

Diabetes Report 2023

Lübbecke, 18. September 2023



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Disease management and prevention recommendations

Treating persons

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Opportunities for prevention and recommendations

Treating persons

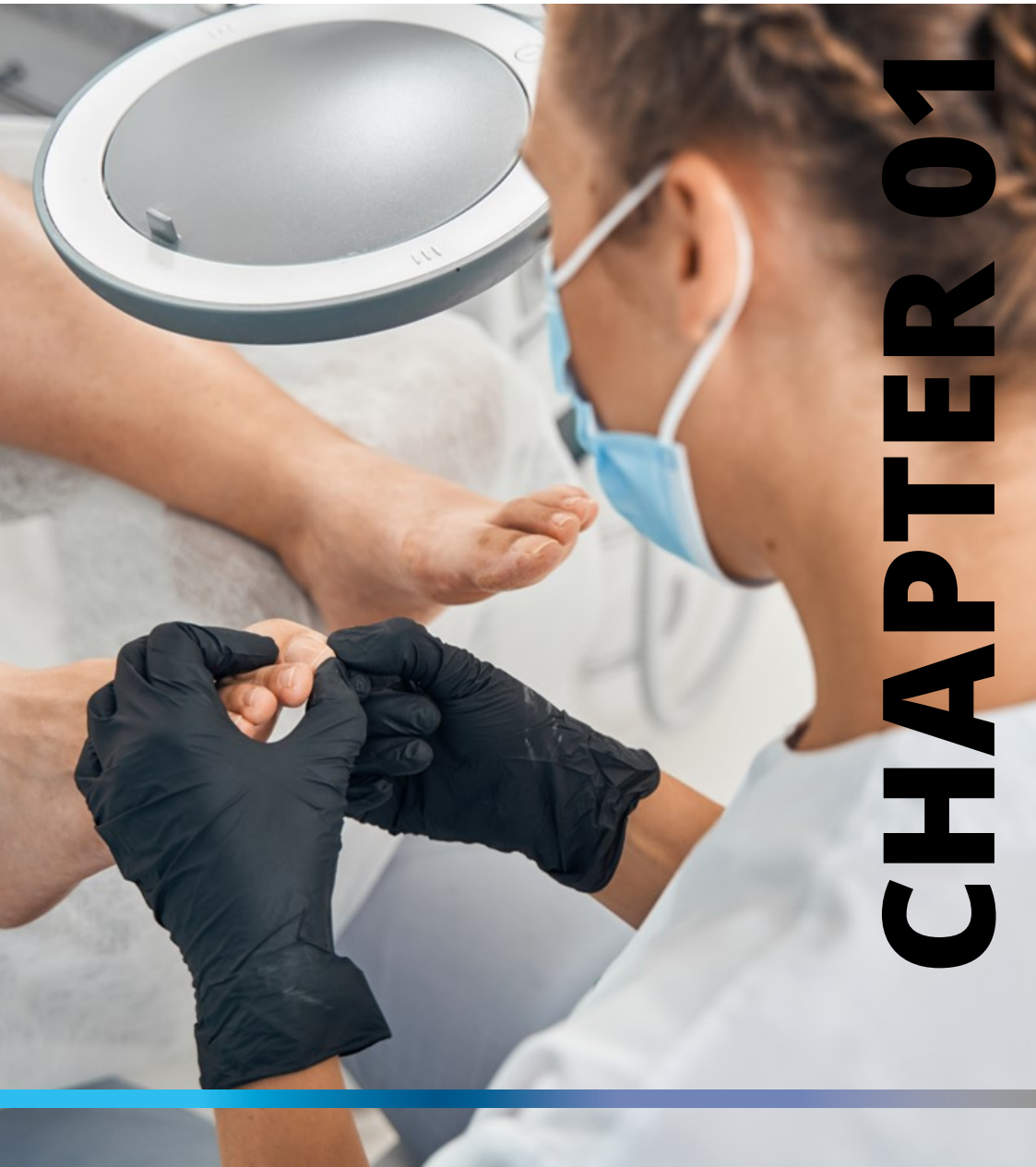
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Disease awareness and prevention implementation

Treating and affected persons

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Methodology



CHAPTER 01

MANAGEMENT SUMMARY

Management Summary

The GEHWOL Diabetes Report 2023 has expanded its data pool and includes not only the assessments of 120 doctors with almost 46,000 patients, but also of 500 diabetes patients surveyed directly online. Doctors and patients received comparable questions that were tailored to them on health awareness, prevention and foot care measures.

The results show how crucial structural improvements in **prevention** can be: If patients receive care in practices that are connected to a foot care network, they are less likely to be at risk of diabetic foot syndrome. The same practices also carry out diagnostic measures such as palpation of the foot pulses and follow-up diagnostics more frequently. This has a particularly positive impact on the vast majority of patients who regularly take advantage of the check-ups.

Among patients with neuropathy, 69% with peripheral neuropathy see a doctor at least once every 3-6 months.

When asked for recommendations for further measures, doctors advocate consistent pressure relief, diabetic training and good podological care. Daily foot checks and applying foot cream are just two of the many preventive measures that you can take on your own.

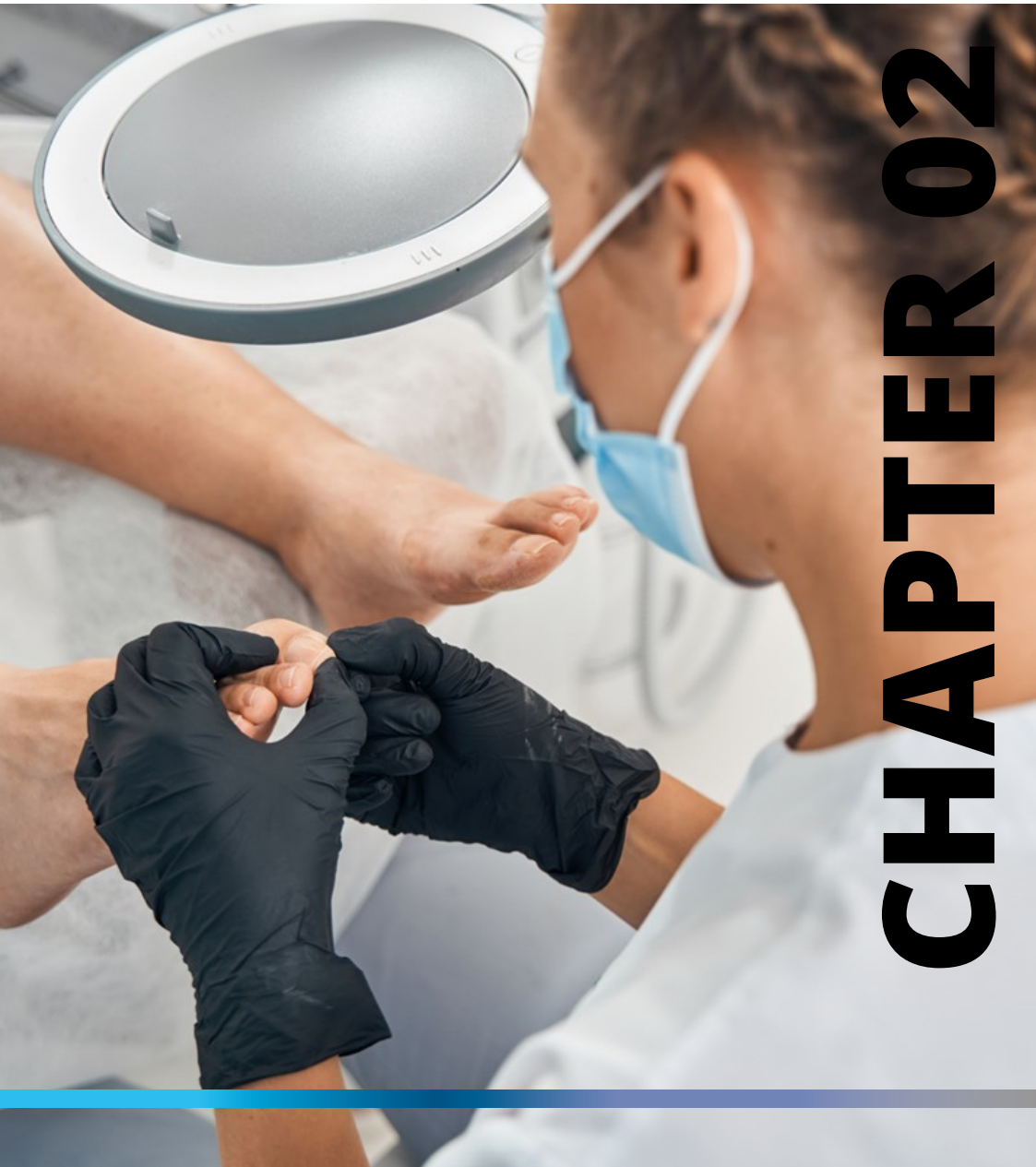
Doctors impart knowledge about preventive measures and foot care to their patients, but in many cases only to high-risk patients. This also applies to specific measures such as podological and orthopaedic shoe technology or biomechanical treatment. Both are recommended to patients, but often only if they have a prescription and not in general.

When it comes to **health awareness and disease management**, the different assessments of doctors and patients stand out in particular:

While doctors estimate that almost 40% of patients do not take care of their feet, 85% of patients say that regular foot care is important to them. This is a discrepancy, especially since doctors report that the vast majority of patients do not take the necessary preventive measures.

On the other hand, foot care awareness is significantly influenced by whether people with diabetes know or fear the risks of foot syndrome.

This shows that people who are concerned about possible foot problems or affected by skin lesions are more conscientious about **foot care**. The more resources are available, the easier this becomes. One obstacle is the cost of foot care. For example, half of the lowest-income group of people never go for medical foot care - in contrast to those with higher incomes, many of whom also regularly use podological services as self-paying patients. This is one more reason to create economic incentives for suppliers and affected persons: Many doctors share the view that better prevention also requires action to improve the socio-economic situation of their patients.



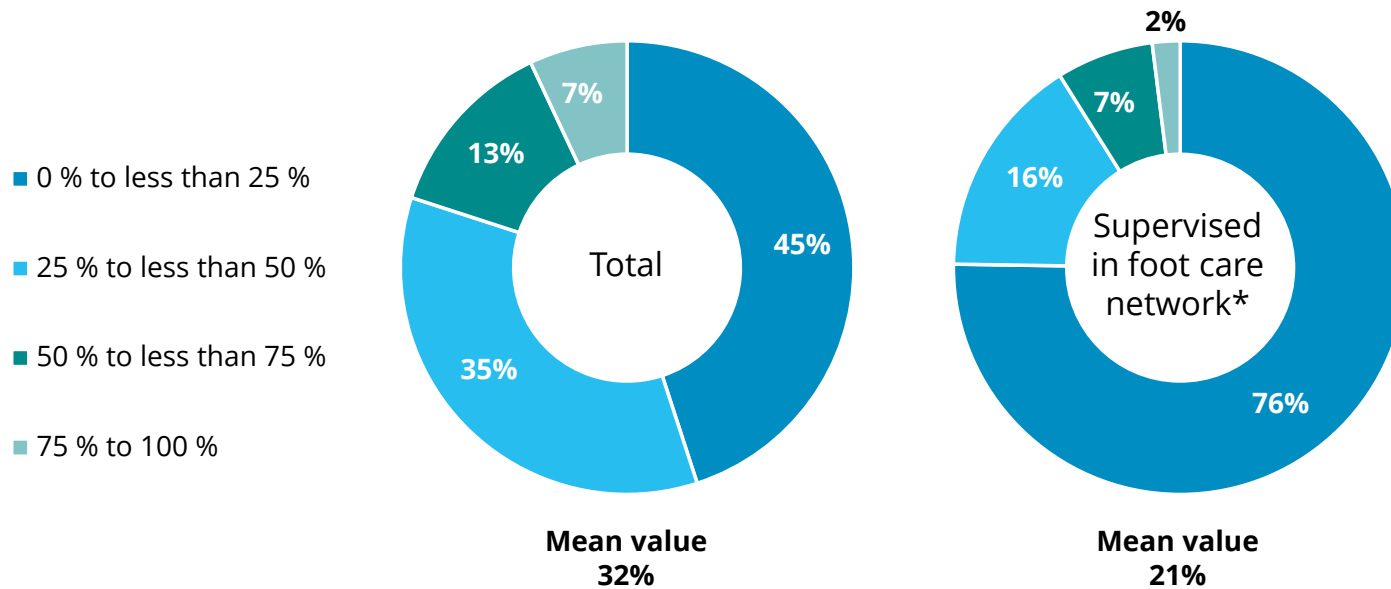
CHAPTER 02

DISEASE MANAGEMENT AND PREVENTION RECOMMENDATIONS

Treating persons

Significantly lower risk of diabetic foot syndrome when cared for in a foot care network

Percentage of patients that the treating physicians would classify as at risk of developing diabetic foot syndrome (DFS)



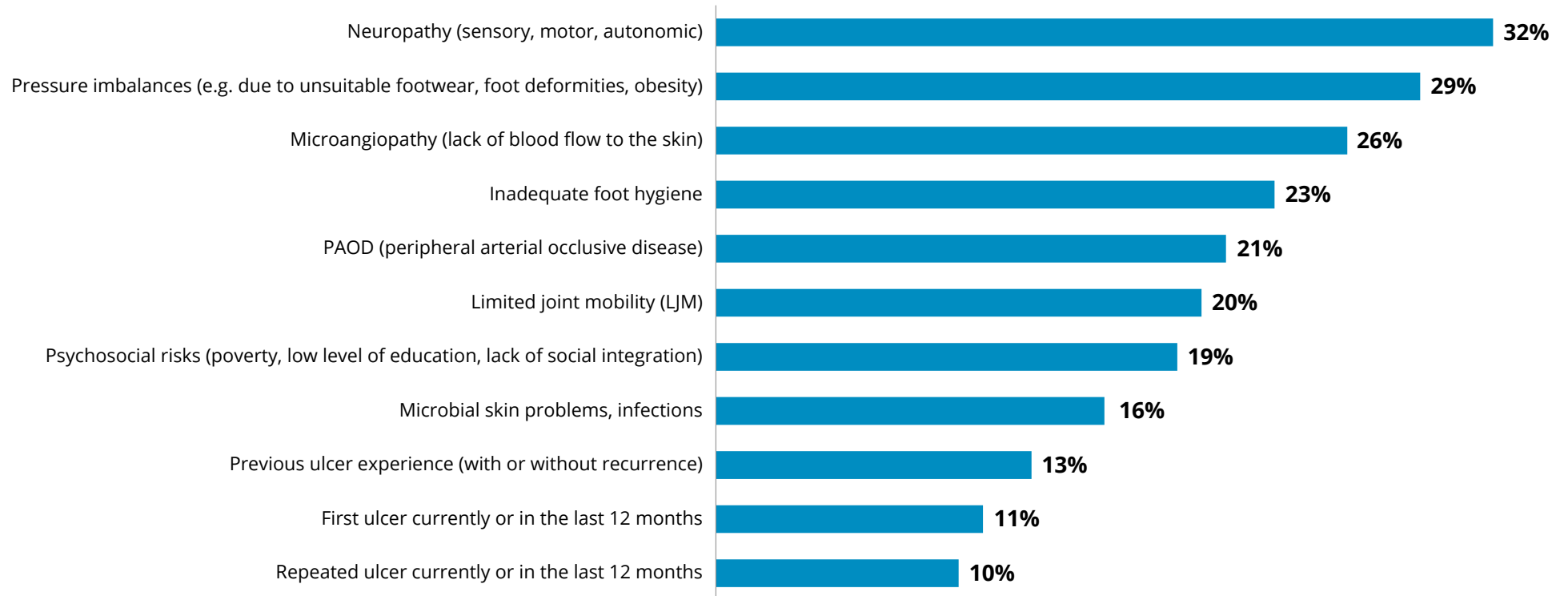
Average**

On average, practitioners state that they classify **21%** of patients treated in a foot care network as being at risk of DFS.

n = 120; * Patients receive interdisciplinary care in a foot care network with other specialists such as diabetologists, internists, orthopaedists, diabetes consultants, podologists, orthopaedic shoemakers, pharmacies, inpatient foot treatment facilities, etc.; ** Basis: n = 46,099 patients

Neuropathies and incorrect strain are the most common risk factors

Proportion of patients to whom these risk factors apply



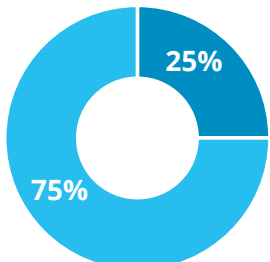
Selection of answers; multiple answers possible; n = 120

Up to a third of affected persons do not follow the recommendations for regular check-ups

Proportion of patients who take advantage of recommended check-ups at this frequency

without peripheral neuropathy

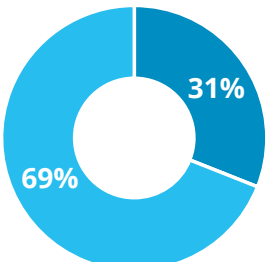
- less than once a year
- at least once a year



Mean values; n = 116

with peripheral neuropathy and PAOD and/or foot deformity

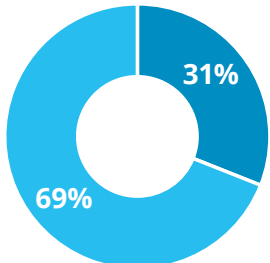
- less than once every 3-6 months
- at least once every 1-3 months



Mean values; n = 118

with peripheral neuropathy

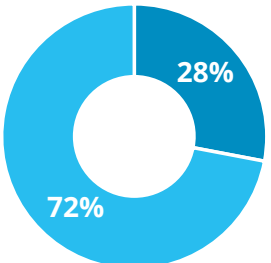
- less than once every 6 months
- at least once every 6 months



Mean values; n = 118

with peripheral neuropathy and a history of ulcer or amputation

- less than once every 1-3 months
- at least once every 1-3 months



Mean values; n = 118



These examinations are carried out by practitioners

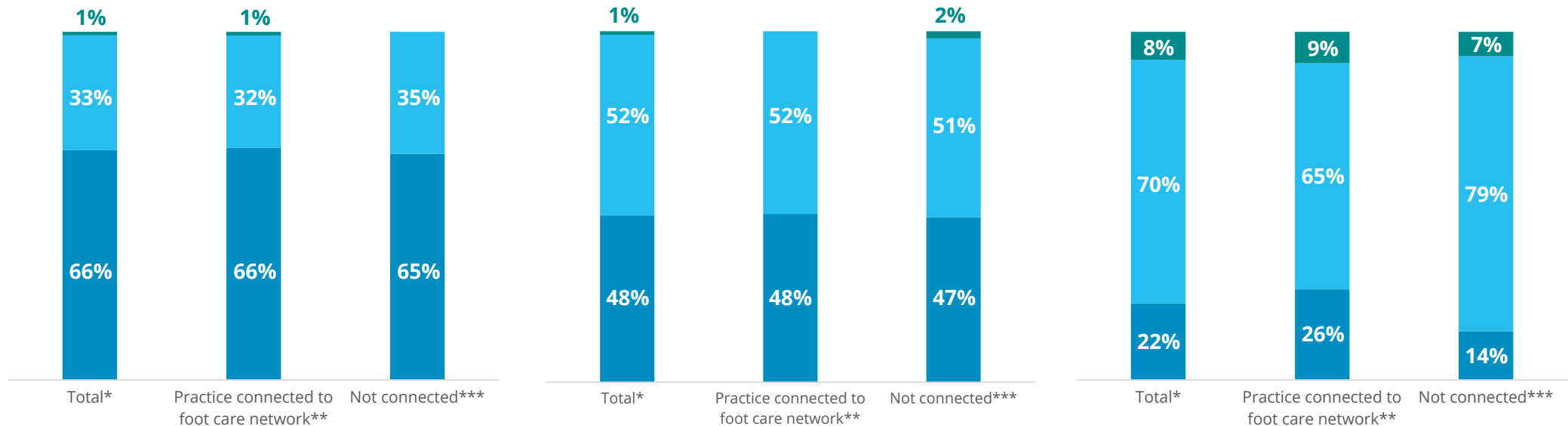
Do you carry out the following examinations on your patients?

Specific medical history (pain, paraesthesia, numbness, etc.)

Examination of skin status (integrity, turgor, sweating, calluses, etc.)

Examination of muscles

■ Yes, at every examination ■ Yes, but not at every examination ■ No



* n = 120; ** n = 77; *** n = 43

These examinations are carried out by practitioners

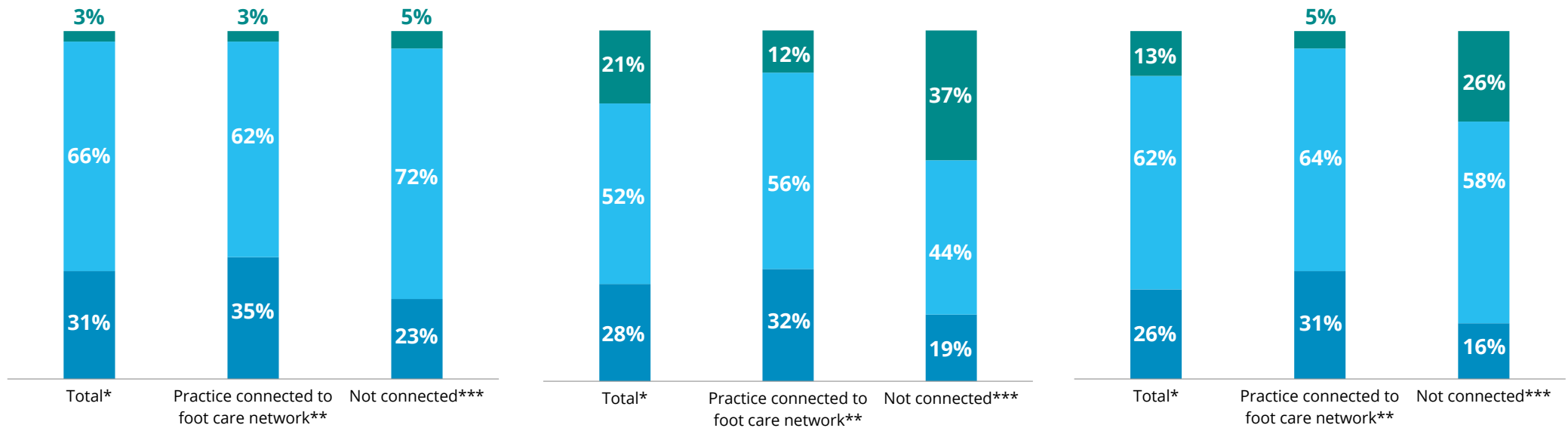
Do you carry out the following examinations on your patients?

Examination for existing foot deformities (malpositions) and mobility

Examination of the skin temperature

Checking the shoes (material, condition of soles, inner seams, condition of insoles if necessary)

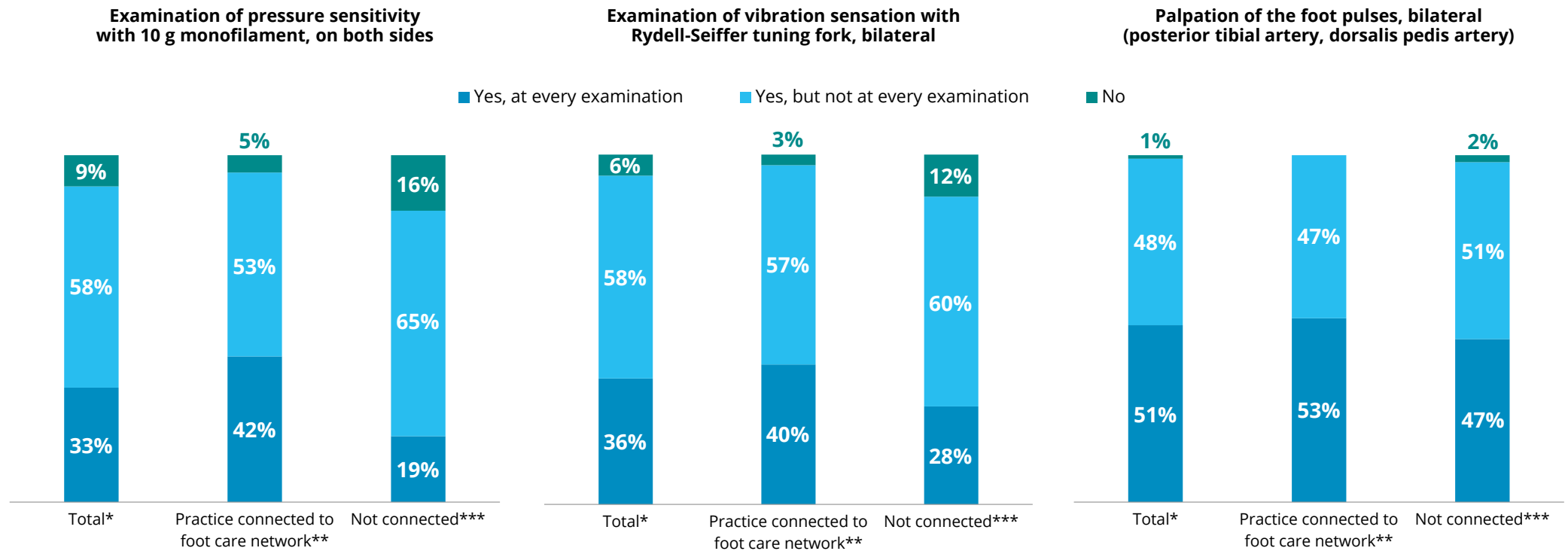
■ Yes, at every examination ■ Yes, but not at every examination ■ No



* n = 120; ** n = 77; *** n = 43

These examinations are carried out by practitioners

Do you carry out the following examinations on your patients?



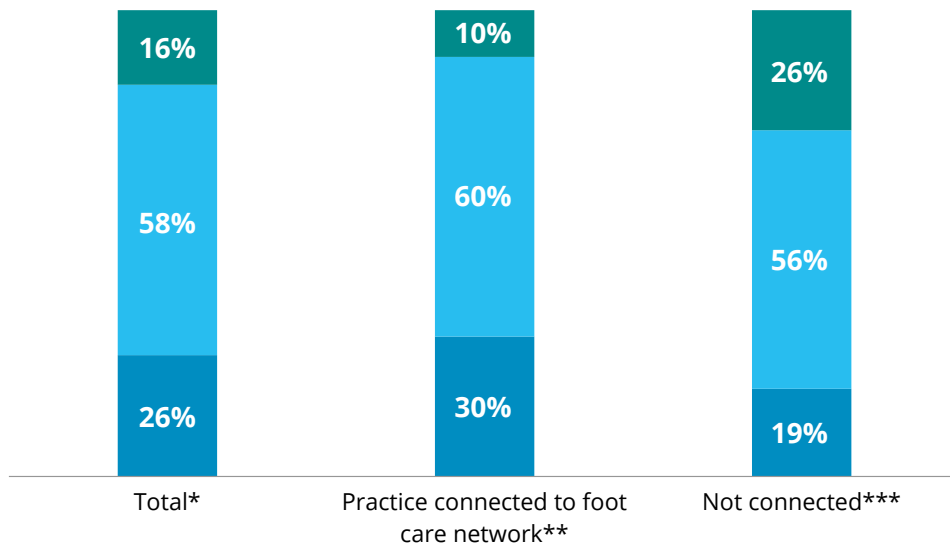
* n = 120; ** n = 77; *** n = 43

Practices with a network connection also carry out more frequent connected diagnostics for palpable pulses

Do you perform follow-up diagnostics, such as a further pulse status, determination of ankle-brachial index or toe-brachial index?

For **palpable** foot pulses

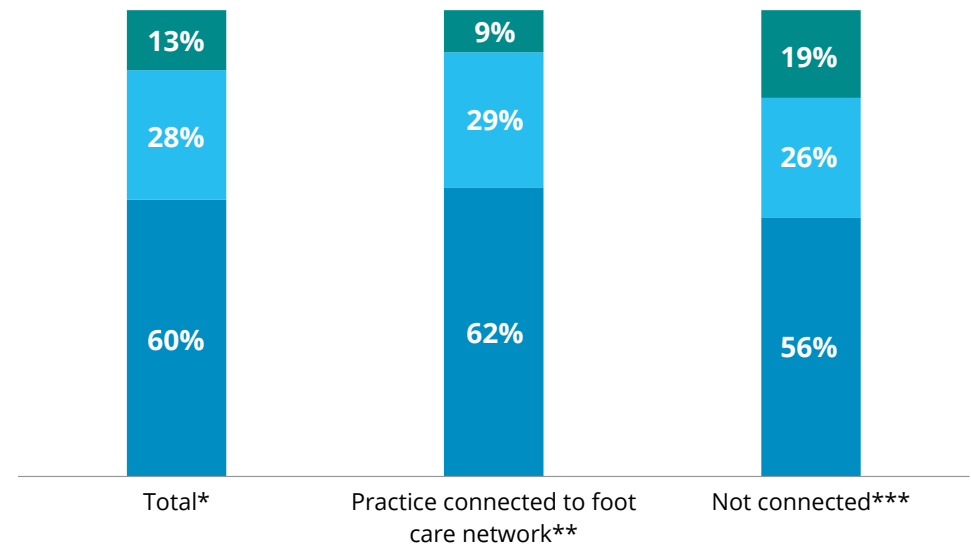
- No, no further diagnostics if the foot pulses show no positive pathological findings
- Yes, partly with palpable foot pulses
- Yes, fundamentally, even if the foot pulses are palpable



Practices without a network connection refer patients with non-palpable foot pulses to specialists more frequently

For **non-palpable** foot pulses

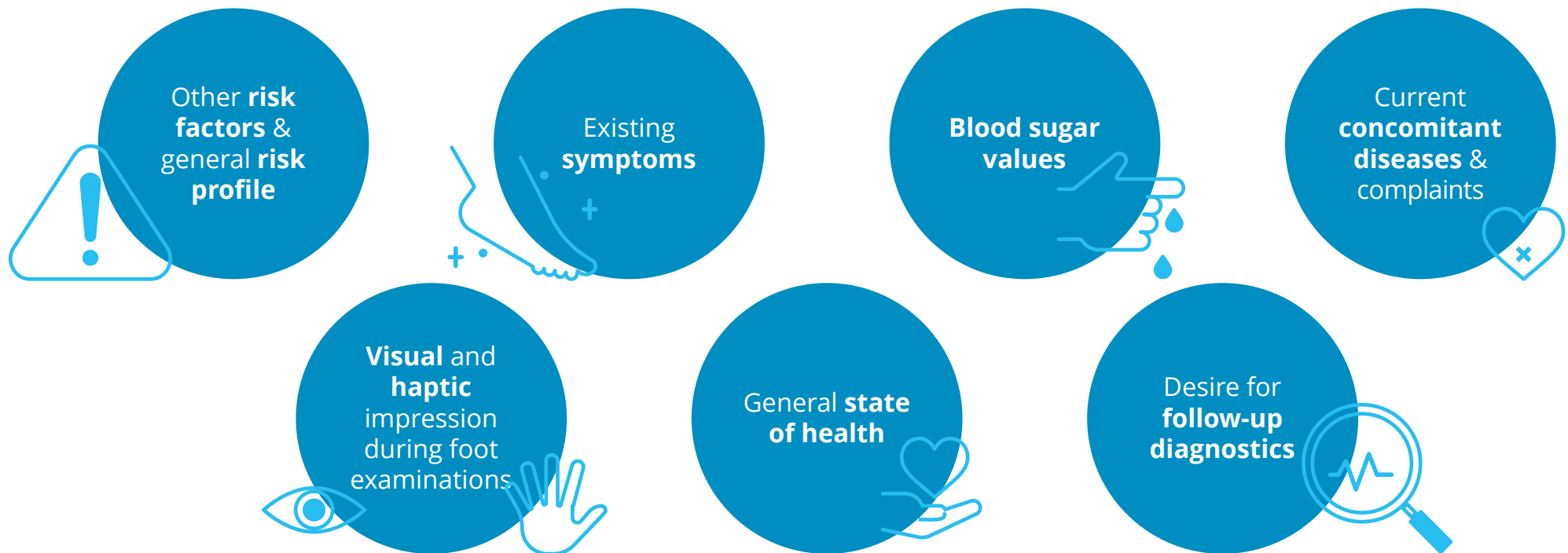
- No, I immediately refer to a specialist
- Yes, partly if the foot pulses are not palpable



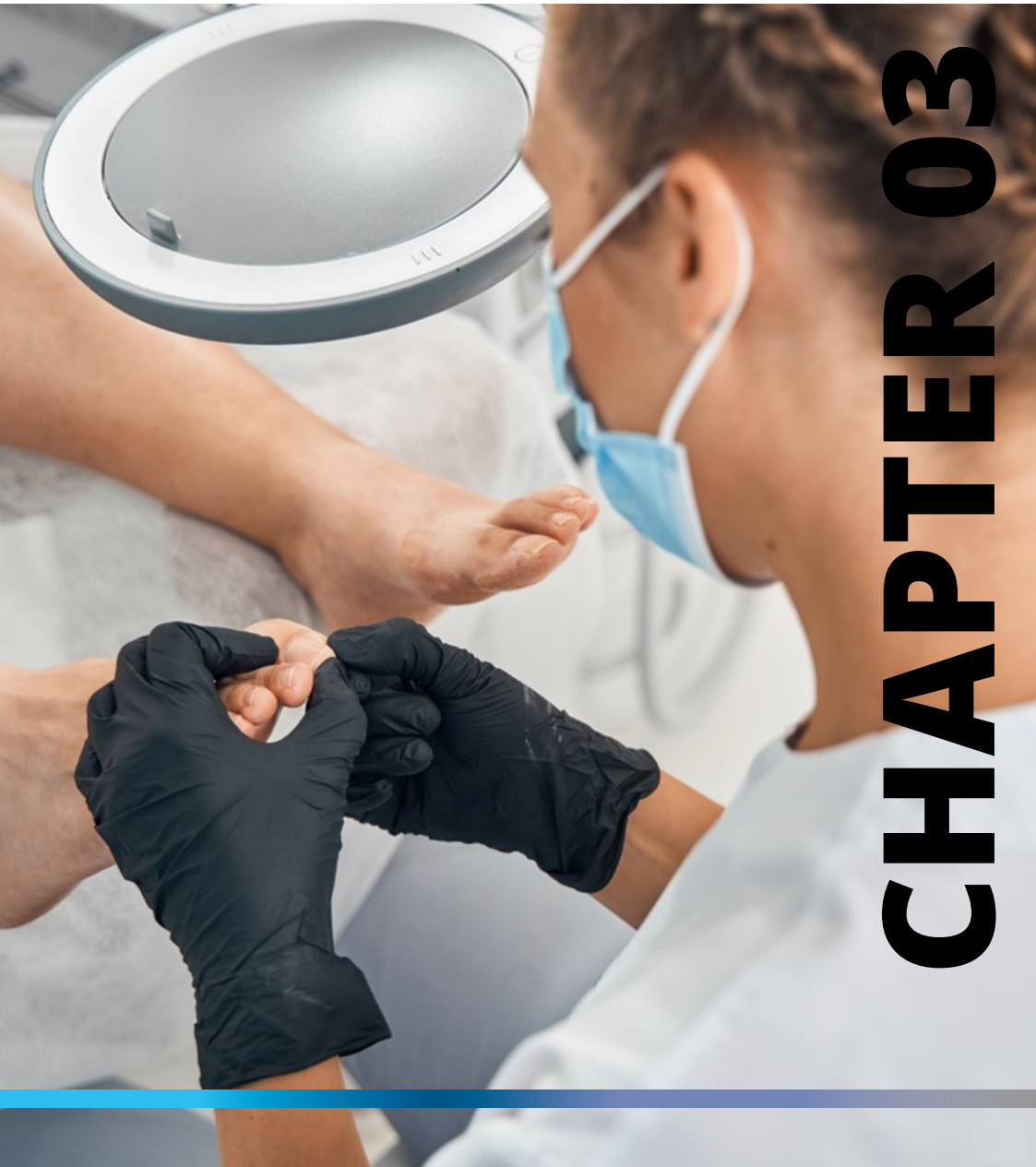
* n = 120; ** n = 77; *** n = 43

Individual risks and complaints determine whether follow-up diagnostics are carried out

Considerations according to which the practitioners decide on follow-up diagnostics



Open-ended responses; summarized responses for "for palpable foot pulses" (70 responses in total) and "for non-palpable foot pulses" (33 responses in total)



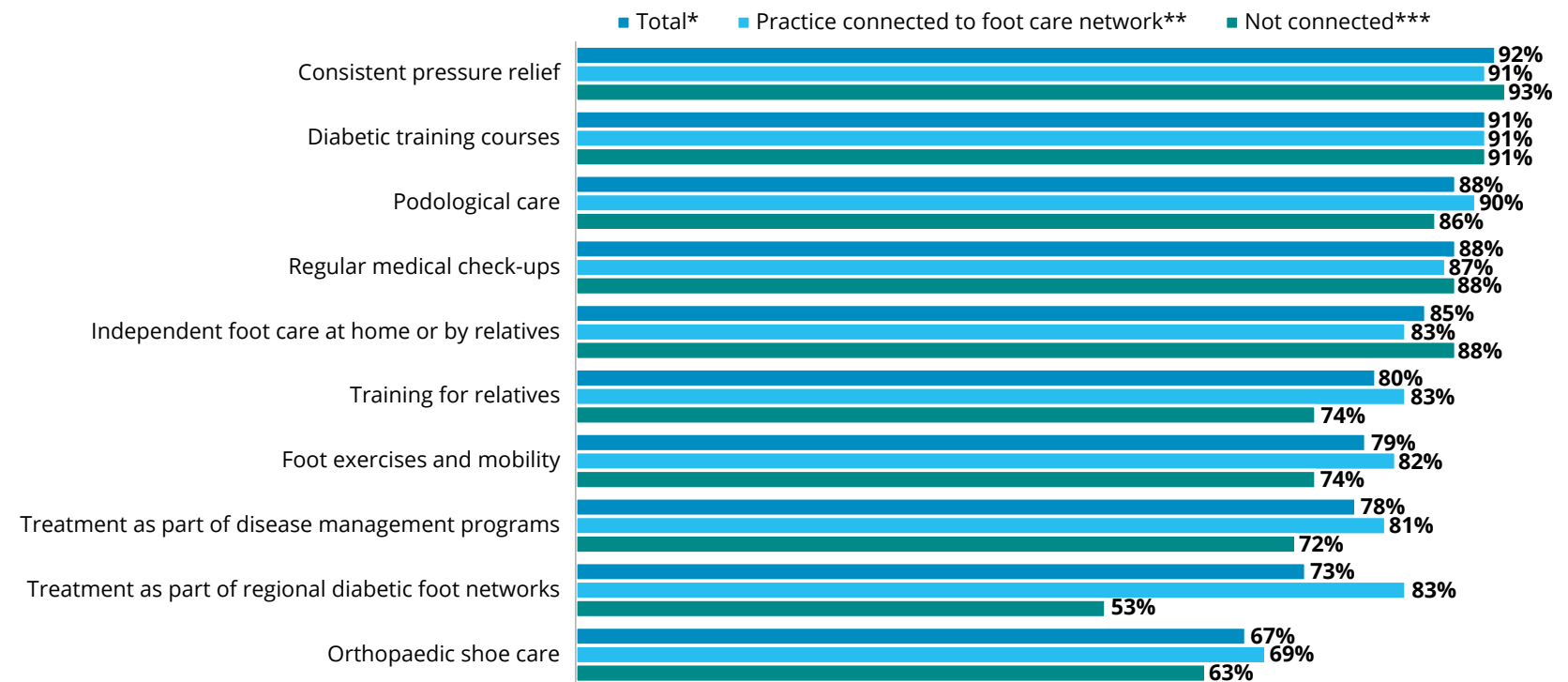
CHAPTER 03

PREVENTION OPPORTUNITIES AND RECOMMENDATIONS

Treating persons

Pressure relief and training are the most important measures from the point of view of those treating patients

Measures to prevent foot lesions in diabetes / diabetic foot syndrome that practitioners find important

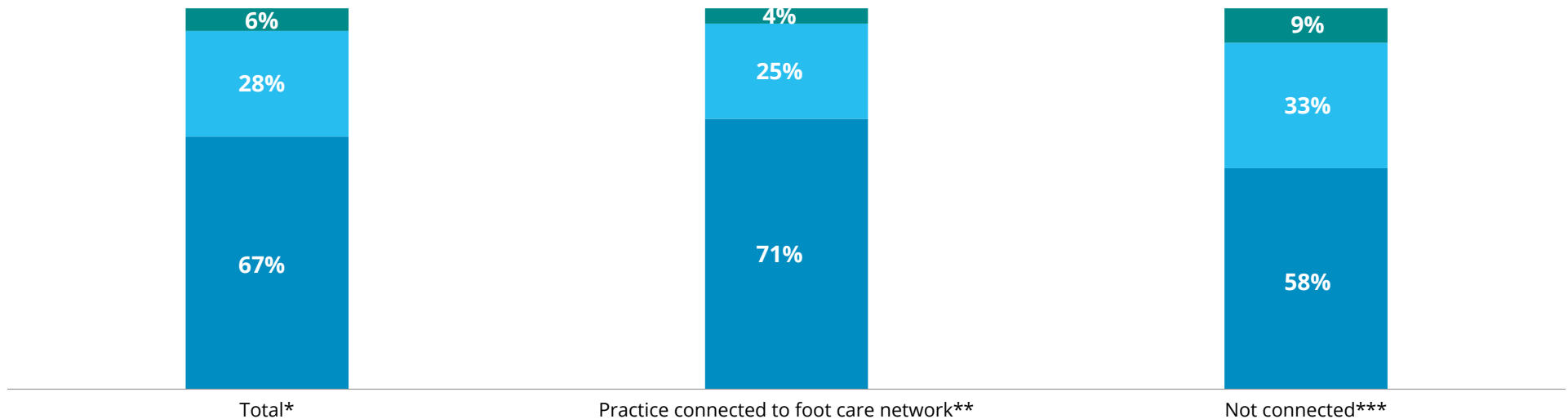


Top 2, "Strongly agree" and "Somewhat agree"; * n = 120; ** n = 77; *** n = 43

Almost everyone provides information, but sometimes only to the high-risk patients

Do you systematically educate your patients with diabetes and ulcer risk about appropriate, self-performed foot inspections and foot care?

- Yes, generally for all diabetics (even without a recognizable ulcer risk)
- Yes, but only for patients with a recognizable ulcer risk / high-risk patients
- No, but I recommend training by a diabetes consultant or podologist
- No, I'm not concerned about that at all

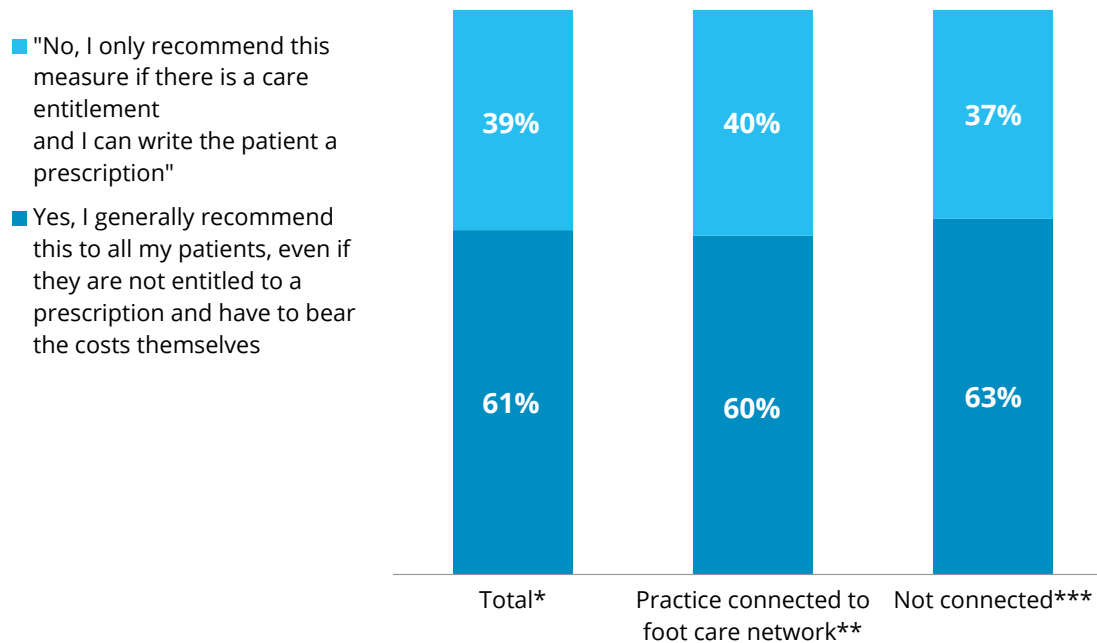


* n = 120; ** n = 77; *** n = 43

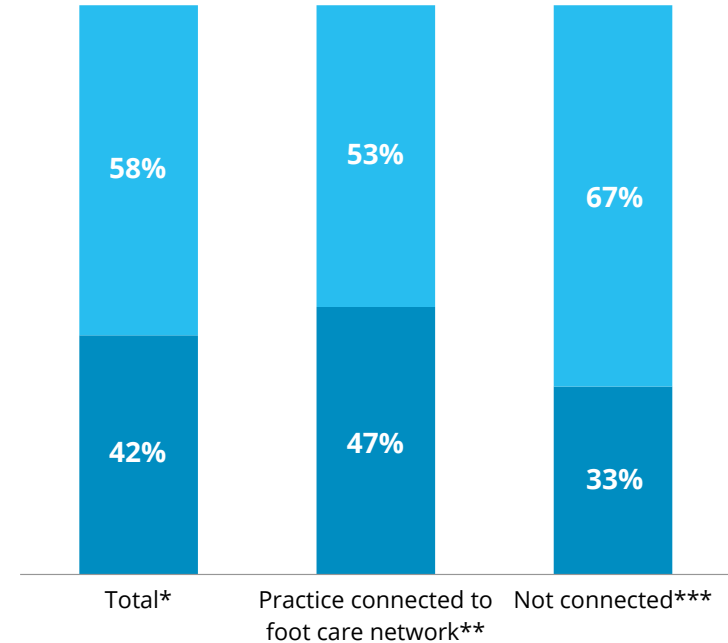
Treatment by a podologist is recommended, but often only if entitled to a prescription

Do you recommend additional therapeutic measures to your patients with diabetes?

Complex treatment by a podologist



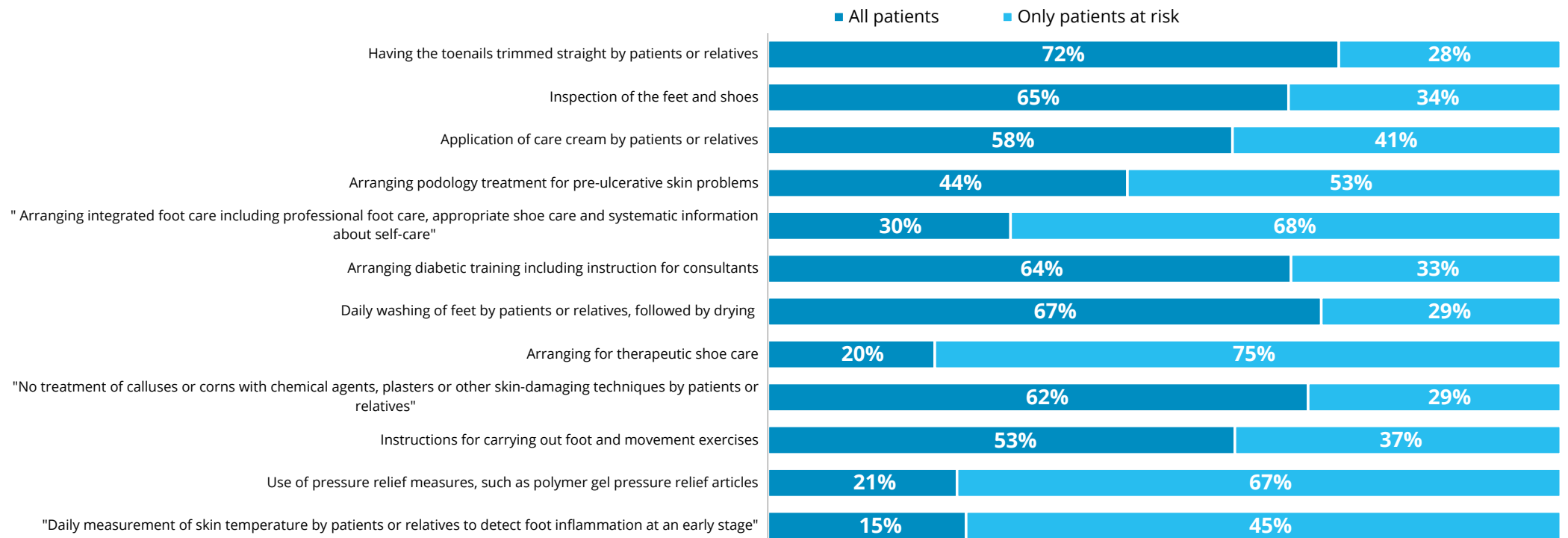
Biomechanical examination by the orthopaedic shoemaker



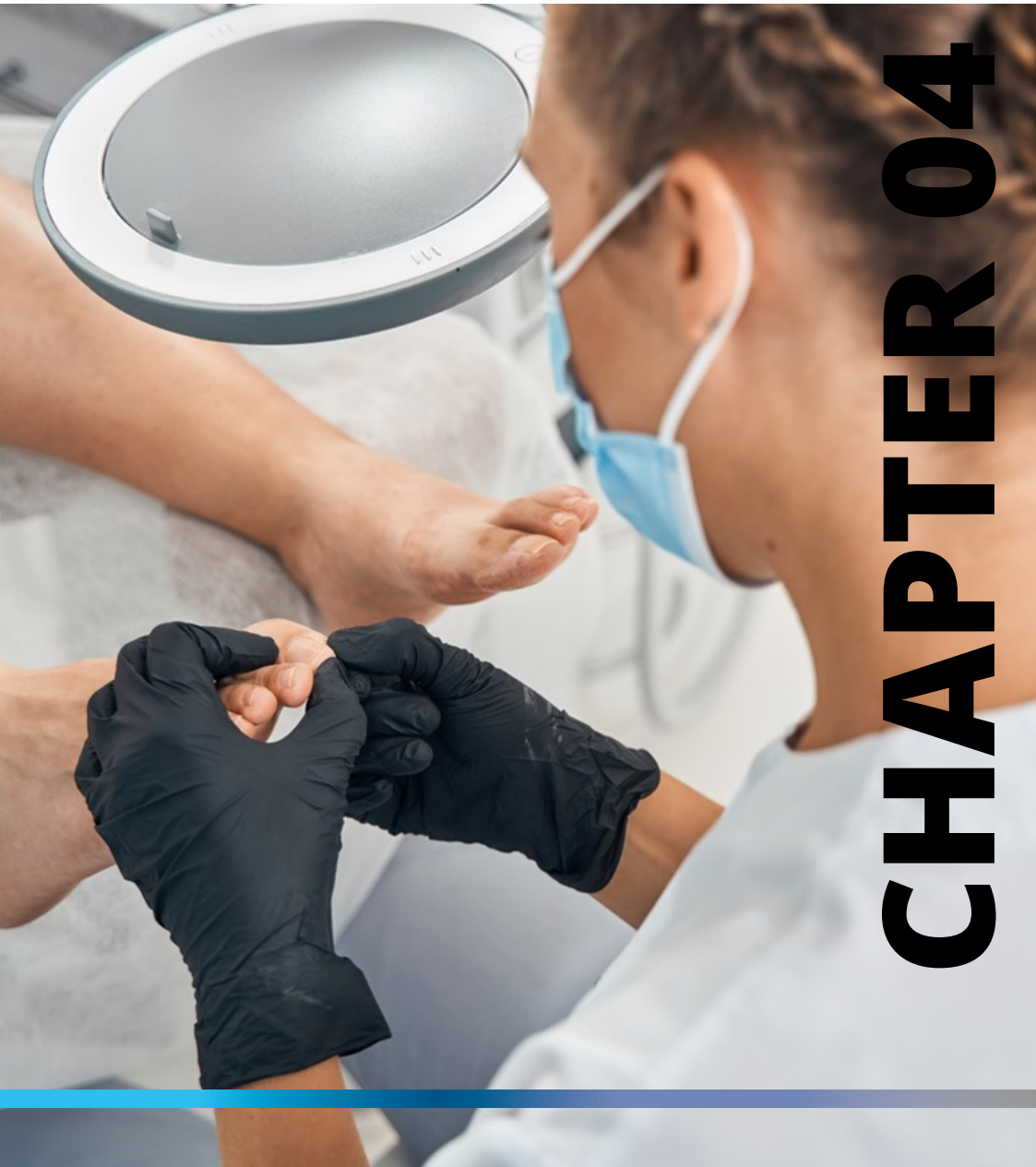
* n = 120; ** n = 77; *** n = 43

Doctors focus on feet as part of prevention

What specific preventive measures do you recommend or initiate for your patients with diabetes?



Multiple answers possible; n = 120



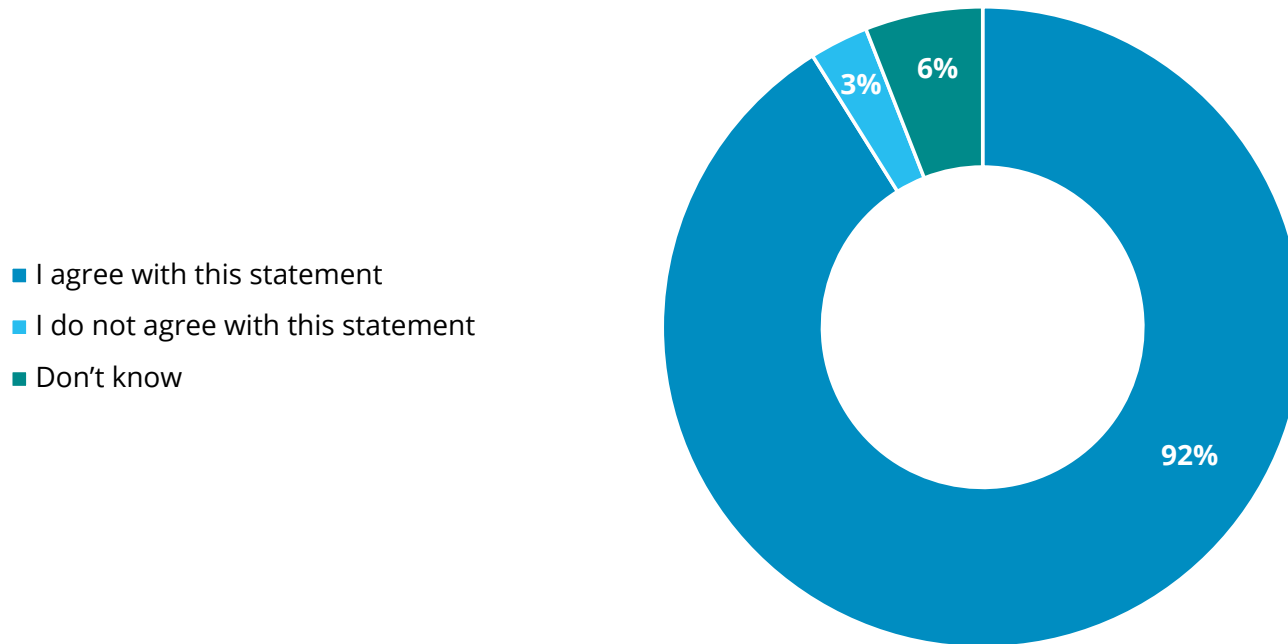
CHAPTER 04

DISEASE AWARENESS AND IMPLEMENTATION OF PREVENTION

From the perspective of the practitioners

Affected persons can do a lot for themselves to avoid foot complications

"Risk awareness and the behaviour of affected persons have the greatest influence on the results when it comes to preventing foot complications in diabetes."



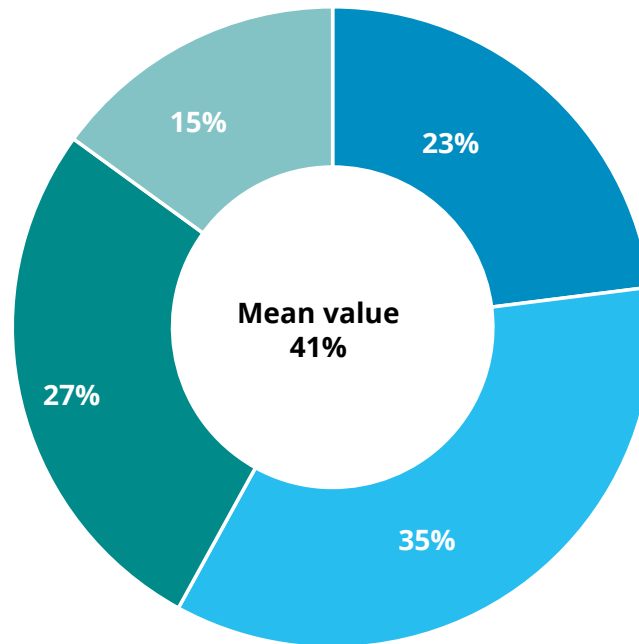
- I agree with this statement
- I do not agree with this statement
- Don't know

n = 120

Only one in six people are aware of the importance of looking after their own feet

How highly do you estimate the proportion of your patients who are not at all aware that they need to take special care of their feet?

- 0 % to less than 25 %
- 25 % to less than 50 %
- 50 % to less than 75 %
- 75 % to 100 %



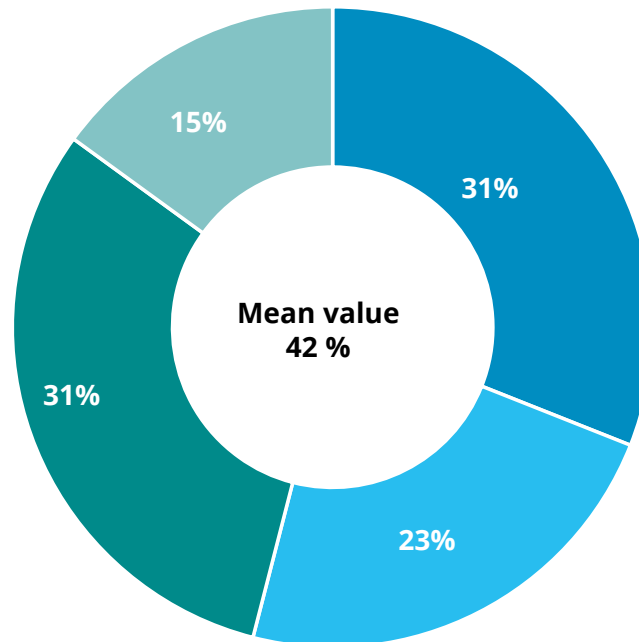
Mean value*

On average, practitioners state that **41%** of affected persons do not know that they need **to look after their feet**.

One in four people do not know what an ulcer is and how it develops

How highly do you estimate the proportion of your patients who do not know what an ulcer is and how it develops?

- 0 % to less than 25 %
- 25 % to less than 50 %
- 50 % to less than 75 %
- 75 % to 100 %



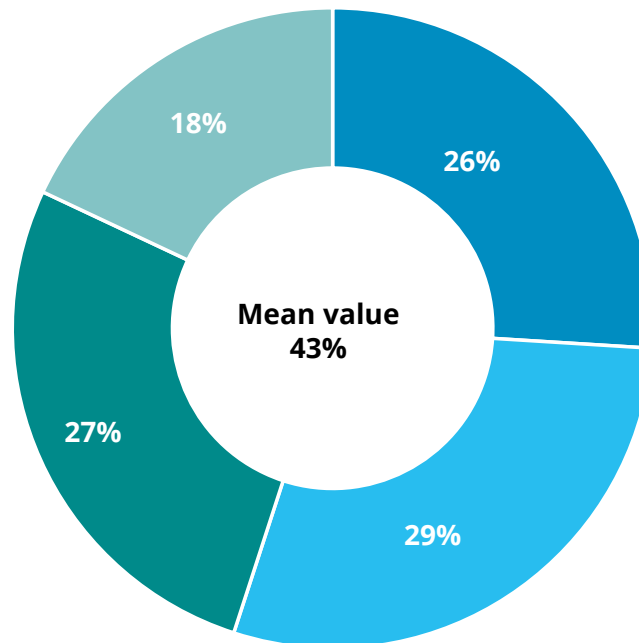
Mean value*

On average, practitioners state that 42% of affected persons do not know what an ulcer is and how it develops.

Not even half know the specific risks of a foot lesion

How highly do you estimate the proportion of your patients who are generally well informed about the risks of a foot lesion?

- 0 % to less than 25 %
- 25 % to less than 50 %
- 50 % to less than 75 %
- 75 % to 100 %



Mean value*

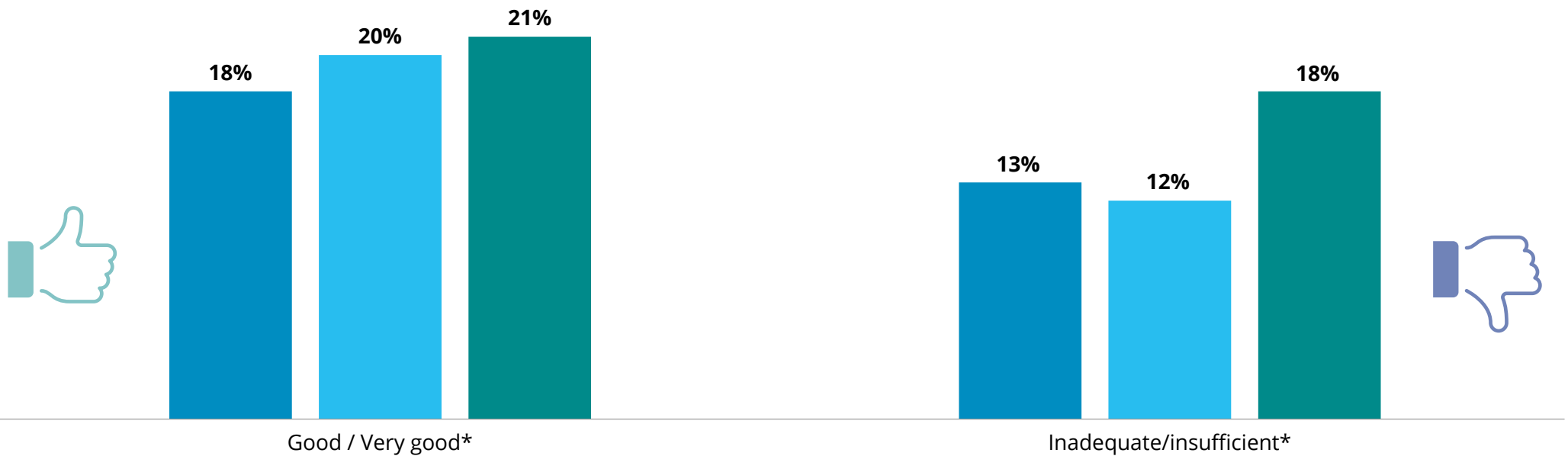
On average, practitioners state that **43%** of patients are well informed about the risks of a **foot lesion**.

n = 120, unweighted basis; * Basis: n = 46,099 patients

Few top ratings for care awareness and other measures

How practitioners assess the implementation of their patients' measures

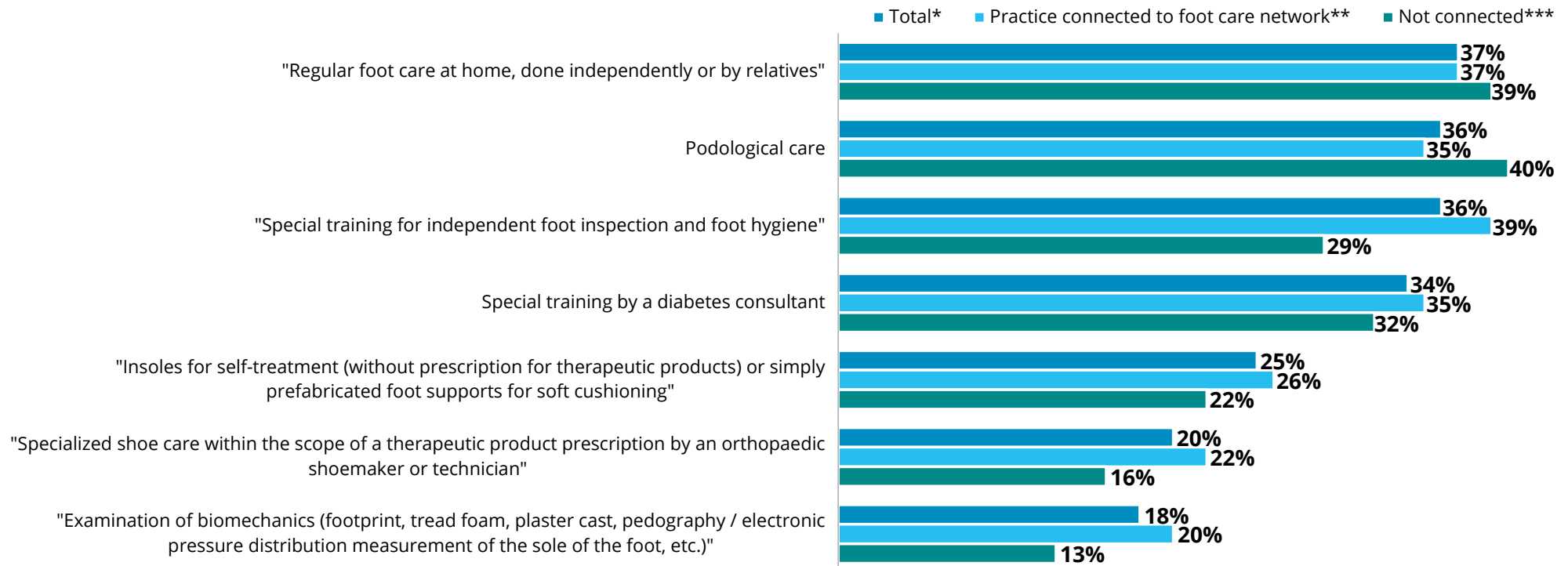
■ Foot care awareness ■ Shoe care ■ Measures to relieve pressure



* Top 2 and bottom 2 answers combined; n = 120

Two thirds and more do not take various precautionary measures

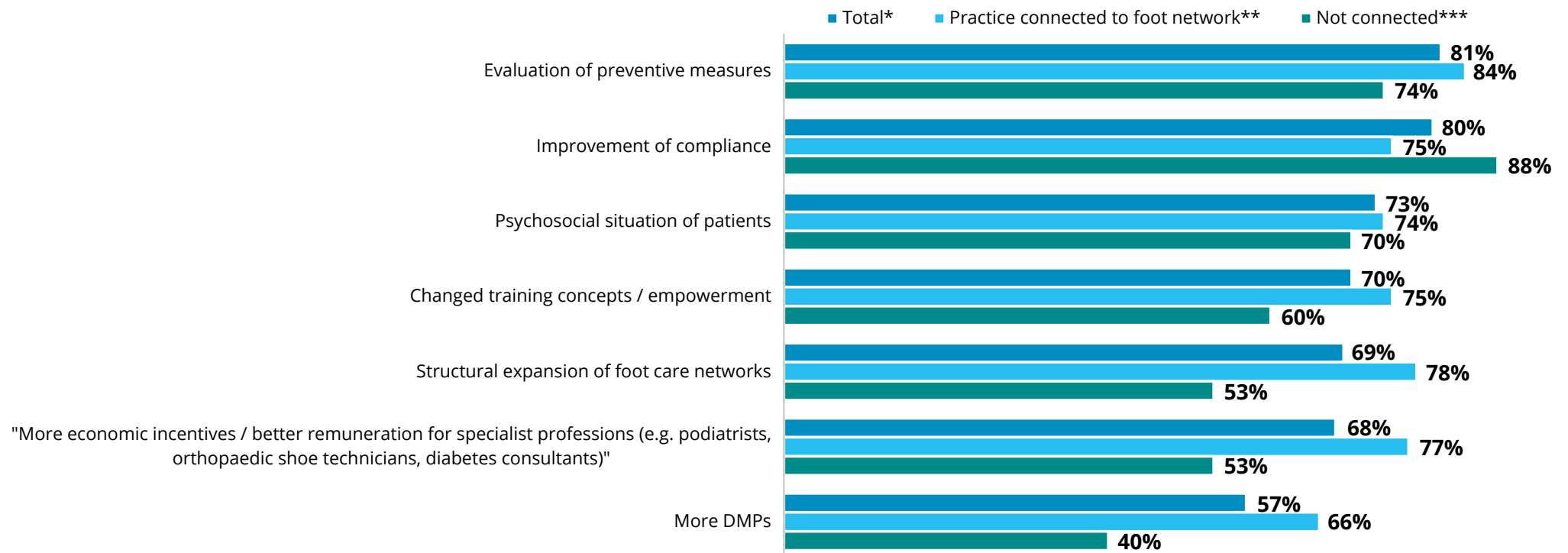
Proportion of patients who take precautionary measures with regard to their feet



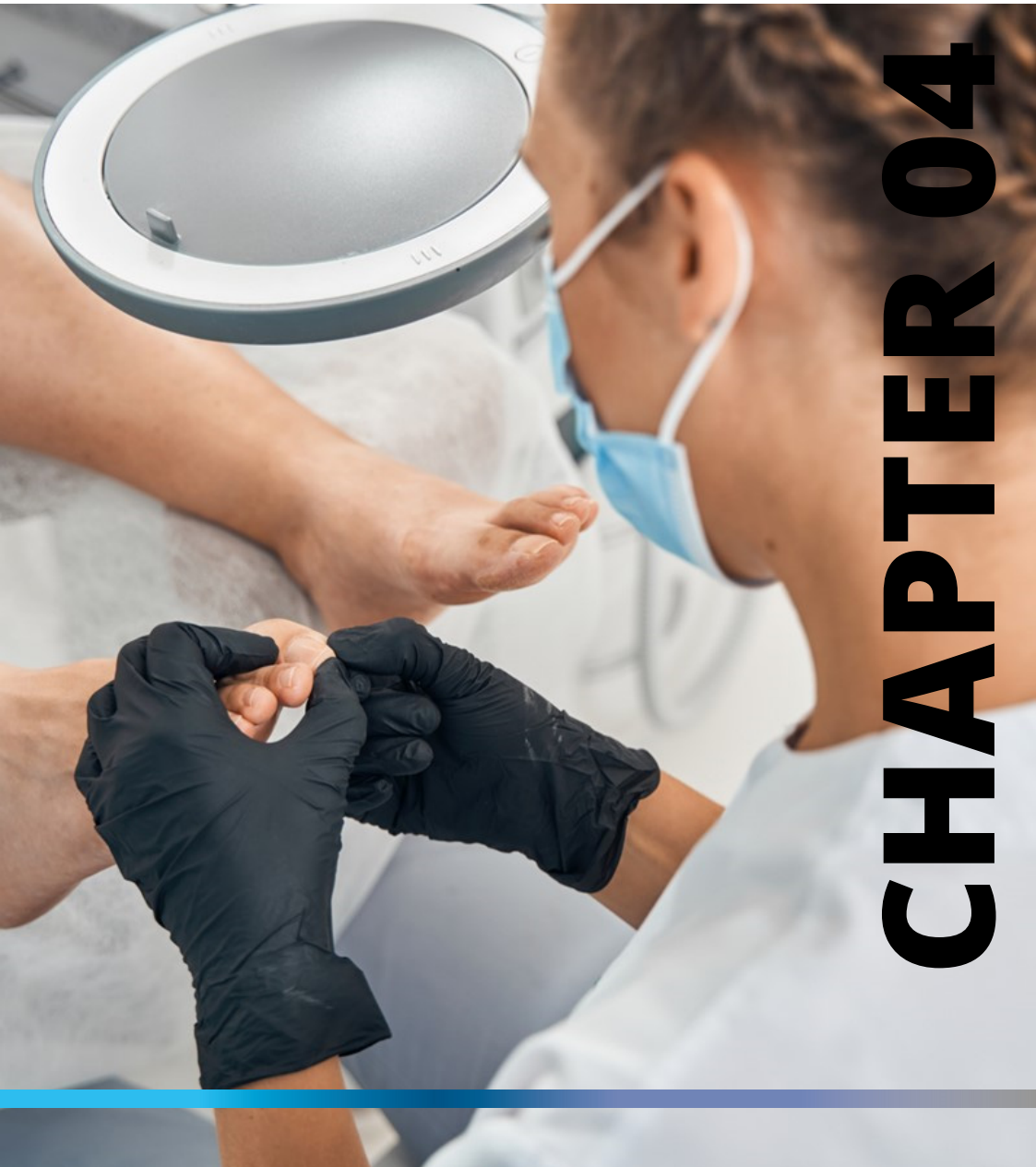
* n = 120, unweighted basis, n = 46,099 patients; ** n = 77; *** n = 43

Evaluation of measures, better compliance, psychosocial situation: A lot of potential is seen here

Practitioners who see a need for action to improve prevention in these areas



Top 2, "Strongly agree " and "Somewhat agree "; n = 120



CHAPTER 04

DISEASE AWARENESS AND IMPLEMENTATION OF PREVENTION

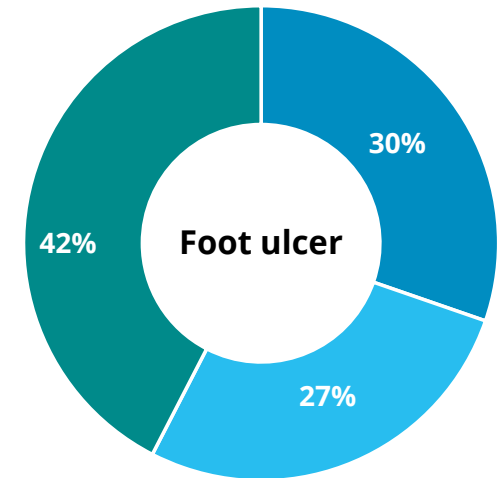
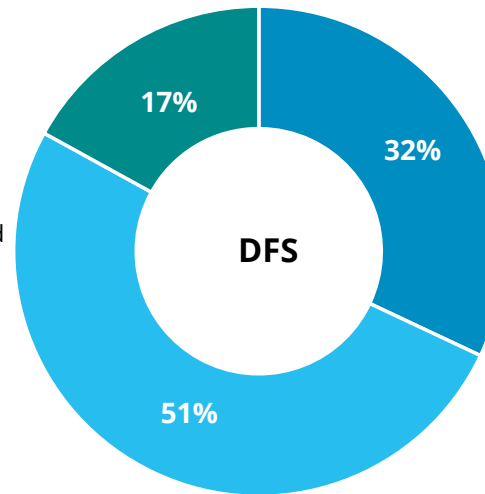
From the perspective of affected persons

The majority are generally aware of secondary complications, but lack detailed knowledge

Patients who know what diabetic foot syndrome (DFS) / foot ulcers are and what risks may be associated with them

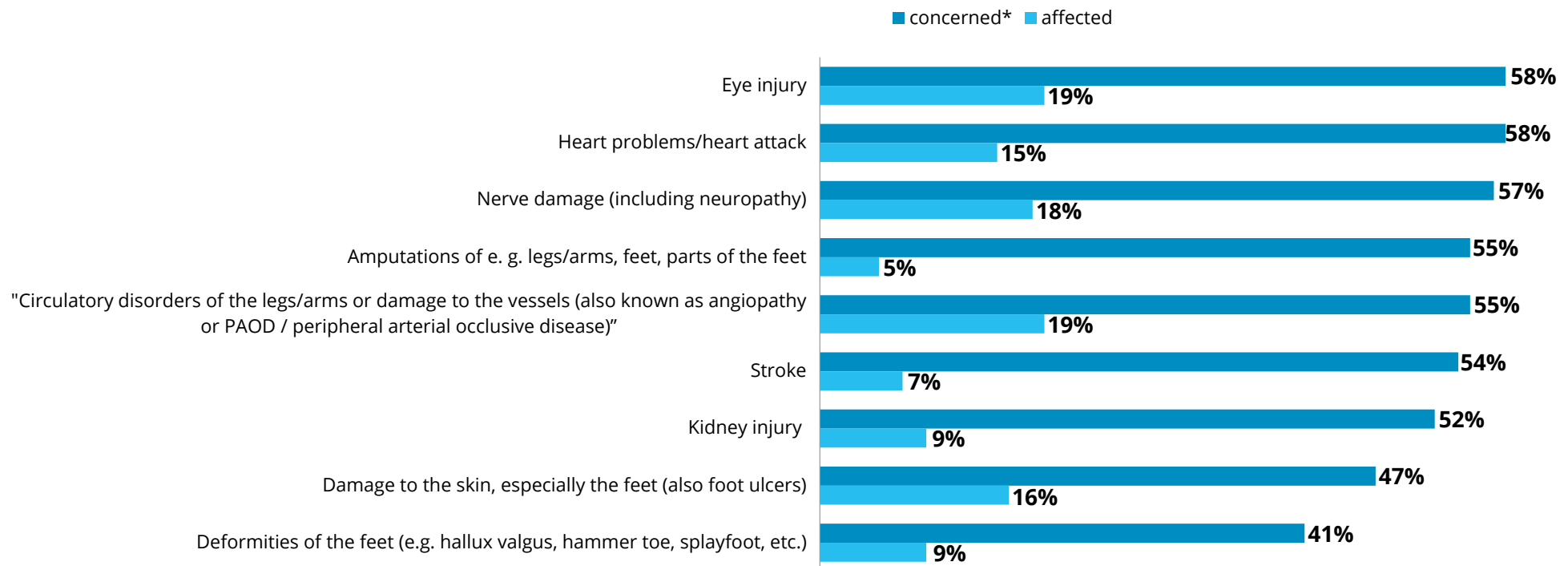
94% of respondents are aware that diabetes can lead to **complications** around the foot (wounds, ulcers, infections, etc.).

- Know the disease, but not the risks
- Know the disease and the risks
- Are uninformed



The biggest concerns are eye, heart and nerve damage

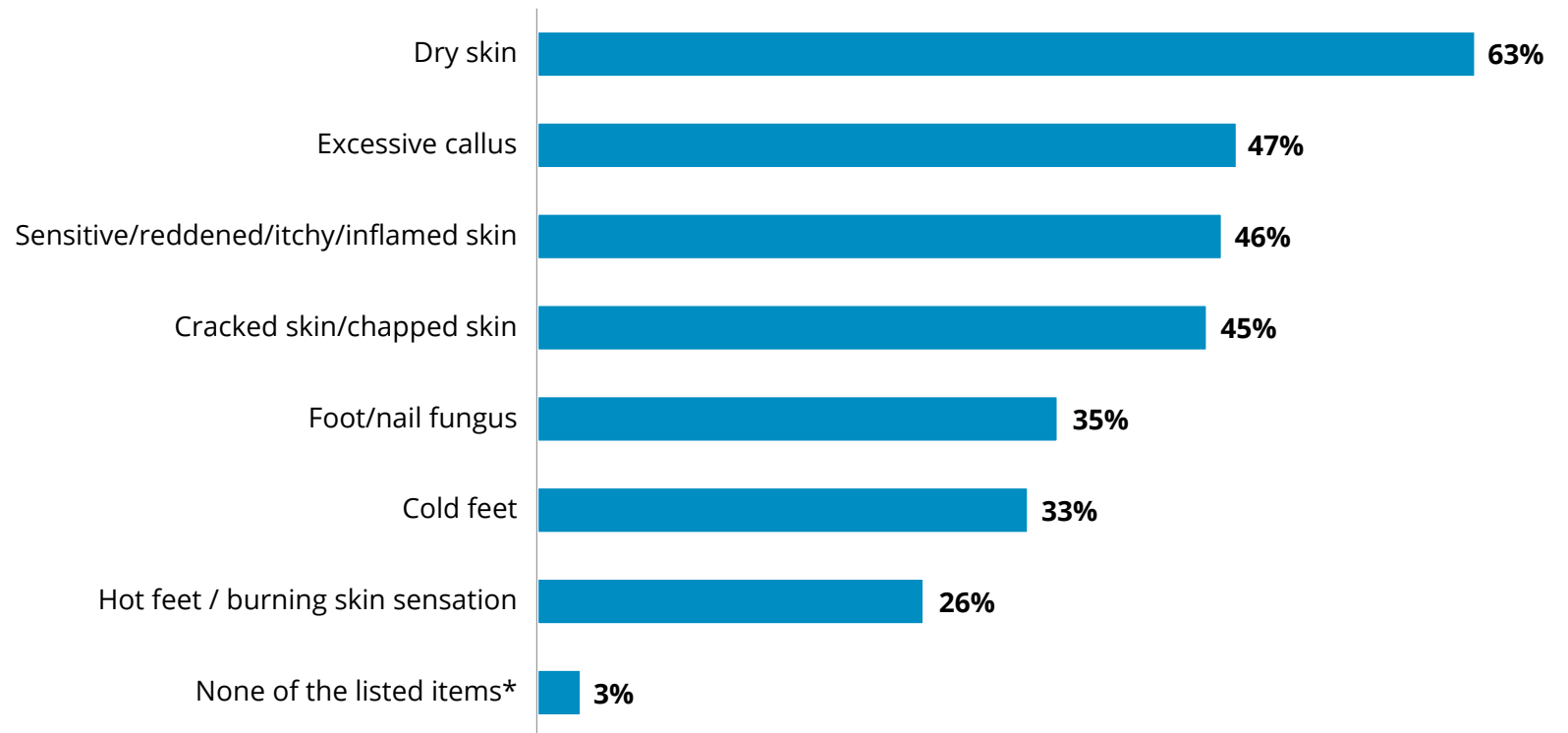
Patients who are concerned about / have been affected by comorbidities of diabetes



n = 500; * Top 2 "Greatly concerns me" and "Concerns me"

Dry skin is the most common foot problem

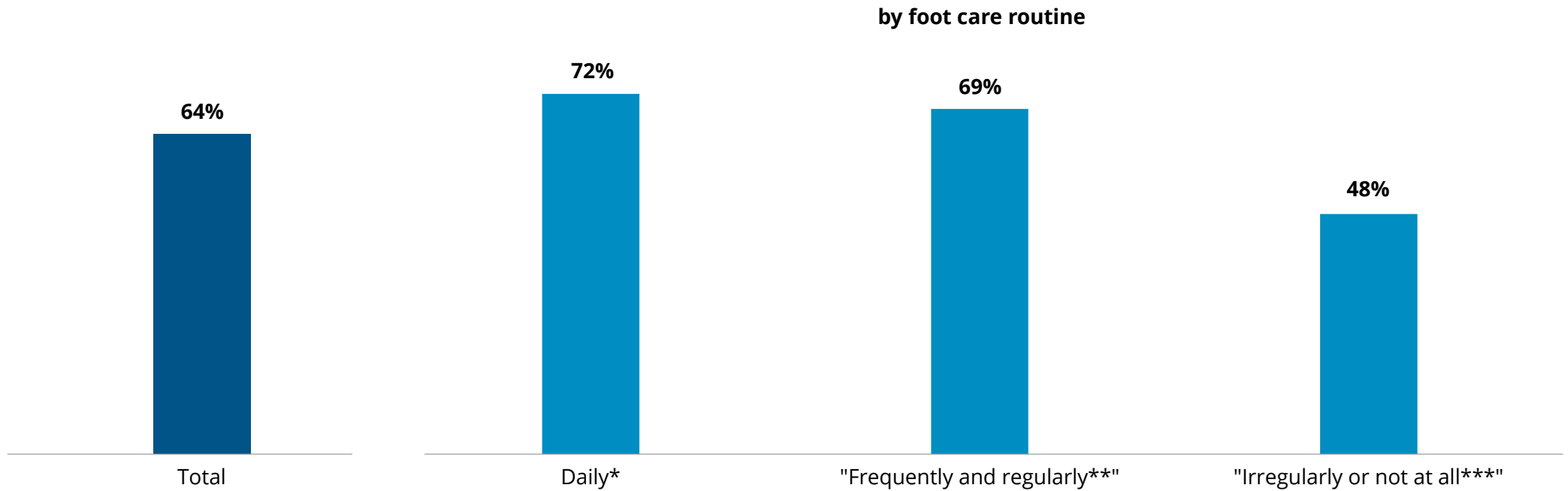
Which of the following skin or foot problems have you noticed?



Selected answers; n = 78 respondents who have at least one foot and have noticed skin or foot problems in themselves

The more frequent the care, the greater the satisfaction with the feet

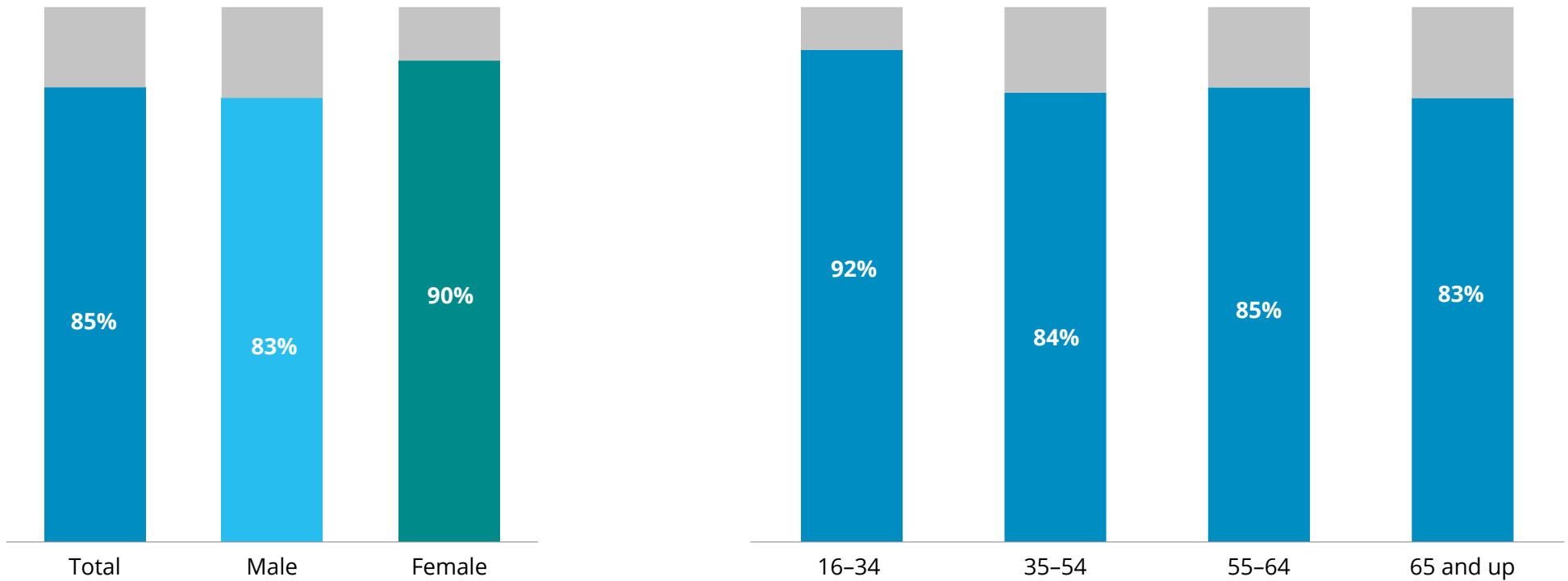
Patients who are generally satisfied with the condition of their feet



Top 2, "Strongly agree" and "Somewhat agree"; n = 492 respondents who have at least one foot; * n = 115; ** n = 249; *** n = 128

Foot care is most important for women and young affected persons

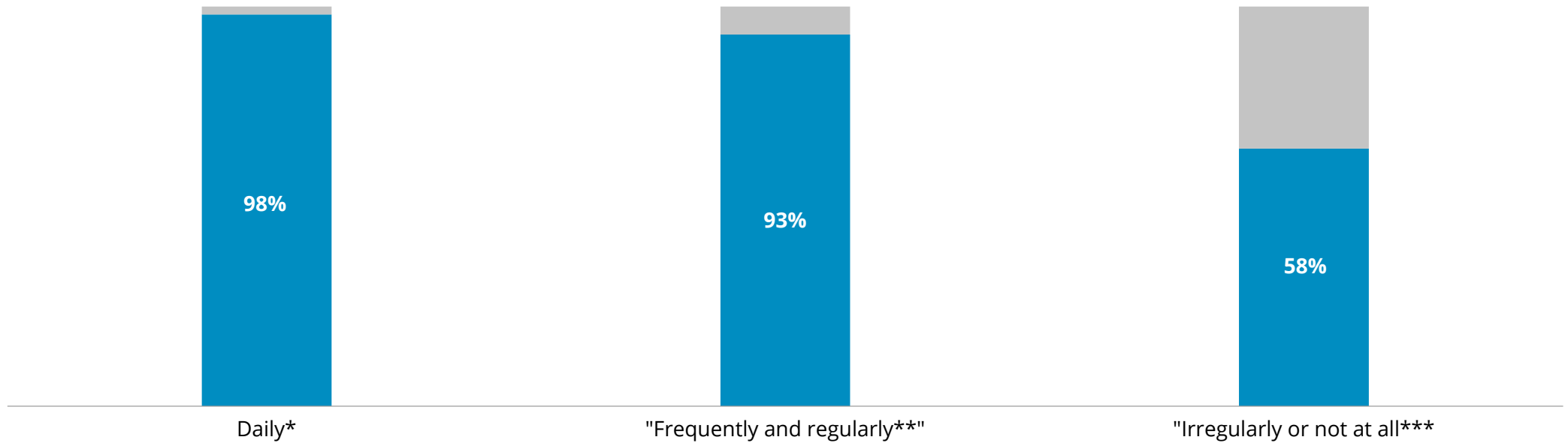
Patients for whom regular foot care is (very) important



Top 2, "Very important" and "Important"; n = 492 respondents who have at least one foot; n male = 332; n female = 160; n 16-34 = 66; n 35-54 = 133; n 55-64 = 131; n 65 and older = 162

Almost 60 percent do not care for their feet regularly, but find foot care important

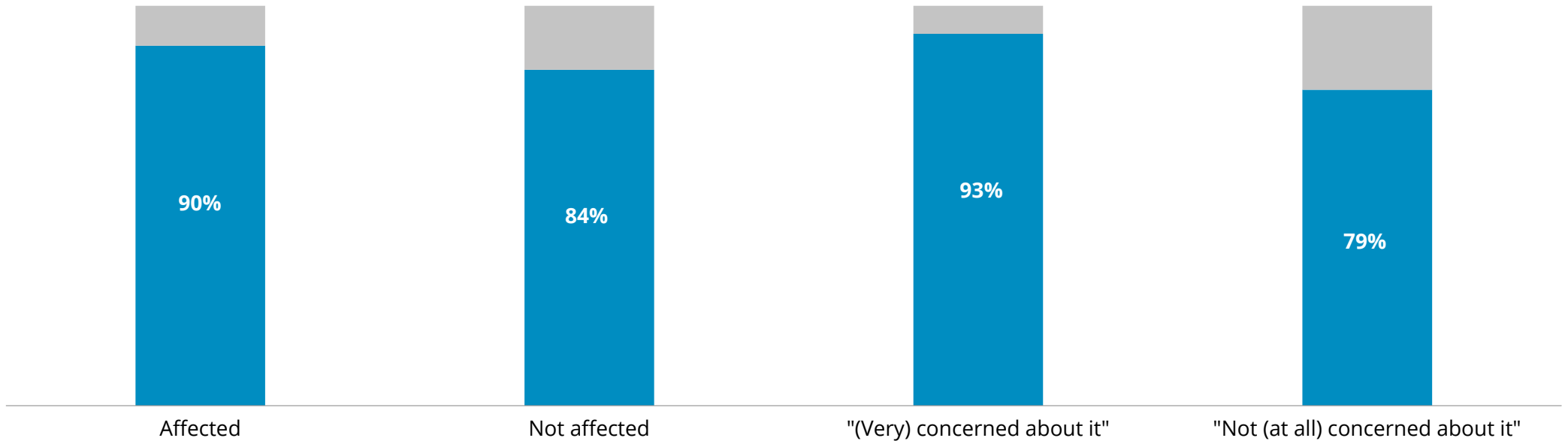
Patients for whom regular foot care is (very) important by care routine



Top 2, "Very important" and "Important"; n = 492 respondents who have at least one foot; * n = 115; ** n = 249; *** n = 128

Those who have foot problems or are concerned about them consider foot care particularly important

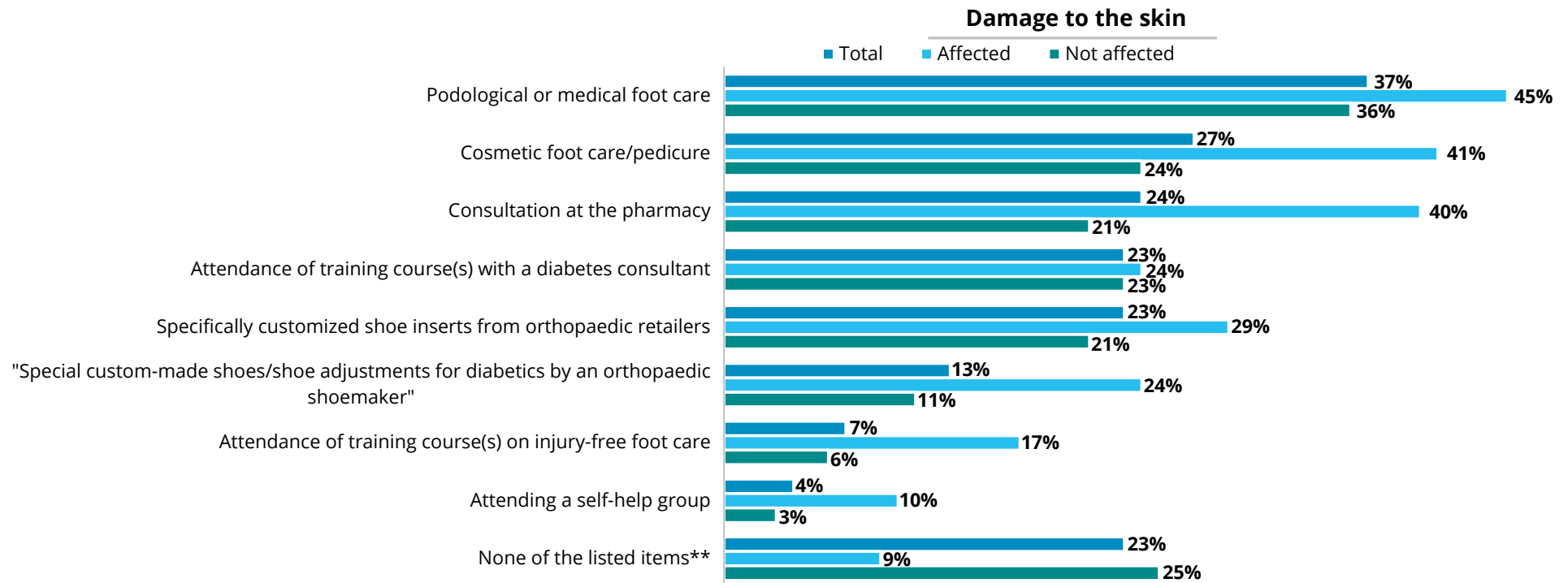
Patients for whom regular foot care is (very) important by skin damage*



* Damage to the skin, especially the feet (including foot ulcers); n affected = 78; n not affected = 414; n "Concerns me (a lot)" = 229; n "Doesn't concern me (at all)" = 110

Preventive measures are more likely to be taken by those already affected by skin damage

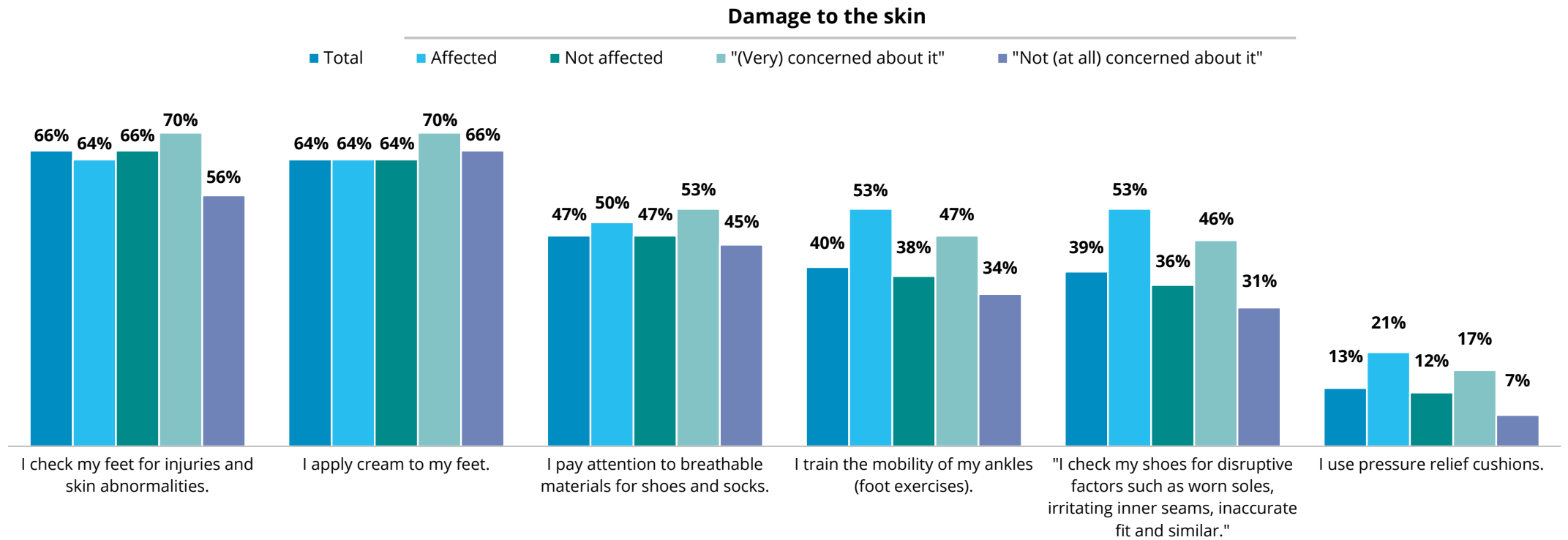
What preventive measures do you take to avoid skin and foot problems caused by diabetes?



n = 492 respondents who have at least one foot; multiple answers possible; * Damage to the skin, especially the feet (including foot ulcers); n affected = 78; n not affected = 414; n "Concerns me (a lot)" = 229; n "Doesn't concern me (at all)" = 110; ** Exclusive option

Concerned persons are the most active in foot care themselves

What specific foot care measures do you take yourself?



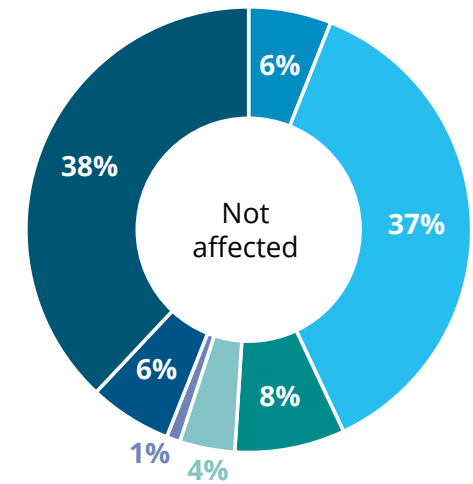
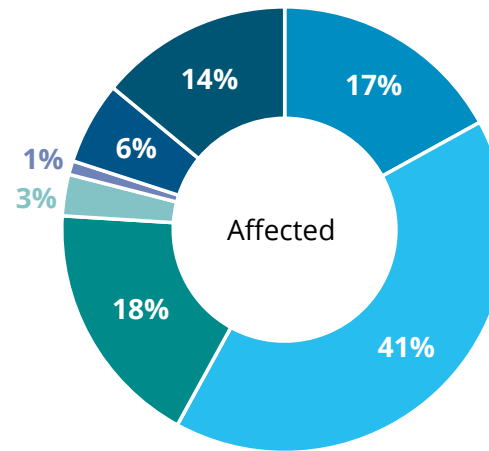
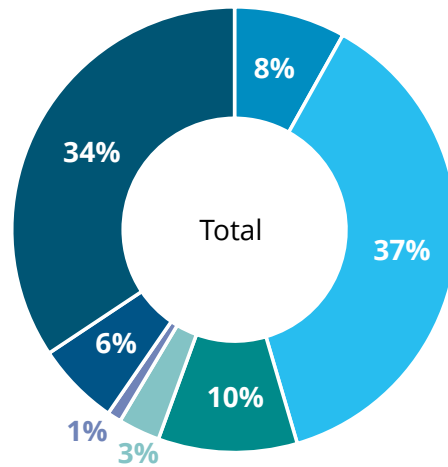
Answer selection; n = 492 respondents who have at least one foot; multiple answers possible; * Damage to the skin, especially the feet (including foot ulcers); n affected = 78; n not affected = 414; n "Concerns me (a lot)" = 229; n "Doesn't concern me (at all)" = 110

People not affected by skin damage visit a podologist with similar frequency

How often do you go to a podologist (medical foot care)?

Damage to the skin*

- More than once a month
- At least once every 1 to 3 months
- At least once every 3 to 6 months
- At least once every 6 to 9 months
- At least once every 9 to 12 months
- Less than once a year
- Never



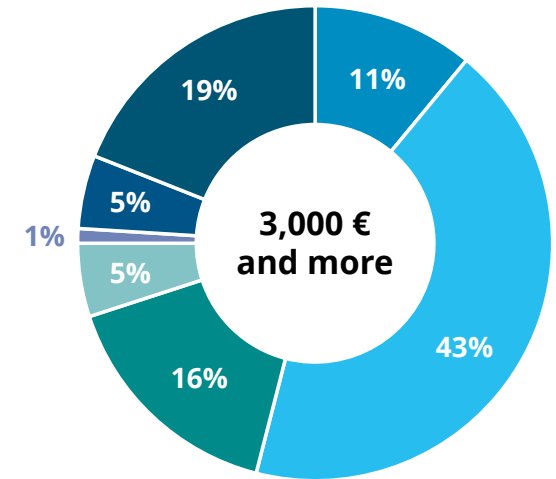
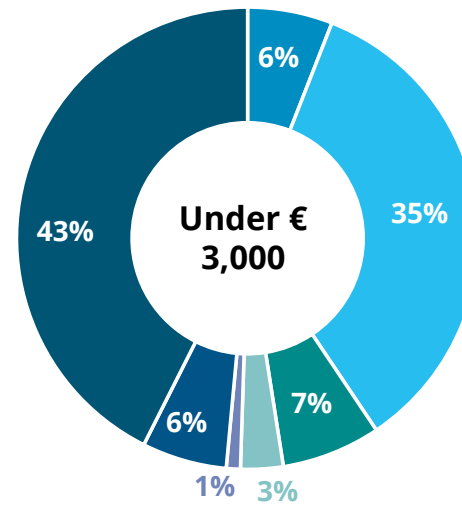
n = 492 respondents who have at least one foot; * Damage to the skin, especially the feet (including foot ulcers); n affected = 78; n not affected = 414; n "Concerns me (a lot)" = 229; n "Doesn't concern me (at all)" = 110

Almost every second person with a low income never goes for foot care

How often do you go to a podologist (medical foot care)? By net household income

75% of patients **pay** for podological treatments **themselves**, at least in part.
Only 25% of treatments are fully reimbursed by the **health insurance company**.

- More than once a month
- At least once every 1 to 3 months
- At least once every 3 to 6 months
- At least once every 6 to 9 months
- At least once every 9 to 12 months
- Less than once a year
- Never

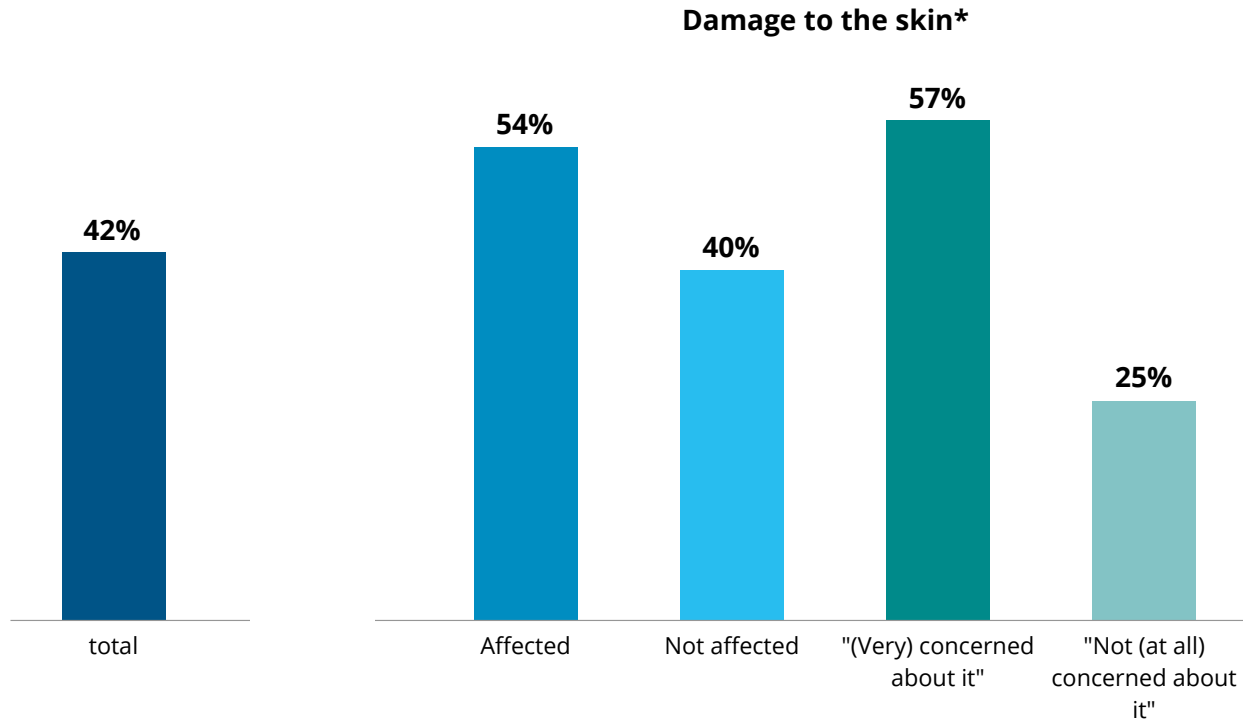


n = 323 respondents who have at least one foot and who see a podologist

n = 492 respondents with at least one foot; n household income under €3,000 = 298; n household income €3,000 and more = 176

People affected by skin damage and concerned persons would like to see a podologist more often

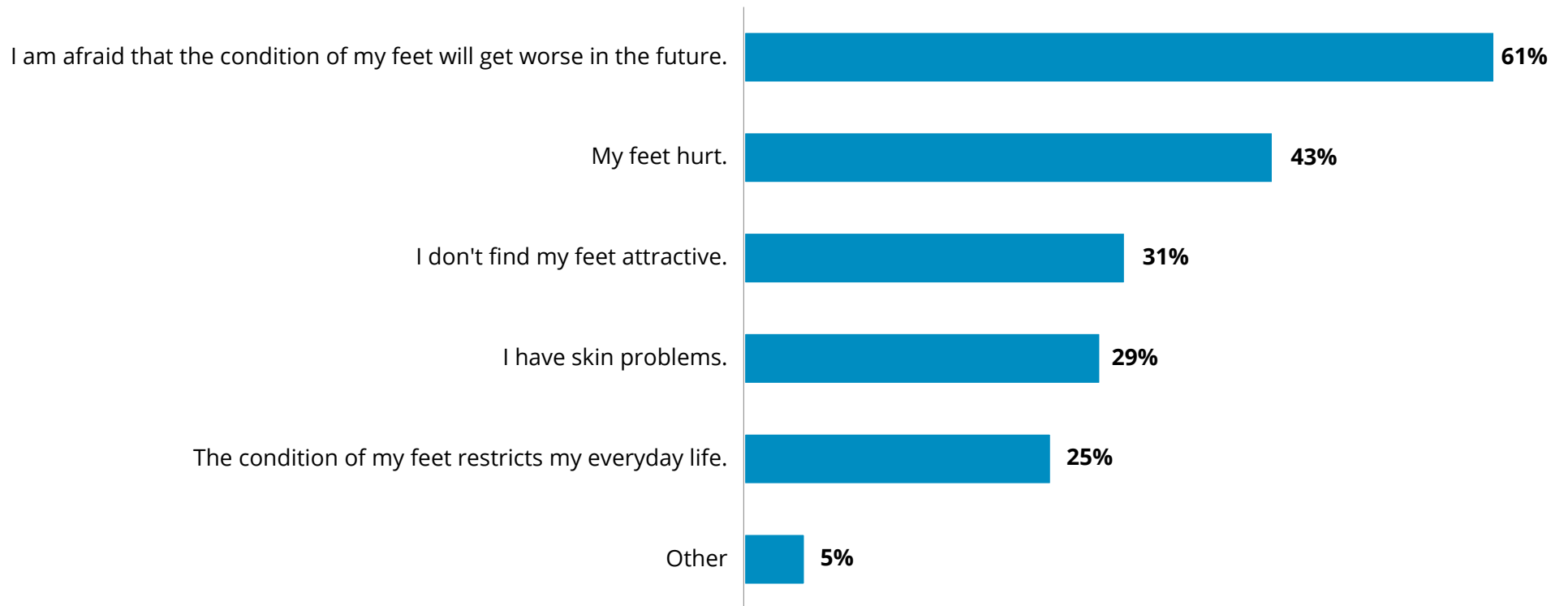
Patients who would like to see a podologist more often



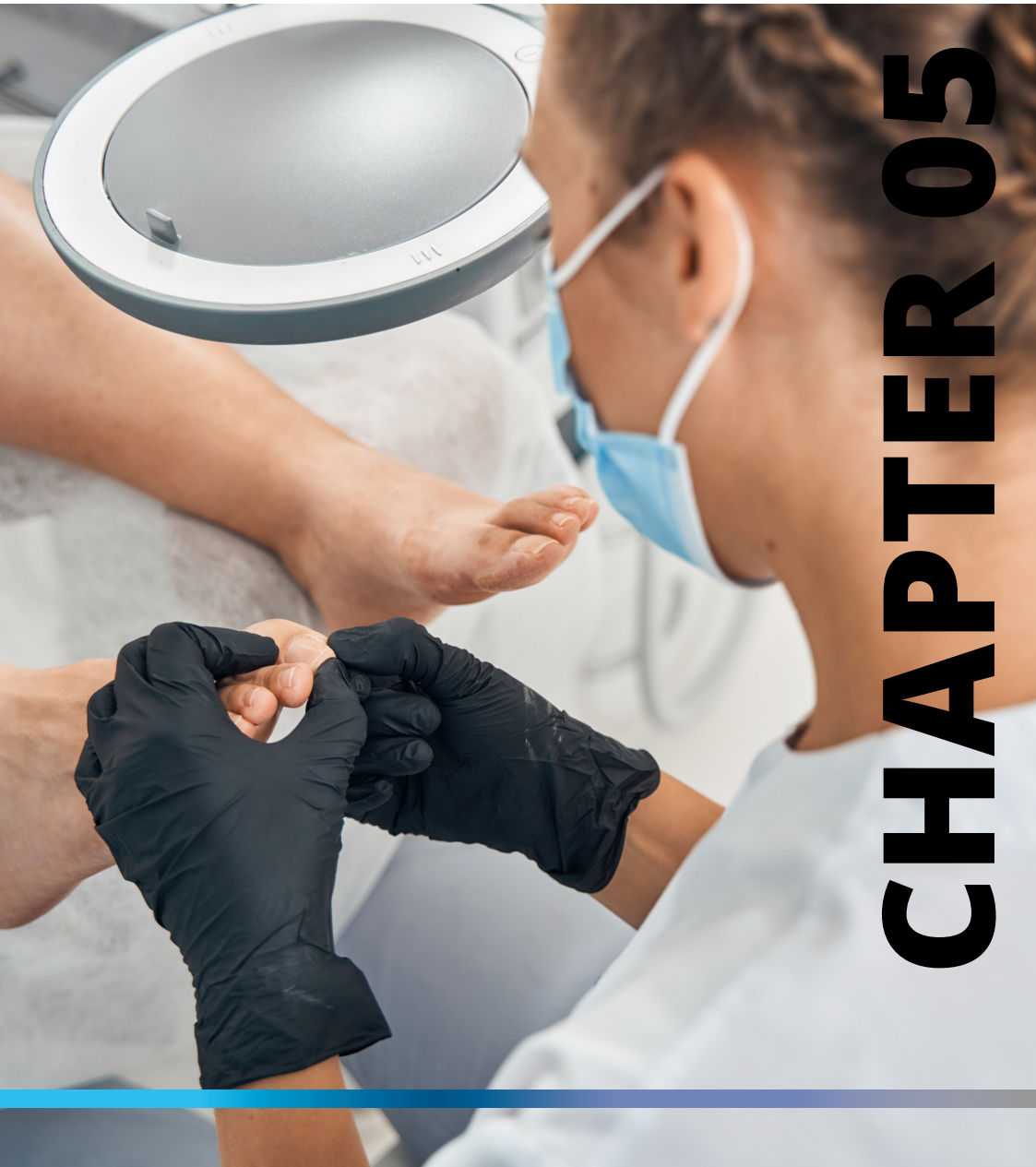
Top 2, "Strongly agree" and "Somewhat agree"; n = 492 respondents who have at least one foot; * Damage to the skin, especially the feet (including foot ulcers); n affected = 78; n not affected = 414; n "Concerns me (a lot)" = 229; n "Doesn't concern me (at all)" = 110

The biggest concern is deterioration of the condition of the feet

With what are you dissatisfied, or what are you concerned about with your feet?



n = 173 respondents who have at least one foot and are not satisfied with the condition of their feet

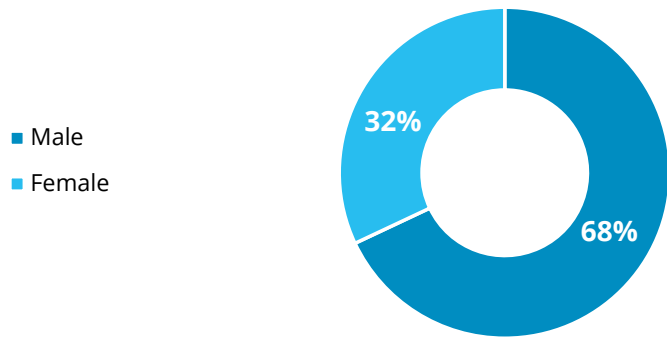


CHAPTER 05

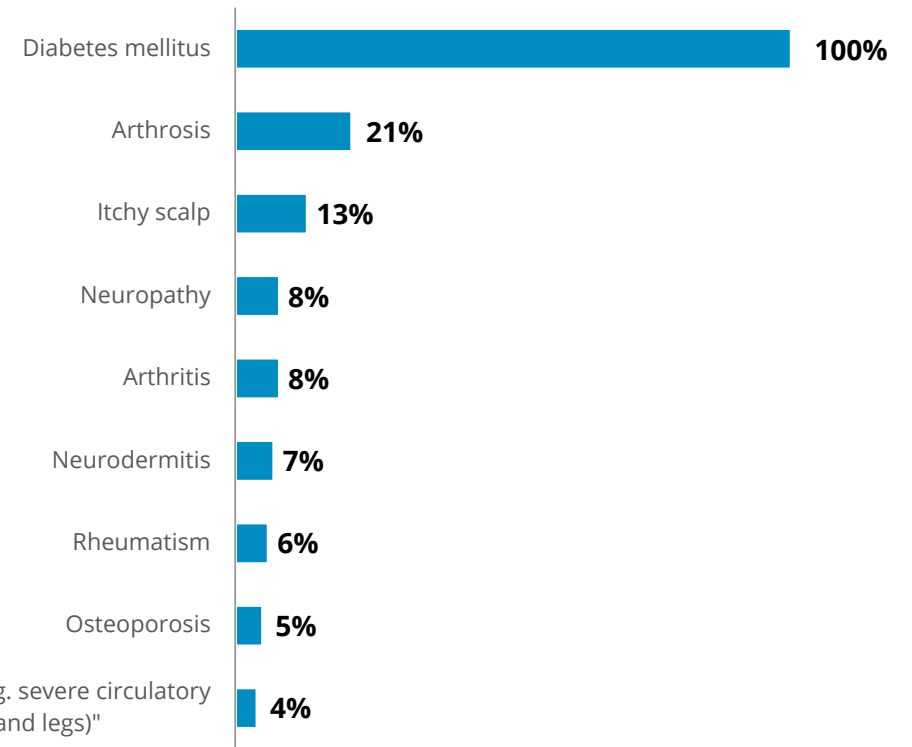
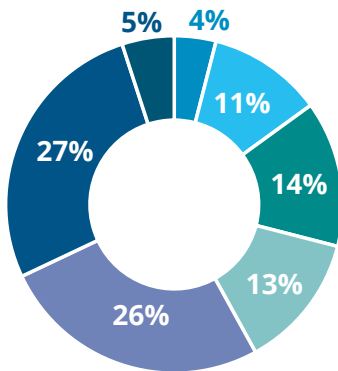
METHODOLOGY

Affected persons - survey via online access panel

n = 500 people with diabetes mellitus in Germany, survey period: 6. June to 13. June 2023



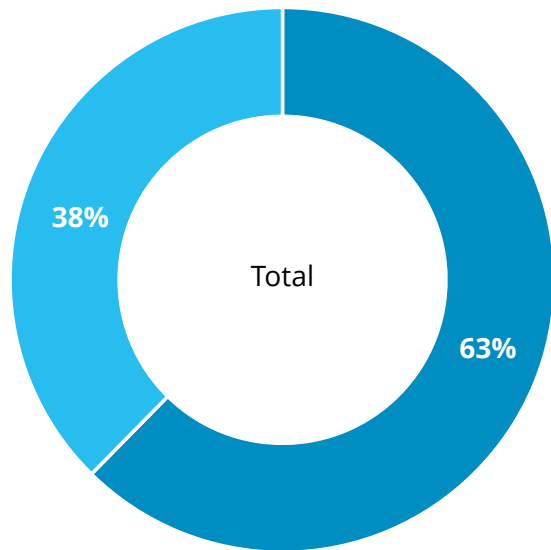
- 16 up to 24 Years
- 25 up to 34 Years
- 35 up to 44 Years
- 45 up to 54 Years
- 55 up to 64 Years
- 65 up to 74 Years
- 75 Years and older



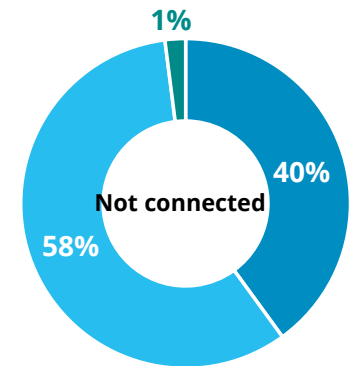
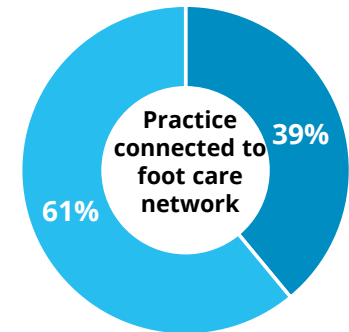
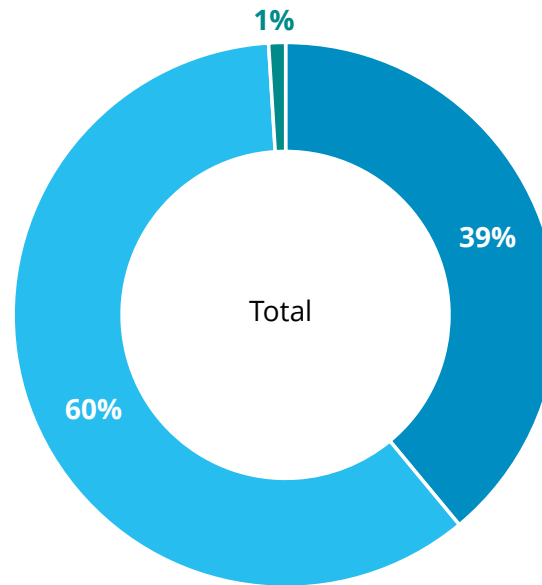
Treating persons - survey via online access panel

n = 120 general practitioners, internists and diabetologists who have at least 300 patients per quarter and treat a sufficient number of diabetes patients, survey period: 26. May to 26. July 2023

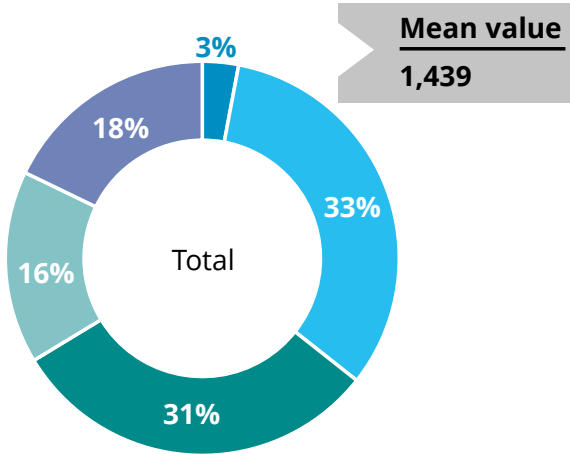
- "General practice/internal medicine"
- "Endocrinology/Diabetology"



- In a private practice
- In a joint practice
- In a medical care center



- 300 to under 500 patients
- 500 to under 1,000 patients
- 1,000 to under 1,500 patients
- 1,500 to under 2,000 patients
- 2,000 and more patients



- 0 % to less than 25 %
- 25 % to less than 50 %
- 50 % to less than 75 %
- 75 % up to 100 %

