GEHWOL Diabetes Report

# I have my blood sugar under control. But what do I do for my feet?

UPDATE 2021/2022

## Survey methodology

Within the scope of the individual primary market research commissioned by EDUARD GERLACH GmbH, the special indication segment of diabetic foot complications was to be investigated among relevant physicians. IDS & Insight Health were commissioned as co-market research companies to map modelling, field structuring, statistical sample size determination and testing. Selection and set-up of the random sample selection was performed, followed by data collection, structured field retrieval of raw data, data extraction, statistical generation with data aggregation of data reports, and data analysis with final data presentation. Modelling of sample size for the validation process is based on a random sample to make sure that each element has the same probability of being included in the sample. The case frequency is validated by prescriptions of the indicator market for A10 antidiabetics. Herein, case figures from the statutory health insurance medication data per patient were calculated on case figures per practice and corresponding patient figures for the analysis. Taking into consideration the level of significance, the recommended sample size is 50 for physicians and 2,000-2,500 for patients.

| | |
|---|---|
| Study sponsor: | EDUARD GERLACH GmbH |
| Survey content: | diabetic foot complications |
| Survey group: | Diabetic patients and general practitioners |
| Survey methodology: | Structured and standardized written survey, random control sample |
| Geographical distribution: | nationwide (Germany) |
| Survey period: | June to August 2021 |
| Case figures: | N = 2,793 diabetic patients |
| Survey partners: | via N = 107 physicians |
| Service contents: | IDS, Insight Health<br>Database modelling, question optimization, structuring, field survey, execution, data aggregation, study design, presentation |

## Summary

Four out of five foot amputations among diabetics are preventable. This is shown by study-based estimates. One prerequisite among others is: Risk awareness! According to the current GEHWOL Diabetes Report, this is the core of the problem. There is still a need for better training. One third of diabetics are not aware that their feet need special attention. They often miss check-ups, and recommended measures for identifying patients at risk are not always used at examinations. Some parts of examinations are occasionally omitted, such as checking either skin temperature or shoes. Generally, podological care at first diagnosis of diabetes could help to improve primary prevention. 86% of physicians agree with this. But podological foot care is often recommended only if there is also a prescription entitlement, and not when affected persons have to bear the cost themselves. Consequently, many patients still do not receive podological care, at least not without a positive skin finding. This is similarly the case for shoe supply. And most doctors can see the deficit of information on injury-free foot care in diabetic trainings.


The recommendations on risk diagnostics and prevention from the Diabetes Report are based on practice recommendations from the German Diabetes Society (Updated version of 2020, Diabetology 2020; 15: S206-S215; DOI 10.1055/a-1194-1790) and the Prevention guideline of the International Working Group on the Diabetic Foot (IWGDF International Working Group on the Diabetic Foot) in the version of 2019. On the Internet: https://iwgdfguidelines.org/


1. Mohamad A. et al. Population-based secular trends in lowerextremity amputation for diabetes and peripheral artery disease. CMAJ Sep 2019; 191 (35): E955-E961; DOI: 10.1503/cmaj.190134

## Key Findings

**33 %**
of patients receive training on foot inspections and hygiene.

**37 %**
of patients do not know that they need to pay special attention to their feet.

**39 %**
of doctors recommend podiatric treatment only if there is a prescribing entitlement and patients can be issued a prescription.

**14 %**
of physicians assess their patients' footwear as insufficient.

**46 %**
of patients receive podological care.

**22 %**
of patients receive a customized shoe fitting.

**57 %**
of doctors inform all patients about foot inspections and care measures; 43% only educate patients who have an identifiable ulcer risk / at-risk patients.

## Key Findings

**19 %**
of doctors order integrated foot care that includes professional foot care, appropriate shoe care and systematic education.

For up to
**14 %**
of doctors, high-risk patients do not pay attention to the recommended check-up intervals – even when they have a history of ulcers or amputation.

**91 %**
of doctors strongly recommend obtaining a second opinion before an amputation.

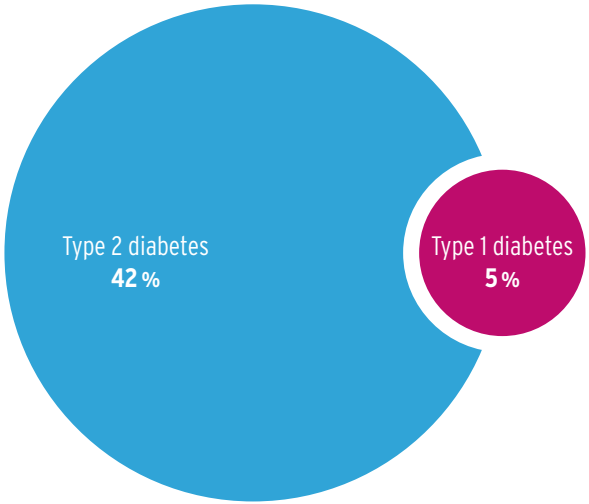
**79 %**
of doctors see a further opportunity to improve preventive care by including relatives in diabetic trainings.

**91 %**
of doctors check the shoes, but 47% do not do so during the check-up.

**86 %**
of doctors generally regard podological screenings at initial diagnosis as an opportunity to improve primary preventive care.

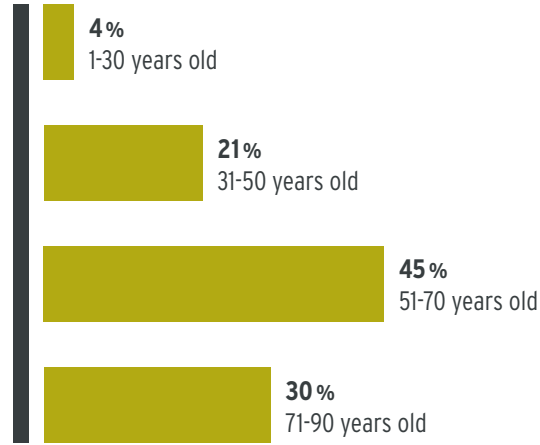
**13 %**
of doctors perform supplementary actions to determine the pulse status to be on the safe side, even when the foot pulses are palpable.

## How does the proportion of diabetics among patients of general practitioners develop?



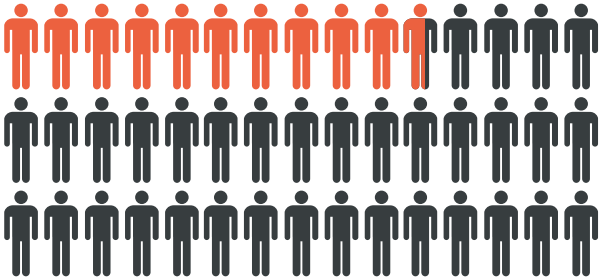

Compared to 2019
Type 2 diabetes: **30 %**
Type 1 diabetes: **4 %**

## What is the age distribution of diabetic patients?



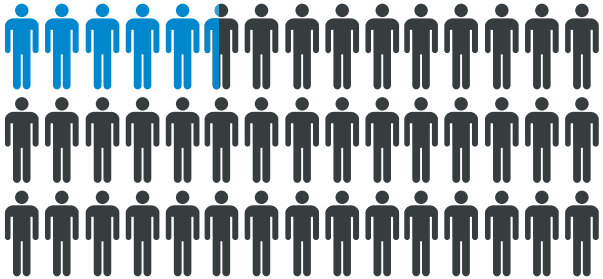

Data in percentage of patients (mean values)

What percentage of patients are at risk* for diabetic foot syndrome (DFS)?



23 %

What percentage of high-risk patients receive interdisciplinary care in a footcare network?

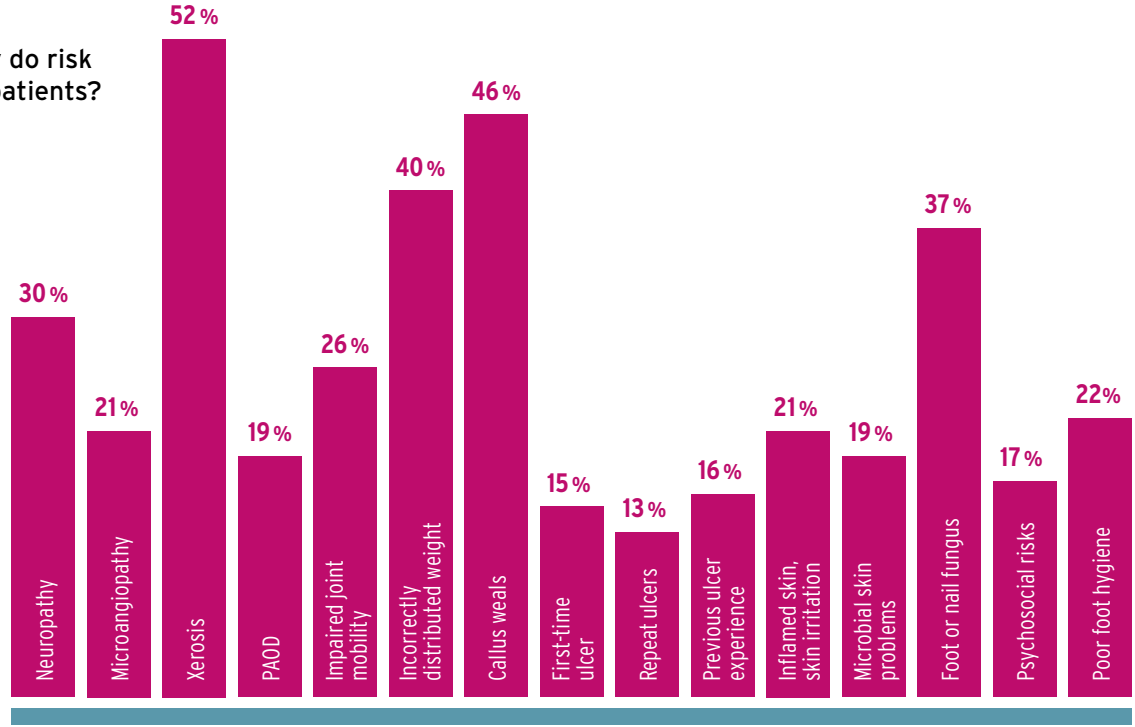


12 %

* Relevant factors are: Neuropathy (sensory, motor, autonomic); peripheral arterial disease (PAOD); limited joint mobility (LJM); pressure deficits (e.g. due to unsuitable footwear, foot deformities, obesity); calluses; biopsychosocial factors (e.g. depression, neglect, self-believed illness, lack of social support)

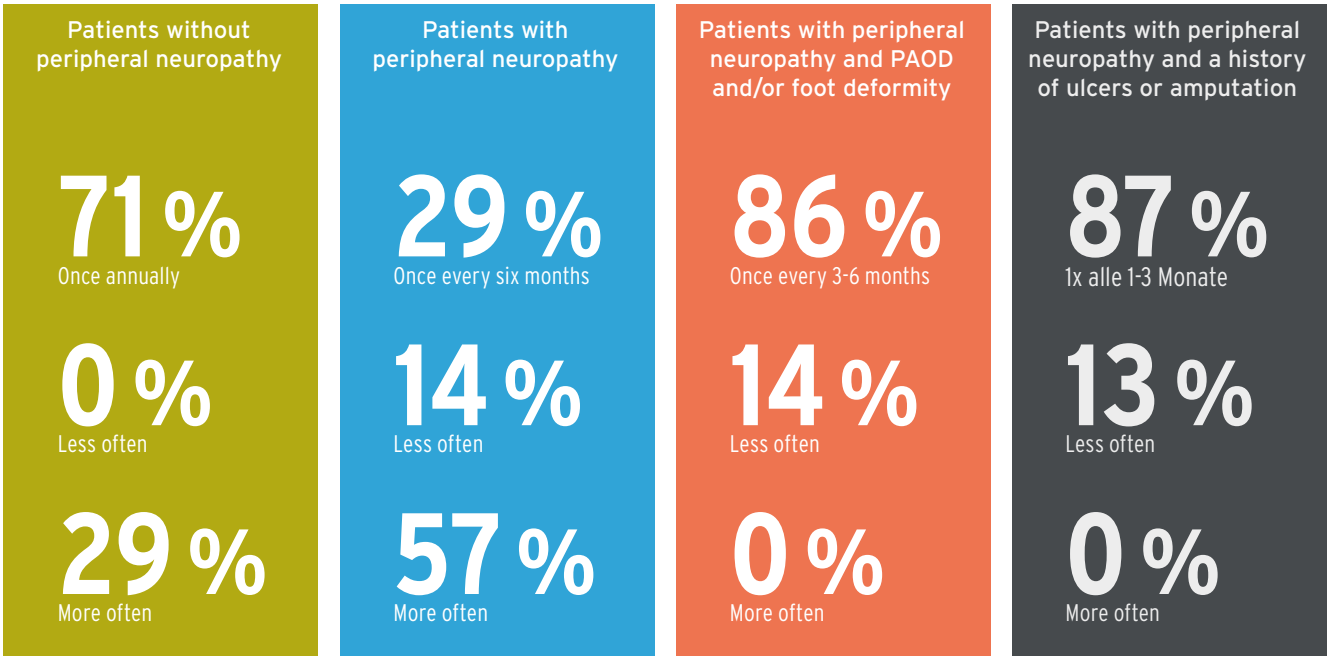
Data in percentage of patients (mean values)

## How frequently do risk factors affect patients?




Data in percentage of patients (mean values), multiple answers possible

## How often do patients go to check-ups recommended for them?




Data in percentage of physicians, according to the vast majority of their patients per risk group (mean values)

## What examinations are given to patients?

| | Yes, at every check-up | Yes, but not at every check-up | No |
|---|---|---|---|
| Targeted medical history | 86 % | 14 % | 0 % |
| Skin status examination | 71 % | 29 % | 0 % |
| Muscle examination | 89 % | 11 % | 0 % |
| Examination for existing foot deformities and mobility | 67 % | 33 % | 0 % |
| Skin temperature examination | 46 % | 43 % | 11 % |
| Shoe check | 44 % | 47 % | 9 % |
| Examination of pressure sensitivity with 10 g monofilament, bilaterally | 57 % | 43 % | 0 % |
| Examination of vibration sensitivity with Rydell Seiffer tuning fork, bilaterally | 48 % | 52 % | 0 % |
| Foot pulse palpation, bilaterally | 55 % | 45 % | 0 % |

Data in percentage of physicians (mean values), multiple answers possible

## What further examinations are given to patients?

| | | |
|---|---|---|
| Follow-up diagnostics with palpable foot pulse: such as further pulse status (popliteal artery, femoral artery), determination of ankle-brachial index (ABI) or toe-brachial index (TBI) | **13 %** **Yes,** Yes, always, even if foot pulse is palpable | **87 %** **No,** no further diagnostics if there are foot pulses along with no positive pathological findings |
| Follow-up diagnostics for non-palpable foot pulses: such as further pulse status (popliteal artery, femoral artery), determination of ankle-brachial index (ABI) or toe-brachial index (TBI) | **72 %** **Ja,** once foot pulse is not palpable | **28 %** **No,** immediate referral to a specialist |
| Follow-up diagnostics by a specialist: such as ultrasound sonography, MR angiography, CT angiography in a vascular centre | **22 %** **Yes,** always immediately for non-palpable foot pulses | **78 %** **No,** only with significant ABI or TBI findings |
| Obtaining a second opinion at a vascular centre before amputating | **91 %** **Yes ...** I strongly advise a second opinion before amputation | **9 %** **No ...** I do not believe a second opinion is needed |

Data in percentage of doctors (mean values)

## Do doctors inform their patients about measures for foot inspection and foot care?

YES

57 %
Always, for all diabetics (even with no recognizable risk for ulcers)

43 %
only for patients with a recognizable risk for ulcers/at-risk patients

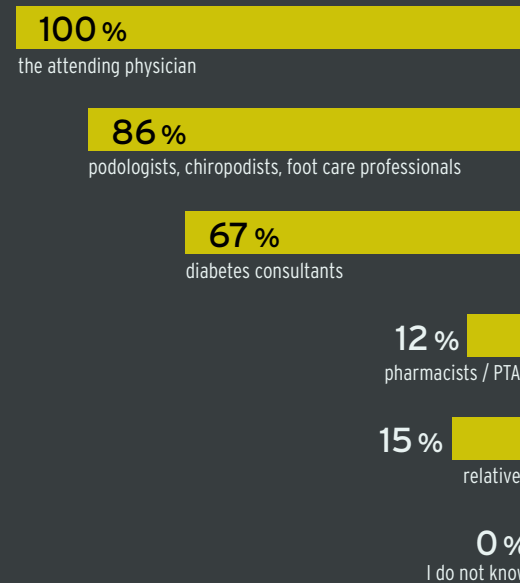
NO

0 %
However, I recommend training from a diabetes consultant or podologist.

0 %
That is not important to me

Data in percentage of doctors (mean values)

## Who should advise patients on foot care measures?




Data in percentage of doctors (mean values), multiple choices possible

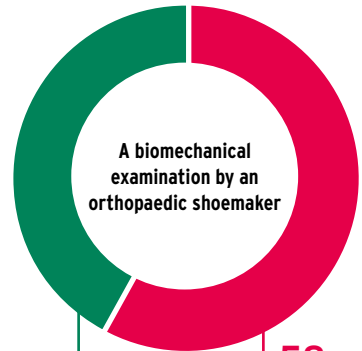
## What others therapeutic measures do doctors recommend to their patients?


**39 %**

**No,** podological treatment only if there is a prescription entitlement and I can issue a prescription to the patient

**61 %**

**Yes,** I always recommend this to all my patients, even if they are not entitled to a prescription and would have to cover costs themselves




**42 %**

**Yes,** I always recommend this to all my patients, even if they are not entitled to a prescription and would have to cover costs themselves

**58 %**

**No,** biomechanical examination only if there is a prescription entitlement and I can issue a prescription to the patient

Data in percentage of doctors (mean values)

## What concrete preventive measures do doctors recommend or offer for their patients?

**71 %**
Foot and shoe examinations

**91 %**
Daily foot washing by the patient or relatives with subsequent drying – particularly for the spaces between toes.

**25 %**
Moisturizing feet with care cream by the patient or relatives

**26 %**
Toenails trimmed straight by the patient or relatives

**74 %**
Avoid treatment of calluses or corns with chemical agents, plasters or other skin-damaging techniques by the patient or relatives

**14 %**
Daily measurement of skin temperature by the patient or relatives for those at medium or high ulcer risk, for early detection of inflammation

**86 %**
Ordering therapeutic footwear for patients at risk of ulcers

**77 %**
Arranging for podological treatment of pre-ulcerative skin problems, such as callus formation, ingrown toenails or fungal infections

**13 %**
Using pressure relief measures, such as polymer gel for pressure protection

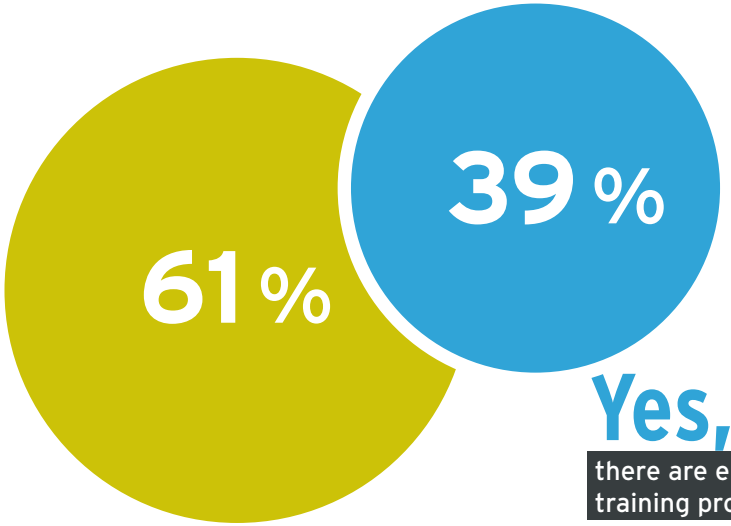
**29 %**
Instructions for performing foot and movement exercises for diabetics at low or moderate risk of ulcers

**19 %**
Arranging integrated foot care for patients with diabetes and a high risk of ulcers, as well as professional foot care, suitable footwear and systematic self-care training

**7 %**
Arranging diabetic training, including instruction from consultants

Data in percentage of physicians (mean values), multiple answers possible

Are existing foot care training courses sufficient?

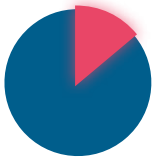



**Yes,**
there are enough training programs

**No,**
training courses often offer insufficient information on avoiding injuries in footcare

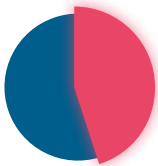
Data in percentage of doctors (mean values)

## What measures can be used to improve diabetic training courses, while also helping to prevent foot problems?

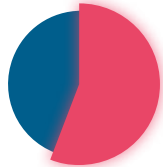


**14%**
More disease management programs

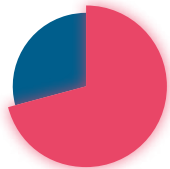
**27%**
Expansion of certified diabetes networks



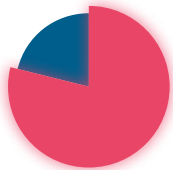
**45%**
More foot-specific training programs for diabetes consultants



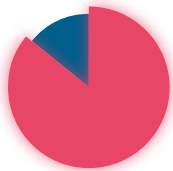
**56%**
Uniform cost coverage regulations for training courses



**71%**
Improved remuneration for the respective professional groups for advisory activities



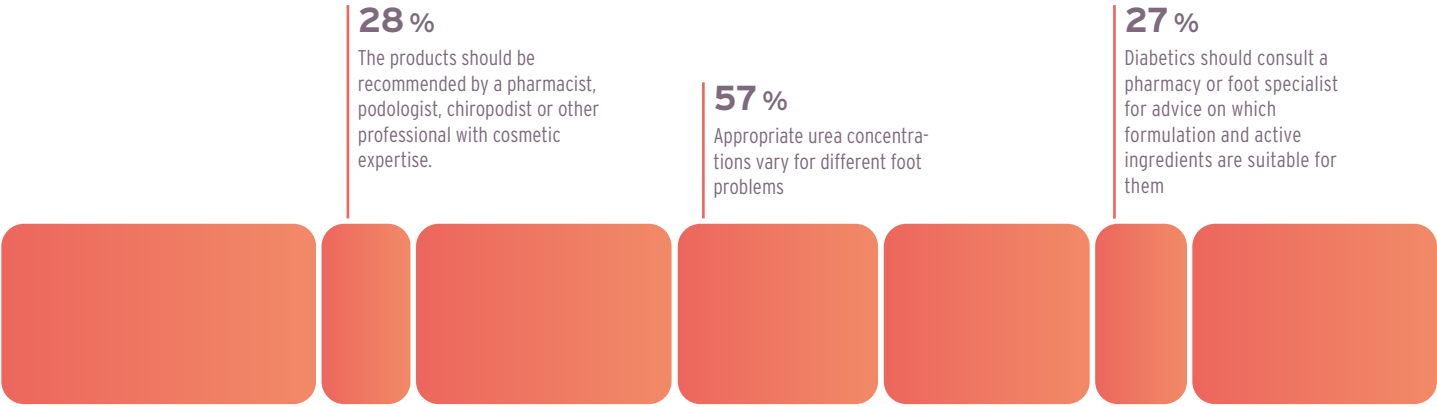
**79%**
Inclusion of relatives in diabetic training courses



**86%**
Preventive podological examinations, generally done at initial diagnosis

Data in percentage of physicians (mean values), multiple answers possible

## Which aspects are important when recommending foot care products?



**89 %**
Efficacy of foot care products.

**28 %**
The products should be recommended by a pharmacist, podologist, chiropodist or other professional with cosmetic expertise.

**71 %**
Foot care products should contain urea

**57 %**
Appropriate urea concentrations vary for different foot problems

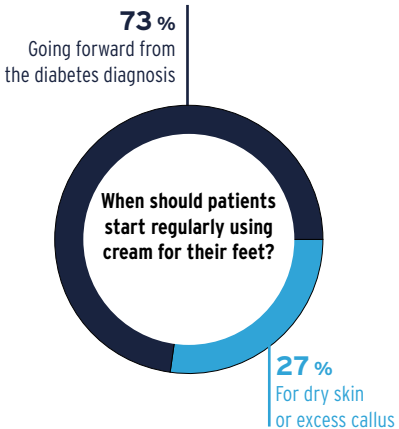
**59 %**
Generally, attention should be given to formulations which positively influence skin microcirculation

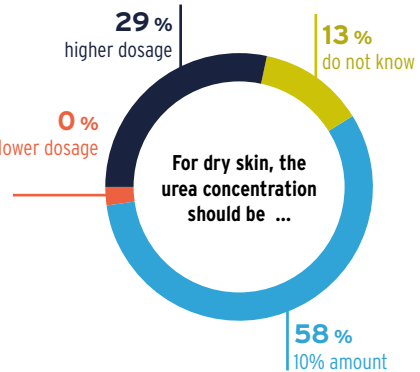
**27 %**
Diabetics should consult a pharmacy or foot specialist for advice on which formulation and active ingredients are suitable for them

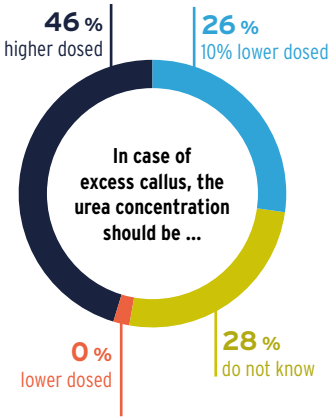
**68 %**
It would be best if diabetics could get foot care products with a prescription

Data in percentage of physicians (mean values), multiple answers possible

## When should patients start using cream for their feet, and how should the urea concentration in a foot care product be chosen?




**43 %** There is a need for more evidence regarding the role of foot care products containing urea in the prevention of foot problems

Data in percentage of physicians (mean values)

"Patient risk awareness and behaviour have the greatest impact on outcomes when it comes to preventing foot complications in diabetes"

**100 %**
I agree with this statement

**0 %**
I do not agree with this statement

**0 %**
Don't know

Data in percentage of physicians (mean values)

How high is the share of patients who don't know that they need to pay attention to their feet?

37 %

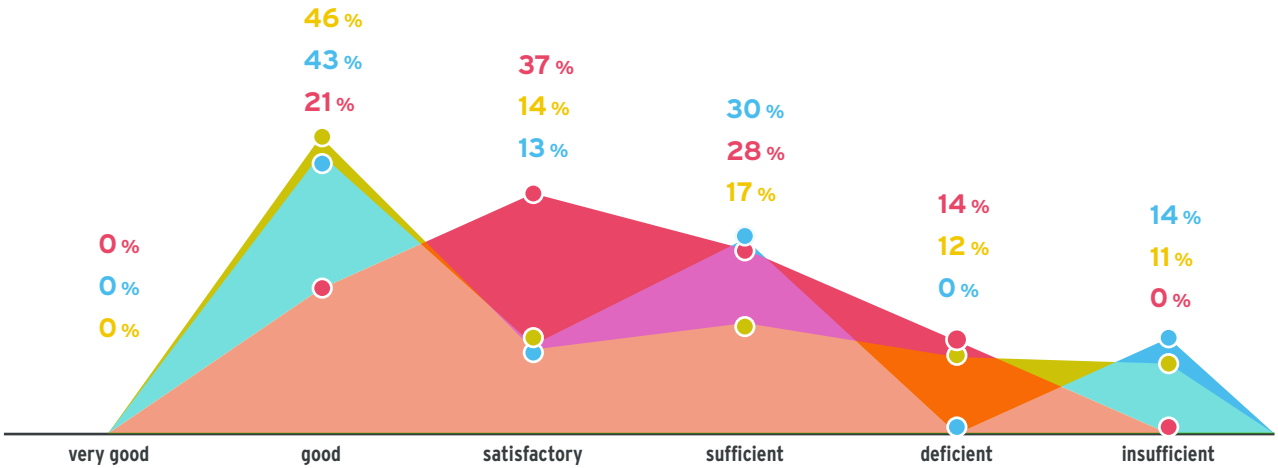
What proportion of patients do not know what an ulcer is and how it develops?

39 %

What proportion of patients are well informed about the risk of a foot lesion?

41 %

Data in percentage of patients (mean values)



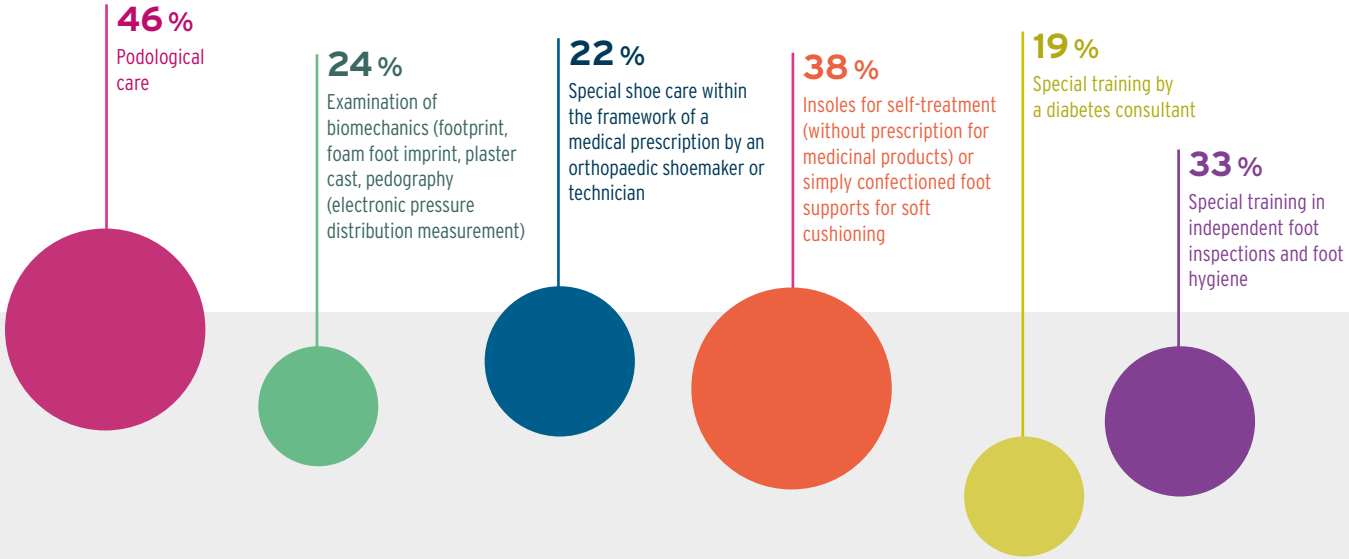

How do doctors assess the foot care awareness of their patients?

How do doctors assess the shoe care of their patients??

How do doctors assess pressure relief measures for their patients?

Data in percentage of physicians (mean values)

## How frequently do preventive care measures apply to patients?




Data in percentage of patients (mean values)