advice.

**Social factors**, such as the situation in the family or at work, often determine a large portion of the burden of the symptoms. Discuss the effects of the patient’s context: support from his/her context can have a positive effect on the course, and incorrect thoughts/assumptions by his/her surroundings can form an inhibiting factor. If there are questions about the work situation, for example, about sick leave and possible health risks in the work place (work pressure as a factor causing MUS to persist, or attribution of symptoms to work-related factors, for example toxic substances or electromagnetic radiation), the general practitioner can refer the patient to an occupational health physician. The general practitioner discusses ways in which the patient can return to work and resume his/her daily activities.

**Advice**
When providing advice, the key message is that the prognosis is good, that the symptoms can vary over the course of time and that it is not harmful to exercise or perform activities. Experiencing pain or fatigue does not mean that there is a disease or that damage has occurred: it is common and usually goes away without intervention. The recovery will be faster if the patient gradually expands his/her activities. Advise the patient to remain active and continue with his/her daily activities – including (paid) work – as far as possible. Give practical advice about this. If the patient avoids certain activities or performs too many activities and does not relax enough, this can inhibit normal recovery.

**Treatment with medication**
If the general practitioner considers advising pain management with over-the-counter pain medication, the working group advises short-term analgesia with acetaminophen or, as a second option (and in the absence of contra-indications), an NSAID (see the Farmacotherapeutische richtlijn Pijnbestrijding [Pharmacotherapeutic guideline on pain management] and the symptom-specific NHG Guidelines). It is preferable to reduce the pain medication gradually after the acute stage, in order to prevent chronic use of pain medication and medication dependency.

**Follow-up and formulation of a shared time-contingent plan**
Instruct the patient to return in the following cases:
• if there is a strong increase in the dysfunction or persistence of severe symptoms: after one week;
• if the dysfunction has not improved or is no longer improving: after two to four weeks.

At a follow-up consultation, always evaluate the previously confirmed relevant parts of the exploration of symptoms and any physical examination and/or additional investigations. Check why the patient’s functioning has not improved and the symptoms have not disappeared. Always use an inventory of the functioning according to the various dimensions (SCEBS) when doing so.

During this follow-up consultation, formulate a shared plan with goals and a time schedule. This approach, which consists of a gradual (time-based) increase of, is preferable over a symptom-based approach (movement ‘if the pain allows’ or becoming active ‘if the fatigue has disappeared’) [Table 3].

Preferably the road to recovery is made tangible and illustrated with tips; the advice or exercise given should match the limitations experienced by the patient in his/her daily life. The general practitioner and the patient should agree on the time schedule for all steps in the treatment plan.
Step 2

The intensification of the treatment in step 2 consists of continuation of the treatment in accordance with step 1, and of collaboration with and referral to other primary care providers. The general practitioner implements step 2 if step 1 yields inadequate results. This usually involves patients with MUS who experience moderate functional limitations (including, for example, sick leave for more than 4 to 6 weeks) and who have several MUS in multiple symptom clusters or a symptom duration longer than expected (depending on the nature and the normal course of the symptom).

Follow-up

Make regular follow-up appointments if the functional limitations persist, for example once every 4 to 6 weeks. Evaluate the progress of the treatment (see ‘Collaboration/referral’ below) and the course of the symptoms together with the patient. Advise the patient to work actively on his/her recovery. Treatments in which the patient participates actively (such as psychotherapy, psychosomatic physiotherapy and exercise therapy) are more effective than passive treatments such as injections, operations and passive forms of physiotherapy.

Collaboration/referral

If the patient is unable to expand his/her activities to an acceptable level because there are many inhibiting factors, the general practitioner can decide to refer the patient. In that case, the general practitioner should discuss with the patient the type of therapy that matches his/her capabilities, wishes and needs.

A care provider with affinity and experience with – as well as specific knowledge about – MUS is preferable if the decision is made to refer. Being able to explore all symptom dimensions (SCEBS) and being able to build a safe, supportive and open relationship with the patient are required competencies.

In the primary care setting, the general practitioner can also collaborate with a (psychosomatic) physiotherapist or exercise therapist, mental health nurse practitioner, primary care social psychiatric nurse or primary care psychologist (trained in cognitive behavioural therapy). Care providers from other primary care disciplines can also be involved, depending on the local situation.

If musculoskeletal symptoms are predominant, the general practitioner will preferably refer to a physiotherapist or exercise therapist with additional specialist training (for example, in psychosomatic physiotherapy or exercise therapy) or who has had training in counselling patients with MUS.

If the general practitioner collaborates with a mental health nurse practitioner or primary care social psychiatric nurse, this person can support patients in this step and offer – for example – PST (problem-solving treatment). The mental health nurse practitioner or primary care social psychiatric nurse takes over the monitoring role from the general practitioner in those cases, but the general practitioner keeps long-term control.

The general practitioner can refer the patient to a primary care psychologist for patient education and short-term supportive counselling or cognitive behavioural therapy. The primary care psychologist should have experience in treating patients with MUS.

Step 3

The intensification of the treatment in step 3 consists of collaboration with and referral to secondary care providers and multidisciplinary teams or treatment centres. This involves patients with inadequate results from step 1 and 2, probably patients with severe MUS (severe functional limitations (including, for example, sick leave for more than 3 months) and a large number of different MUS and/or a duration of symptoms > 3 months).

In this stage, it is important that one care provider keeps control of the care provided to the patient with MUS. In many cases, the general practitioner is the best person for this job, but a social psychiatric nurse, psychologist or occupational health physician can also fill this role.

In this step, the role of the general practitioner consists of:

1. continuing to stimulate the expansion of the patient’s functioning and detecting any deterioration in his/her functioning (see step 1);
2. limiting long-term treatments and investigations that are not useful and may even be harmful;
3. if several or long-term specific and intensive treatments have not resulted in any further improvement: encouraging the patient to accept the status quo.

Follow-up

Make regular follow-up appointments during the treatment, for example once every four to six weeks. In the event of persistent dysfunctioning without active treatment, the advice is to evaluate the situation at least once a year and to potentially offer any new treatment options.

Collaboration/referral

Referral for therapeutic reasons to a mono-disciplinary pain specialist is not recommended if he/she only applies local invasive analgesic methods,
such as denervation and injections with analgesics, corticosteroids or sclerosing agents, since these treatments are not effective when applied as monotherapy. If the approach in the previous steps has failed or if the evaluation immediately revealed that this is a case of severe MUS, the general practitioner can refer for a multidisciplinary approach, in which the previously mentioned disciplines are represented and collaborate in an integrated manner. A multidisciplinary approach that integrates somatic, psychological and social aspects in the treatment offers the opportunity of improving the functioning in various areas. An intense physical and cognitive-behavioural rehabilitation programme promotes a return to an acceptable level of activity. A multidisciplinary approach allows for long-term and more specific treatments to be offered, either as out-patient treatment or in combination with admission.
NOTES AND LITERATURE

1 Multidisciplinary guideline on medically unexplained symptoms and somatoforic disorder

The NHG Guideline on MUS is an expansion of aspects from the multidisciplinary guideline on MUS and somatoform disorders [Fisher 2010] that are relevant to general practice medicine and describes how they can be applied in the general practice setting.

2 Expression of physical symptoms in non-Western cultures

In many cultures, social harmony and non-confrontational interaction with other people take precedence over the expression of emotions. The use of metaphors and physical symptoms as a language of distress prevents the patient and those around him from feelings of shame [Kirmayer 1998], Turkish and Moroccan individuals in particular tend to focus mainly on the somatic side of their problems, in contrast to individuals from Surinam [Knipscheer 2005].

3 Absence of a medical explanation for physical symptoms

Quite regularly when a person visits a doctor due to physical symptoms, the doctor is unable to find a physical cause. In about 30 to 50% of cases, the general practitioner cannot find a medical explanation for the symptoms [Khan 2003]. These percentages are also high – between 40 and 60% – for the neurologist, rheumatologist, pulmonologist, gastroenterologist, cardiologist, dentist, gynaecologist [Nimnuan 2001a] and internist [van Hemert 1996].

4 Common MUS per specialism with accompanying ICPC code

See (Table 4).

5 Functional syndromes: one or many?

There is much discussion about the question whether functional symptoms cluster into clearly defined syndromes such as fibromyalgia, chronic fatigue syndrome or tension headache, or whether these specific somatic syndromes are primarily an artefact of medical specialisation [Wessely 1999, Nimnuan 2001b, Olde Hartman 2004].

6 Clusters of medically unexplained symptoms

In an exploratory study of a group of 778 MUS patients – with 701 patients originating from general practice – the symptoms experienced by these patients could be grouped in 4 clusters:

- gastro-intestinal: stomach pain, varying pattern of defecation, feeling bloated/swollen abdomen, gastro-oesophageal reflux, nausea, vomiting, borborygm;
- cardio-pulmonary: palpitations, unpleasant sensation across the chest, shortness of breath without exertion, hyperventilation, warm or cold sweats, trembling/shaking, dry mouth, butterflies in the stomach, blushing and sweating;
- musculoskeletal: pain in arms/legs, muscle pain, joint pain, local sensation of loss of strength or weakness, back pain, pain with movement, unusually numb sensation/tingling;
- general non-specific: excessive fatigue, headache, dizziness, concentration problems, memory problems.

The authors only counted symptoms that a person experienced as a burden. The average MUS patient had five symptoms. The more symptoms patients had, the more frequently they had a high score for distress, anxiety or depression domains on a questionnaire. It made little difference whether the symptoms were located in many different clusters. The authors concluded that MUS (though they felt that bodily distress syndrome was a better name) can be viewed as one syndrome, which can be expressed in various areas [Fink 2007, Fink 2010].

7 Site of somatoforic disorders and epidemiology in general practice

Apart from the continuum based on severity (mild, moderate and severe MUS), there are also the somatoform disorders according to the DSM. The DSM-IV-TR [American Psychiatric Association 2000] – the world’s most widely used psychiatric classification system, which describes all psychiatric disorders – includes seven somatoform disorders. The undifferentiated somatoform disorder and the somatoform disorder not otherwise specified are less severe – in terms of prognosis and limitations – than the somatisation disorder, the pain disorder and a number of other disorders. They are more common than the other somatoform disorders and do not often require a specialist approach. Hypochondriasis and body dysmorphic disorder often result in significant suffering, but less often in severe limitations in functioning and require specialist treatment. Also see (Table 5).

8 Epidemiology of MUS

The large variation in observed prevalence of MUS is partly due to the definition used, the point in time the symptom episode at which the diagnosis is made, and inter-doctor variation. Melville et al. found that 3% of the patients with a new symptom episode received the diagnosis of MUS from 3 months [Melville 1987]. In an English study, general practitioners classified MUS as the reason for consultation in 19% of the consultation visitors. Based on screening instruments, 35% were found to have MUS, with 31% of these possible suffering from a somatoforic disorder [Peeleer 1997]. A Dutch study found that an average of 13% of all consultations concerned at least one symptom that the general practitioners labelled as MUS [Van der Weijden 2001]. One of the highest rates of prevalence observed was in an Australian study, which showed that patients presented with MUS in 33% of the scheduled consultations in primary care [Pilowsky 1987]. Of course, the prevalence of MUS after first consultations about a symptom also differs from the prevalence of symptoms due to symptoms that have existed for a longer period. For example, Verhaak et al. found a prevalence of 2.5% for patients visiting their general practitioner frequently with MUS in Dutch general practice [Verhaak 2006]. Another cause of the variation in prevalence is a large inter-doctor variation in labelling the presented health problems as ‘explained’ or ‘unexplained’. When one doctor deems ‘unexplained’ may have a perfectly logical explanation according to another doctor. Some doctors require a pathological organic foundation before they can define a symptom as ‘explained’, whilst others are satisfied with functional symptoms or syndromes as an explanation.

9 Somatisation in immigrant versus non-immigrant patients

Statement based on the book Een arts van de wereld: etnische diversiteit in de medische praktijk [A global doctor: ethnic diversity in medical practice] [Seeleman 2005].

10 Association of MUS with anxiety disorder or depression

Both an anxiety disorder and depression can be associated with physical symptoms. Depression and anxiety disorder can also present initially in the form of physical symptoms. In the case of depression, this is often in the form of fatigue and pain; anxiety disorders are often expressed in the form of shortness of breath, dizziness, palpitations, tingling (more generally: symptoms that present as cardiac-pulmonary symptoms). However, the predictive value of having physical symptoms for making the diagnosis of depression or anxiety disorder is low (See the NHG Guideline on anxiety and depression). Using data from the Transition Project (16,000 patients from 10 general practitioners), Van Boven et al. examined the correlation between MUS and psychological disorders. They compared patients with new MUS (including palpitations, low back pain and headache) with patients with symptoms that are usually explained by a somatic condition (for example, enlarged lymph nodes and swollen ankles). The researchers found a statistical relationship between having MUS and an anxiety disorder or depression (OR varying from 1.7 to 5.1 for anxiety disorders, and from 1.7 to 4.2 for depression). In addition, the researchers found that the predictive value of MUS for developing an anxiety disorder or depression disorder was just as low as the predictive value of explained symptoms for the development of such a disorder [Van Boven 2011].

Table 4 Common MUS per specialism with accompanying ICPC code

<table>
<thead>
<tr>
<th>Specialism</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal medicine</td>
<td>A02</td>
</tr>
<tr>
<td>Dermatology</td>
<td>A09.02</td>
</tr>
<tr>
<td>ENT</td>
<td>S02</td>
</tr>
<tr>
<td>Neurology</td>
<td>H03</td>
</tr>
<tr>
<td>Cardiology</td>
<td>K29.02</td>
</tr>
<tr>
<td>Pulmonology</td>
<td>N01</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>K04/K05</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>N17/01-02/18</td>
</tr>
<tr>
<td>Cardiology</td>
<td>N18</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>N01</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>N05</td>
</tr>
</tbody>
</table>

11 HUISARTS & WETENSCHAP

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### Explanatory models

#### Table 5 Description of somatoform disorders and estimated prevalence in general practice [De Waal 2004]

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated prevalence in general practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatisation disorder</td>
<td>Condition of multi-symptoms that often starts before the age of thirty, persists for a long time and is characterised by a combination of pain, gastro-intestinal, sexual and pseudo-neurological symptoms.</td>
</tr>
<tr>
<td>Pain disorder</td>
<td>Unexplained pain that is severe enough to limit functioning and to seek medical help. Occurrence, severity, exacerbation and persistence are linked to psychological factors. Inadequately explained pain in the presence of a somatic condition is also included in the pain disorder.</td>
</tr>
<tr>
<td>Conversion disorder</td>
<td>Unexplained symptoms or loss of function that affects random motor or sensory functions, or seizures/convulsions that suggest a neurological or other somatic condition. A link to psychological factors is deemed likely.</td>
</tr>
<tr>
<td>Undifferentiated somatoform disorder</td>
<td>At least one medically unexplained physical symptom that has caused a limitation in daily life for at least six months. The functional syndromes (IBS, CFS, FM etc.) fall into this group of undifferentiated somatoform disorders.</td>
</tr>
<tr>
<td>Somatoform disorder not otherwise specified</td>
<td>Somatoform symptoms and syndromes that do not meet the criteria of one of the specific somatoform disorders.</td>
</tr>
<tr>
<td>Hypochondriasis</td>
<td>Strong preoccupation with and fear of having a serious illness, as a result of an incorrect interpretation of physical symptoms for at least six months.</td>
</tr>
<tr>
<td>Body dysmorphic disorder</td>
<td>Preoccupation with a supposed flaw in the appearance.</td>
</tr>
</tbody>
</table>

#### 11 Explanatory models

The various explanatory models differ in the extent to which they explain physical symptoms and processes and the extent to which they take account of certain physiological, psychological and social aspects. However, pathophysiological mechanisms of various symptoms are becoming increasingly clear. Research is focussing predominantly on the physiology of psychological processes. This somato-psychological research focuses on the physical symptoms of psychological disorders (cardiovascular or inflammatory symptoms occurring with depression) and psychological consequences of somatic conditions (effect of rheumatoid arthritis on ideas and personality), among other things. In this way, we are gaining increasing insight into the way in which somatic phenomena, ideas, emotions, behaviour and environment are linked.

- **Biopsychosocial model**
  - The biopsychosocial model [Engel 1977] clearly emphasises the importance of the context of the patient. The model assumes that (perceived) health is associated with all dimensions of human existence and that humans are constantly interacting with their environment. Medical schools have now incorporated this model in their curricula.
  - **Capacity/burden model**
    - A model that expounds on the capacity/burden principle is the so-called SSS model [De Jonghe 1997]. SSSV stands for: support, stress, strength and vulnerability. The balance between these factors is important. If vulnerability and strength are unbalanced in a person, this can lead to symptoms as a result of a specific type of stress and lack of support, for instance.
  - **Stress model**
    - De Gucht and Fischler [De Gucht 2002] demonstrate in their ‘analysis of the relationship between professional stress, psychosocial parameters and various dimensions of physical health’ that a high level of professional stress is correlated with fatigue, pain and somatoform disorders. Psychological distress plays an important role in this relationship. Their hypothesis is that certain psychosocial factors combined with a chronically high level of professional stress can result in experiencing unexplained physical symptoms.

#### 12 Explanatory models and non-Western cultures

Every society has its own explanatory models for disease and health. The biomedical model dominates in Western cultures: a disease can be traced to a disorder in the body or the mind. In contrast, non-Western cultures often do not distinguish between body and mind and the causes of and solutions to problems are sought elsewhere (gods/spirits). For example, in Morocco, a distinction is made between disease due to natural causes (disruption in the balance between warm and cold), supernatural causes (contagion, demons that inhabit a world parallel to humans) or human causes (the evil eye, witchcraft or magic) [Borra 2003].

Some Islamic patients see their symptoms as the fate that Allah has bestowed upon them and do not feel that they can actively intervene. You cannot create or earn health, it is a favour bestowed by Allah [Noordenbos 2007].

#### 13 Course of MUS

In a meta-analysis – following an extensive search – the authors identified 6 prospective cohort studies (with 81 to 337 patients per study) on the prognosis of MUS in relation to treating patients in primary care. The studies included in the meta-analysis revealed that the symptoms improved during the follow-up period (6 to 15 months) for 50 to 75% of the patients. Ten to 30% deteriorated during the follow-up. For most of the studies, the extent of treatment was not clear. The meta-analysis also revealed that a greater number of symptoms in the beginning resulted in a poorer prognosis. The same applies to the severity of the symptoms; the more severe the symptoms were at the start, the greater the chance that the symptoms will persist [Old Hartman 2009a].

In general, the majority of MUS develop in a favourable manner: only 20% of patients still experience symptoms one year after their first visit to the general practitioner [De Waal 2006].

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**Note:** The table and the description of somatoform disorders are based on De Waal (2004), while the explanatory models and their development are discussed in various sources including Engel (1977), De Gucht and Fischler (2002), and others. The course of MUS and the meta-analysis findings are referenced to Old Hartman (2009a) and De Waal (2006), respectively.
However, the course can also be more complex. A 1-year cohort study followed 62 patients who visited their general practitioner with a new-onset fatigue symptoms. Recovery was fast for 17%, slow for 22%, and no improvement for 61% in the third year for 26%, and 32% recovered quickly but suffered a relapse within a year [Nijhoff 2008].

14 Effect of doctor-patient relationship and communication on health outcomes

It is known from the literature that a good doctor-patient relationship — as well as good doctor-patient communication — results in better health outcomes. A good doctor-patient relationship is more effective than the same treatment (Lambert 2012). In a literature study on the therapeutic effect of the general practitioner-patient relationship, the investigators concluded that — despite the large heterogeneity of the studies found — general practitioners that had a warm and personal relationship with their patients were more effective in keeping chronic patients who kept their relationship more neutral and formal [Di Blasi 2001]. A Dutch study on the effectiveness of treatment in primary care [De Graaf 1995] revealed that treatment according to the guideline alone is insufficiently effective, but that it is effective in combination with empathy and support [Van Os 2005]. Also for the treatment of headaches, warm, empathic and trusted doctor-patient relationship is more effective than the same treatment without such a relationship. In the guidelines for different diseases, health skills are related to the cognitive and functional skills for making health-related decisions [Paasche-Orlow 2007].

17 Other NHG Guidelines

Other NHG Guidelines may also apply, depending on the initial symptoms, for example the NHG Guidelines on food intolerance (M47), non-traumatic knee problems in adults (M67), anxiety (M66), depression (M44), organic alcohol use disorder (M54), menopause (M43), menopause disorders in men (M42), enurization problems in men (M42), enurization problems in men (M42), and erectile dysfunction (M67).

18 The chance of a somatic condition being the cause of symptoms initially explained as MUS

Two prospective studies examined how reliable the diagnosis of irritable bowel syndrome (IBS) was. Harvey et al. [Harvey 1987] monitored 104 patients with IBS for 4 years. The diagnosis was found to be correct in all cases. Owen et al. [Owen 1995] monitored 112 patients with IBS for an average of 20 years. Over the course of time, 3 patients developed ulcerative colitis, 2 developed gastro-intestinal disease, and for 2 of the cases it was very unlikely that the IBS symptoms were the result of an organic disease. There were no correlations between the symptoms of IBS and possible organic diseases.

Fatigue

A prospective cohort study in Dutch general practitioners examined the diagnoses resulting from newly presented, initially unexplained symptoms. A total of 63 general practitioners included 444 patients (75% female, average age 43 years), primarily with symptoms of fatigue (70%). After a follow-up duration of one year, 82 patients (18%) were found to have at least one organic component that (partially) explained the symptoms. These were mainly somatic (partial) explanations in the categories infectious/inflammatory (22% of 82), osteoarthrosis/irregular abnormalities (33%), diabetes mellitus (9%), anemia (6%), hypothyroidism (4%), infectious mononucleosis (4%) [Koch 2009a].

Dizziness

A Dutch cross-sectional diagnostic study of elderly patients who consulted their general practitioner due to dizziness, examined causes that could contribute to dizziness, among other things. A total of 417 patients between the ages of 65 and 93 years were included. Cardiovascular disease was the most contributing cause of dizziness (57%), followed by peripheral vestibular dizziness (14%) and psychiatric disease (20%). Side effects of medication played a contributing role in 23% of the cases [Maarssen 2009].

Conclusion: the chance of an organic disease underlying symptoms previously categorised as MUS varies according to the initial symptom. This chance is very low for abdominal complaints categorised as MUS and slightly higher for fatigue categorised as MUS. The greatest chance of a somatic cause is present for dizziness previously categorised as MUS in elderly patients.

19 Clues/cues

There is a long-standing tradition in primary care of paying attention to clues/cues and their significance. Recognising cues is important for the mutual understanding between doctor and patient. The importance of paying attention to cues came back into fashion with the patient-centered movement at the end of the 1980s. Responding to cues presented by the patient is one of the most important tools for a successful consultation [Older Hartman 2008].

Cues are described in various ways by various authors: Gask and Underwood [Gask 2002] refer to the verbal and non-verbal expressions of the patient as cues that the patient gives about psychosocial or social problems. Levinson et al. [Levinson 1997] define cues as direct or indirect expressions that contain information about the lives and emotions of the patient. Balint uses the word ‘offer’ for marks that the patient about the importance of the symptoms and the reason for visiting the general practitioner [Balint 2000]. Branch en Malik [Branch 1993] see cues as a chance for the doctor to display empathy. It is important to detect cues and to respond at the moment that the patient offers these cues. Not responding to cues can result in the patient withholding further explanations. Bertakis et al. [Bertakis 1991] performed a study in which they analysed recordings of consultations in combination with a patient satisfaction questionnaire, and they reported a significant relationship between the reaction by the doctor to emotional cues and the extent to which the patient made further revelations. Furthermore, cues also allow for a better understanding of the patient’s life and his/her thoughts and emotions. There is another benefit to recognising and responding to emotional cues. It shows that the general practitioner is listening carefully, wants to understand the significance of the symptoms for the patient and is interested in the patient. This has a favourable effect on the therapeutic relationship and thereby on disease outcomes and patient satisfaction. Doctors have difficulty recognising cues. Levinson et al. [Levinson 1997] conclude that doctors are not aware of how patients presented cues and how doctors responded to them. Cues were present in more than half of the consultations (average of 2.5 cues per consultation). Patients initiated 31% of the cues themselves and 29% of the cues were initiated by the doctors as a result of asking open questions. Doctors missed out on the opportunity to respond to a cue in the majority of the consultations (75%). These consultations lasted significantly longer. Butow et al. [Butow 2002] found the same result in their study of verbal cues of cancer patients: oncologists did not recognise cues consistently and did not always respond to them. The consultations in which oncologists did respond to cues to a greater extent did not take any longer than the other consultations. Cegala et al. [Cegala 1999] analysed video recordings of consultations in primary care of 16 doctors with 32 patients, and found that doctors did not usually provide information in the absence of a direct question from the patient.

Conclusion: there is sufficient evidence to indicate that it is important to pay attention to clues/cues.

20 Questionnaires/symptom lists/detection instruments

There are various symptom questionnaires, such as the 4-DKL, Van Hemert’s list, the PHQ, Beck Anxiety (BAI-PC) and Beck Depression (BDI-PC).
The Zen6w/NIVEL Kennisgroep 997 [Mental health care knowledge synthesis] [Zwaanwijk 2009] asked a panel of 54 primary care providers (general practitioners, social workers, primary care psychologists, social psychiatric nurses, mental health nurse practitioners) and patient representatives how these questionnaires can best be used in general practice. A total of 82% of the respondents sees support of the diagnosis as a role, if the presence of a certain condition is already suspected. Questionnaires can also be used to provide an opportunity for discussion (listed by 74%) and to detect problems in high-risk groups (44%). Only 14% thinks that such an instrument can be used to detect problems in a general group of patients. In addition, it was also mentioned that questionnaires can be used to monitor the severity of patients’ symptoms during treatment or during waiting time.

According to most respondents (96%), the number of questions that a questionnaire contains and the time that it takes to complete such an instrument are deciding factors for the level of applicability of the instrument in daily general practice. A total of 47% of the general practitioners in the panel used 1 or more questionnaires, in particular for depression, anxiety and dementia.

The instruments included in the table 6 are the questionnaires relevant to MUS that were evaluated as adequately to highly reliable and valid in their method of questioning. They can all be completed by the patient himself/herself. There are regional differences in which instrument is used. The working group has not indicated a preference in this matter.

### 21 Ethnic-cultural points important for communication

In the absence of any strong evidence, the comments and advice provided below were obtained from the Handleiding voor anamnestisch gesprek met migrantenz (workshop held in Leiden in 1997) on the method of questioning and for discussing the medical history with immigrants with diseases that are culturally significant.

#### Explanation

An amended method of questioning is important when questioning immigrants from non-Western cultures. In contrast to Dutch culture, which is individualistic and in which it is somewhat more common to talk about emotions, non-Western cultures are often collectivist. In collectivist cultures, individuals are often expected to maintain group harmony above all else and it is not acceptable to place too much emphasis on one’s own opinion and emotions. A common question in the Netherlands, such as: “Do you have any problems?” will be answered negatively, as one does not discuss problems with people outside the family. It is also important to word the questions as directly as possible:

- When exactly did the symptoms start? What happened on that day?
- How are things at work?
- What does your family think about this? (can also express patient’s unspoken opinion)
- Are you able to sleep with this illness? Do you dream a lot? (dreams are important in indigenous disease interpretations)

Turkish and Moroccan patients can have difficulty with the direct communication style of Dutch care providers and would discuss taboo subjects. They can remain passive out of respect for the care provider or because they feel that they do not have any control over the symptoms [Rabbaei 2008].

The order of questions (‘from the outside to the inside’) can help to make it easier to discuss emotions. If unknown, it is difficult to discuss the emotional conditions (including country of origin) and the daily activities (work, household). Then focus on the symptoms expressed, followed by the social context in which the symptoms are experienced (relationship to work, housing, etc.), then the relationship of the symptoms to the family and finally the patient’s own perception of the symptoms (psychological consequences, causes). Cultural barriers

If the emphasis is placed squarely on physical symptoms, bear in mind that it may be more difficult for the patient to express thoughts and emotions – compared to physical symptoms – in a language that is not his/her mother tongue. It is often helpful to ask about facts first, then opinions and finally emotions. The patient does expect questions about the various aspects of the symptoms, but more as a matter of social interest or as confirmation of diagnostic processes. Particularly in the case of MUS, the general practitioner will have to explain clearly that he needs a lot of information in order to be able to help the patient. It is possible to discuss the psychological and social consequences of symptoms, but an explanation in the form of a vicious circle is often not compatible with these patients. If the patient finds it acceptable to discuss with your doctor the fact that your family is a source of stress or part of the problem, but the patient can talk about the impact of the symptoms on the whole family. The general practitioner can then use the patient’s cultural background and immigrant family members can become involved in the treatment as confidants.

Misunderstandings in communication are even more common in contact with second-generation immigrants from non-Western cultures. The general practitioner often forgets that cultural barriers still exist if patients speak Dutch fluent [Boevink 2001]. Research also shows that the chance of mutual misunderstanding between doctor and patient becomes greater if the patient belongs to a later generation of immigrants or to a partially acculturated group of immigrants from non-Western cultures. It is more important to aim for understanding than to reach an agreement [Harmsen 2005].

#### Table 6 Characteristics of questionnaires evaluated as adequately to highly reliable and valid

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Number of questions</th>
<th>Completion time in minutes</th>
<th>Test characteristics</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHQ-9</td>
<td>9</td>
<td>5</td>
<td>Measures the 9 depression criteria of the DSM IV.</td>
<td></td>
</tr>
<tr>
<td>BDI-P*</td>
<td>7</td>
<td>1-2</td>
<td>Sensitivity: 82 – 97%, specificity: 82 – 99%.</td>
<td></td>
</tr>
<tr>
<td>BAI-P*</td>
<td>7</td>
<td>1</td>
<td>Sensitivity 85% and specificity 80% at cut-off point 5.</td>
<td></td>
</tr>
<tr>
<td>4-DRK1</td>
<td>50</td>
<td>5 – 10</td>
<td>Distinguishes uncomplicated stress-related problems from psychiatric conditions.</td>
<td></td>
</tr>
</tbody>
</table>

* can be ordered via www.pearson-nl.com using personal BIG number.
* can be downloaded from www.emgo.nl/research/tools/4DSQ.asp or via www.spreekuurassistent.nl
thalassemia and vitamin B12 deficiency (all 1x).

2) Effect of additional investigations on the level of satisfaction
A narrative review provided a descriptive summary of RCTs that examined the effectiveness of the use of diagnostic tests as a method of reassurance for patients. A total of 5 RCTs with 10,344 patients were found. The RCTs examined various tests (ECG, X-ray examination of the lumbar spine, MRI of the brain, laboratory tests, MRI of the lumbar spine) for various symptoms (including chest pains, low back pain and headache). Of the 5 RCTs, 4 found no significant effect of the tests on the patient's level of reassurance. One study reported a reassuring effect after 3 months, which had disappeared after one year. The authors of the review concluded that despite the small number of studies and the differences in the design of the included studies, diagnostic tests hardly appear to contribute to the extent of reassurance. A clear explanation and a policy of what to do next may make additional investigations unnecessary. If diagnostic tests are used, it is important to provide adequate pre-test information about normal test results [Van Ravestein et al. (2012)].

24 Presence of functional limitations as a prognostically unfavourable factor

For the broad group of MUS patients in general, the presence of functional limitations has not been demonstrated to be a prognostically unfavourable factor.

25 Categorisation of MUS patients in severity classes

The categorisation of MUS patients in severity classes is based on consensus within the working group. The need for categorisation according to severity is motivated by the treatment principle of stepped care. We can distinguish between three dimensions of severity: the extent of functional limitations, the duration of the symptoms and the number of symptoms/symptom clusters involved.

26 Stepped care

Stepped care is a more flexible treatment method than traditional forms of treatment. It means that various interventions of varying intensity are offered subsequently, depending on the effect of a previous step. Stepped-care treatment is based on three assumptions. The first is that the minimal interventions that are used in stepped care—for example, patient education—can have a significantly positive effect on the symptoms that are equal to that of traditional psychological treatment, at least for a number of the patients. The second assumption is that the use of minimal interventions and the entire stepped-care approach are acceptable for both the patient and the care provider [Bower 2005]. In the case of MUS and somatiform disorders, stepped care entails offering the mildest possible effective treatment based on the evaluation. The choice depends on the individual and the factors that influence the patient's decision. The outcome of the intervention is performed. If the effect is inadequate, a subsequent (more intense) step in the care path is selected. As various disciplines play a role in this stepped-care approach, their communication with each other is vitally important, as is the central role of the general practitioner as case manager. The stepped-care approach demands regular evaluation ofore each treatment effect if active treatment is used. However, as yet, there is no empirical evidence to support a stepped-care approach for MUS and somatiform disorders [Fisher 2010].

27 Effect of blood tests and doctor-patient relationship on the level of satisfaction and concern

A cluster RCT (69 general practitioners; 948 patients) revealed that patients with MUS for whom the general practitioner immediately requests blood tests are no more or less satisfied or concerned than patients for whom the general practitioner employs watchful waiting for a month. Patient satisfaction was greater and the level of concern was lower if the patient generally trusted his/her general practitioner, felt that he/she was being taken seriously, had obtained clarity about the severity of the symptom, if the option of testing was discussed, if the general practitioner had not created the impression that he/she did not see how the symptoms were that bad and if the general practitioner was older [Van Bokhoven et al. (2009)].

28 Ways of explaining and consequences

A focus group study among Dutch general practitioners revealed that general practitioners are aware of the importance of the way in which they explain the working hypothesis of MUS to their patients. However, they find it difficult to explain the nature and origin of the symptoms during a consultation. In general practice, there is no disease and the use of metaphors [Olde Hartman et al. (2009)]. However, the normalisation of symptoms and telling patients that they do not have a disease without providing a tangible explanation about how the symptoms could develop is not effective and could even lead to more help-seeking behaviour [Salmon et al. (1999), Dowrick et al. (2004)].

29 Anatomical knowledge

In 2009, a cross-sectional, multiple-choice questionaire study examined the anatomical knowledge of 722 participants (938 patients from 6 different diagnostic groups and 133 people from the general population). The knowledge of the anatomy was poor (average 52.5% correct, standard deviation 20.1) and had not improved significantly since a previous, similar study 10 years ago. Only patients from the groups with liver diseases and diabetes scored higher. There was a negative correlation with age (the older the individual, the poorer the anatomical knowledge) and a positive correlation with the level of education (the higher the level of education, the better the anatomical knowledge). The authors concluded that these deficits had significant consequences for doctor-patient communication [Weitzman et al. (2009)].

In the case of refugees, a lack of sufficient knowledge and insight into the functioning of the body and mind and the emotional charge associated with certain subjects makes it extra difficult for the care provider to explain matters in the usual manner to this group of individuals [Voorberghs et al. (2005)].

30 Effectiveness of CBT and reattribution for MUS

Various treatments have been described for patients with MUS, with quite a lot of recent research for effective treatments for primary care. Some studies demonstrate that antidepressants and cognitive behavioural therapy are effective in the treatment of persistent MUS, with symptoms and functioning apparently improving and psychological symptoms apparently decreasing [Kroenke et al. 2007, Sumathipala et al. 2007]. Reattribution is a structured intervention in which the explanation for the mechanism of the patient's symptoms is provided by means of negotiation and patient-centred communication [Little et al. 2001]. This therapy is probably not effective, as three of the four studies showed no benefits for MUS patients [Morriss et al. 2010]. Furthermore, one RCT demonstrated that reattribution therapy by general practitioners was associated with a decreased quality of life [Morriss et al. 2007].

31 Avoidance behaviour and other behavioural factors

In the experience of the working group, behavioural factors such as avoidance or over-activity are almost always present with long-term MUS. This has been scientifically studied and proven for fibromyalgia [Van Kouil et al. (2008)].

32 Time-contingent approach

The literature describes the step-by-step expansion of activities according to a set schedule as guided activity [Lindstrom et al. 1992]. The care provider reaches an agreement with the patient—in advance—about the exercises and activities that the patient will perform over the coming period. The starting level is determined based on the maximum ability level of the patient. The exercises are not performed based on the pain (pain-based approach) but are performed according to a time-based approach: the exercises are gradually increased in nature, duration, frequency and intensity. The therapist's task is to schedule activities in such a way that patients who overestimate their capacities are slowed down and patients who underestimate themselves are stimulated. For a long time it was assumed that patients with chronic non-specific lower back pain (which can also be regarded as MUS) were less physically active. Objective measurements demonstrate that there is no significant difference between the activity levels of patients with chronic non-specific low back pain and healthy individuals [Verhagen et al. 2001]. However, a particular feature in the behaviour of many patients with back pain is that they will systematically avoid a small number of specific activities [Waddell et al. (1993), Vlaeyen et al. (2001)]. From a behavioural therapy point of view, it is important to work towards such activities gradually in these patients. In this way, the patient is gradually exposed to the situation that forms the basis of his/her dysfunction. (Also refer to the NHG guideline on non-specific low back pain.)

33 Active participation

A literature review of systematic reviews and meta-analyses provides an overview of the results of therapeutic trials for various functional syndromes and diagnostic analogies of these syndromes [Henningsen et al. (2007)]. The authors conclude that non-drug treatments that require active participation from the patient—as such as exercises and psychotherapy—appear to be more effective than passive physical treatments, including injections and operations, for functional somatic syndromes in general. The literature review does not quantify the effects. The authors indicate that this was not feasible for the integration of so many different systematic reviews, which used such different criteria and represented different interpretations in heterogeneous clinical settings. Their overview provides empirical trends in the treatment of functional somatic syndromes in general.

Conclusion: non-drug treatments that require active participation from the patient—as such as exercises and psychotherapy—appear to be more effective than passive physical treatments, including injections and operations, for functional somatic syndromes in general.
14 Effectiveness of psychosomatic exercise therapy (PSET)
An observational study performed in 2010 [Van Ravensberg 2010] into the effects of the treatment by psychosomatic exercise therapists included 14 psychosomatic exercise therapists and 119 patients with stress-related and/or unexplained physical symptoms. At the intake, 49% were found to have somatoform symptoms, 26% suffered from emotional exhaustion and burnout, and 24% suffered from anxiety and panic symptoms and hyperventilation. Approximately half the patients (44%) had experienced symptoms for more than 6 months. Ten percent of the patients had even experienced symptoms for more than 5 years. Almost 30% of the patients had dysfunctional thoughts (incorrect ideas and views that inhibited recovery), and approximately half of the patients displayed dysfunctional behaviour (forcing themselves or over-taxing themselves). The number of patients with a distress score of more than 20 on the 4-DKL questionnaire was significantly reduced after the PSET treatment (in ver.

sus 49%; p < 0.001). The other dimensions of the 4-DKL also improved significantly. The separate SF-36 (quality of life questionnaire) dimensions and the VAS scores improved significantly during the treatment (p < 0.001) in more than 90% of the patients that indicated that their health problems had improved significantly.

Conclusion: although the level of evidence of the observational study is low – because it was unable to demonstrate that the observed difference was not the result of natural course – the working group is of the opinion that the observed effect of PSET in this group of patients (who have a poorer prognosis due to the duration of their symptoms >6 months) is related to the treatment. The working group is also of the opinion that there are strong indications for the effectiveness of PSET in patients with MUS.

35 Effectiveness of intensive rehabilitation programmes
Relatively little research has been performed on the effectiveness of non-somatic clinical treatment, and the treated disorders and treatment modalities studied also vary too much to make general conclusions with a high level of evidence.

This effect study was conducted in the Netherlands into the multidisciplinary treatment of severe MUS and somatoform disorders in a specialised centre for the treatment of psychosomatic conditions [Yenseki 2005]. This study formed part of the so-called STEP study (Standard Evaluation Project), a national initiative of some fifteen clinical mental health departments aimed at obtaining national figures about the effectiveness and efficiency of treatment. This study evaluated intensive clinical (in-patient), multi-day or one-day multidisciplinary treatment. It was concluded that – in the case of severe or very severe MUS and somatoform disorders – there are strong indications that an intensive, integrative, multidisciplinary approach can be effective in achieving a reduction in symptoms, an increase in quality of life and a decrease in medical consumption.

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