The Diabetic Foot- looking at the whole patient

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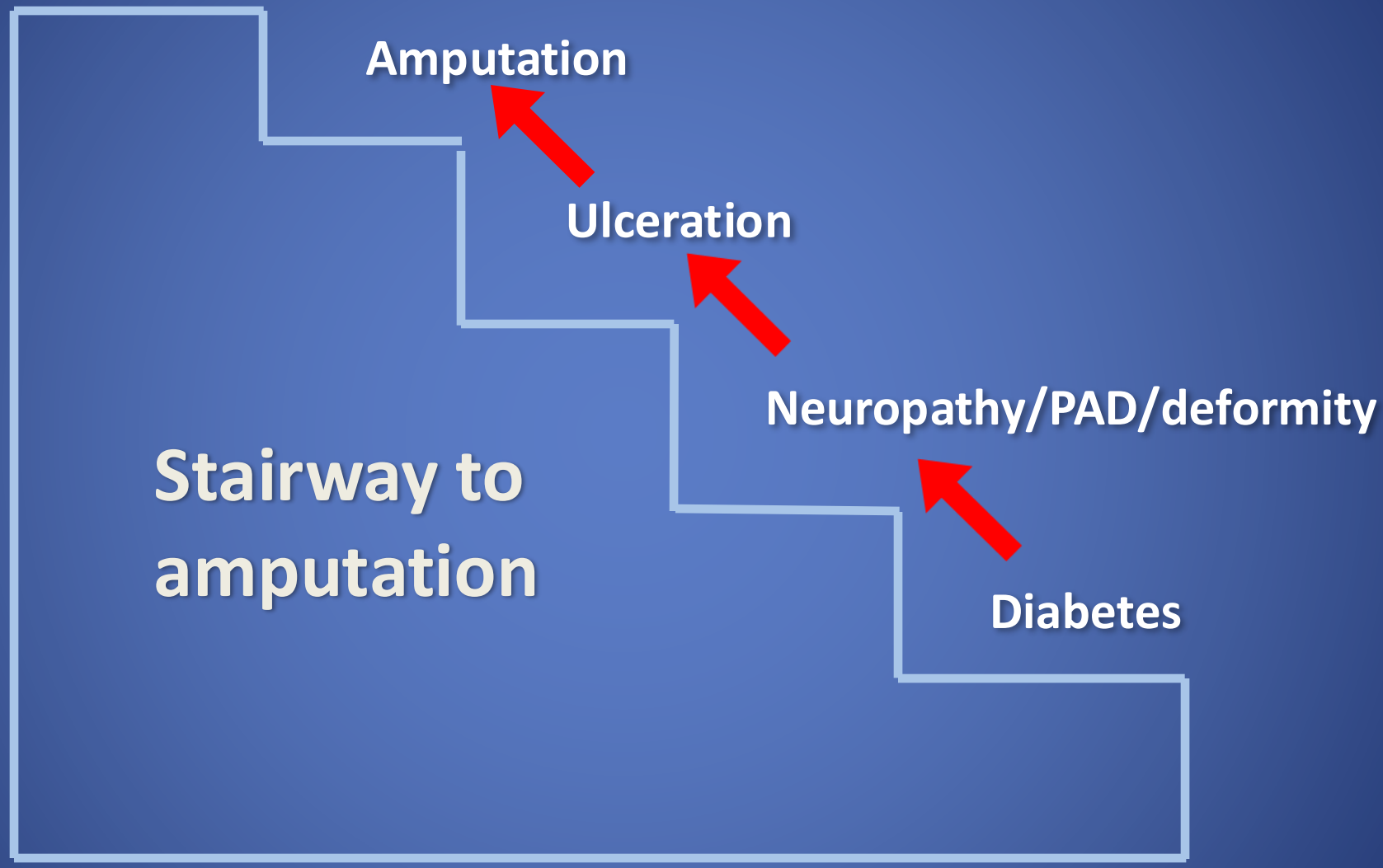
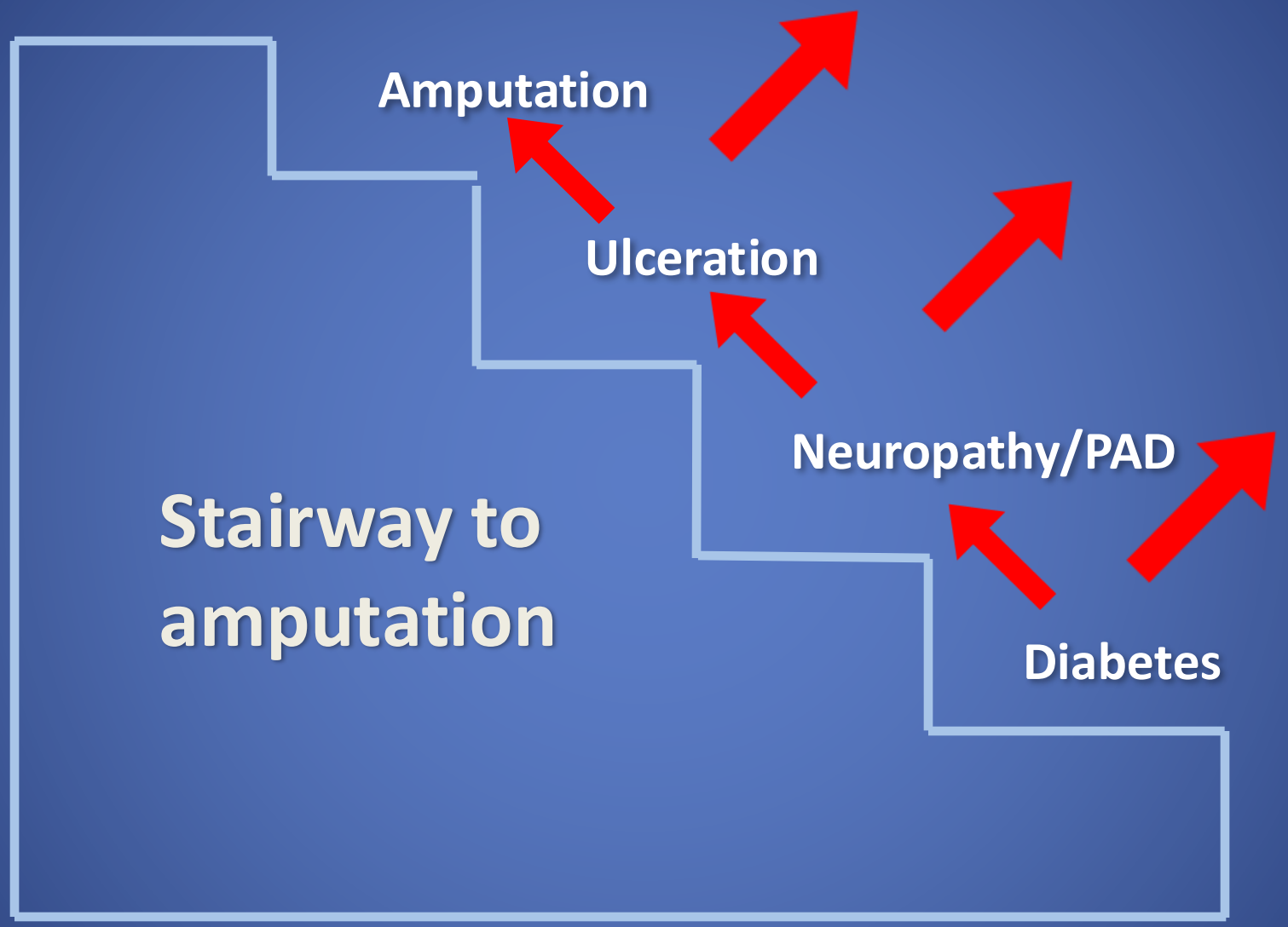

Amputation
Ulceration
Neuropathy/PAD/deformity
Diabetes
Stairway to amputation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Diabetes related Foot Facts

Foot ulcers are common:

Prevalence: 2% of the diabetes population

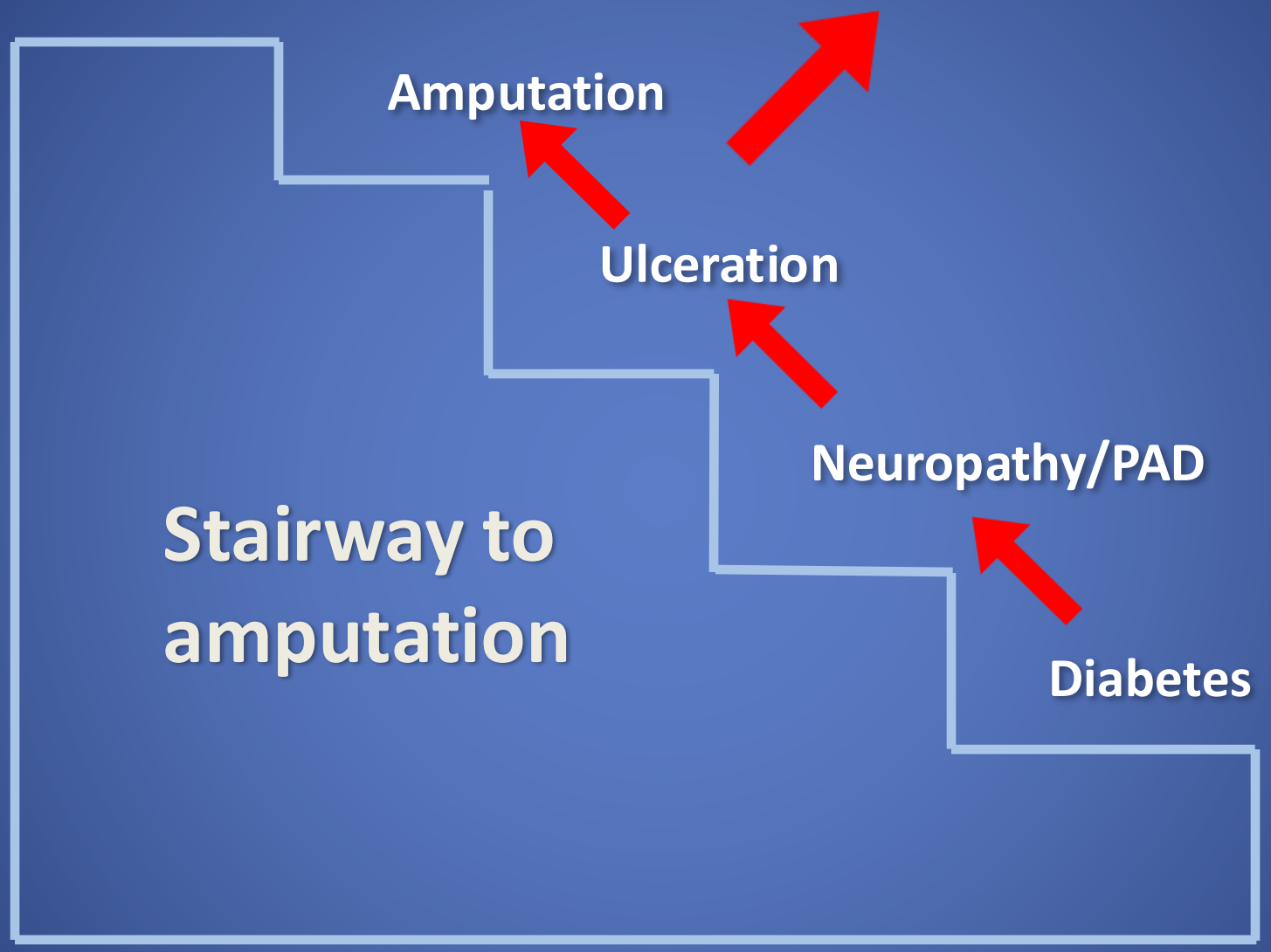
Abbott et al Diabetes Care 2005

Incidence:

-English cohort (CPRD) 4.7% developed DFUD over a median of 4.3 years (incidence rate 9.0[95%CI: 8.8–9.2] per 1000 person-years) follow-up

-Scottish cohort (SDRN-DRN) 2.9% over a median of 6.3 years (incidence rate 4.4 [95% CI: 4.3–4.5] per 1000 person-years.

Gharibzadeh S et al, Diabetes Obes Metab. 2025;27:4782–4792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Diabetes related Foot Facts

Amputations are common (?):

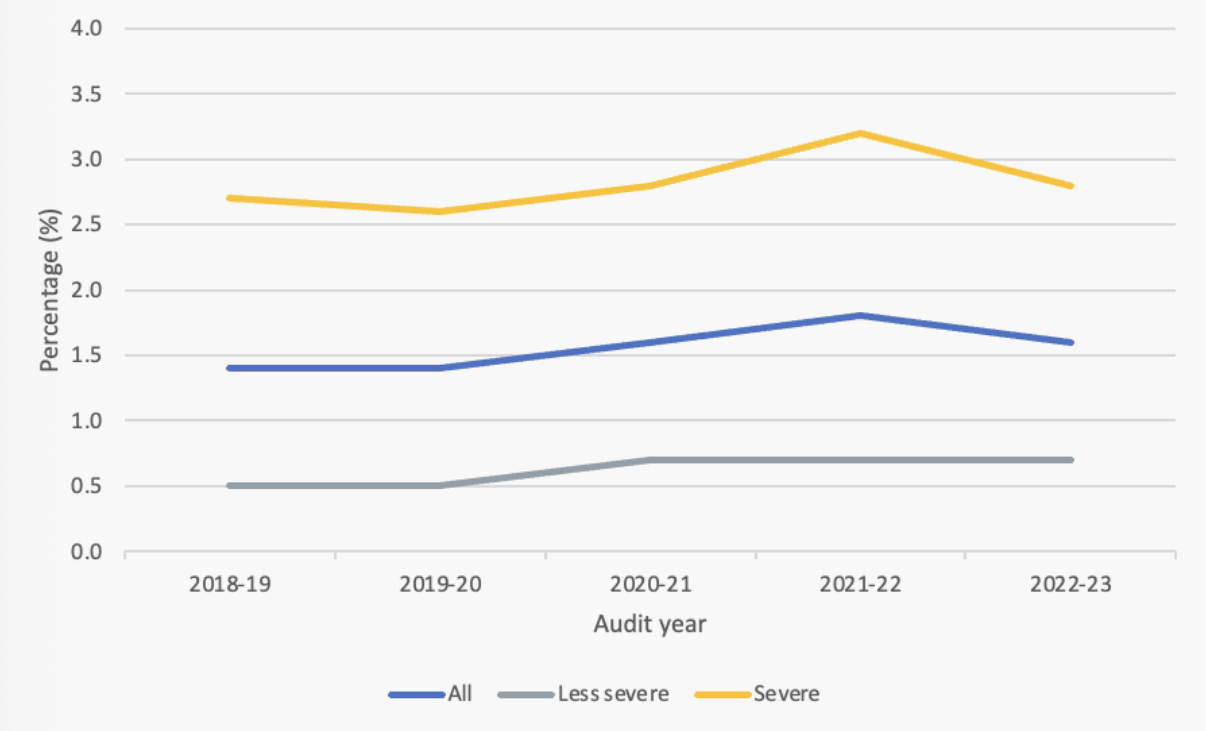
6,000 people with diabetes undergo leg, foot or toe amputation each year in England

Year	Major amputations type 1 diabetes N	Major amputations type 1 diabetes rate/1000 people with diabetes	Major amputations type 2 diabetes N	Major amputations type 2 diabetes rate/1000 people with diabetes	Total major amputations N
2020	420	1.4	1980	0.6	2400
2021	395	1.3	2135	0.6	2510
2022	475	1.6	2280	0.6	2755

National Diabetes Audit

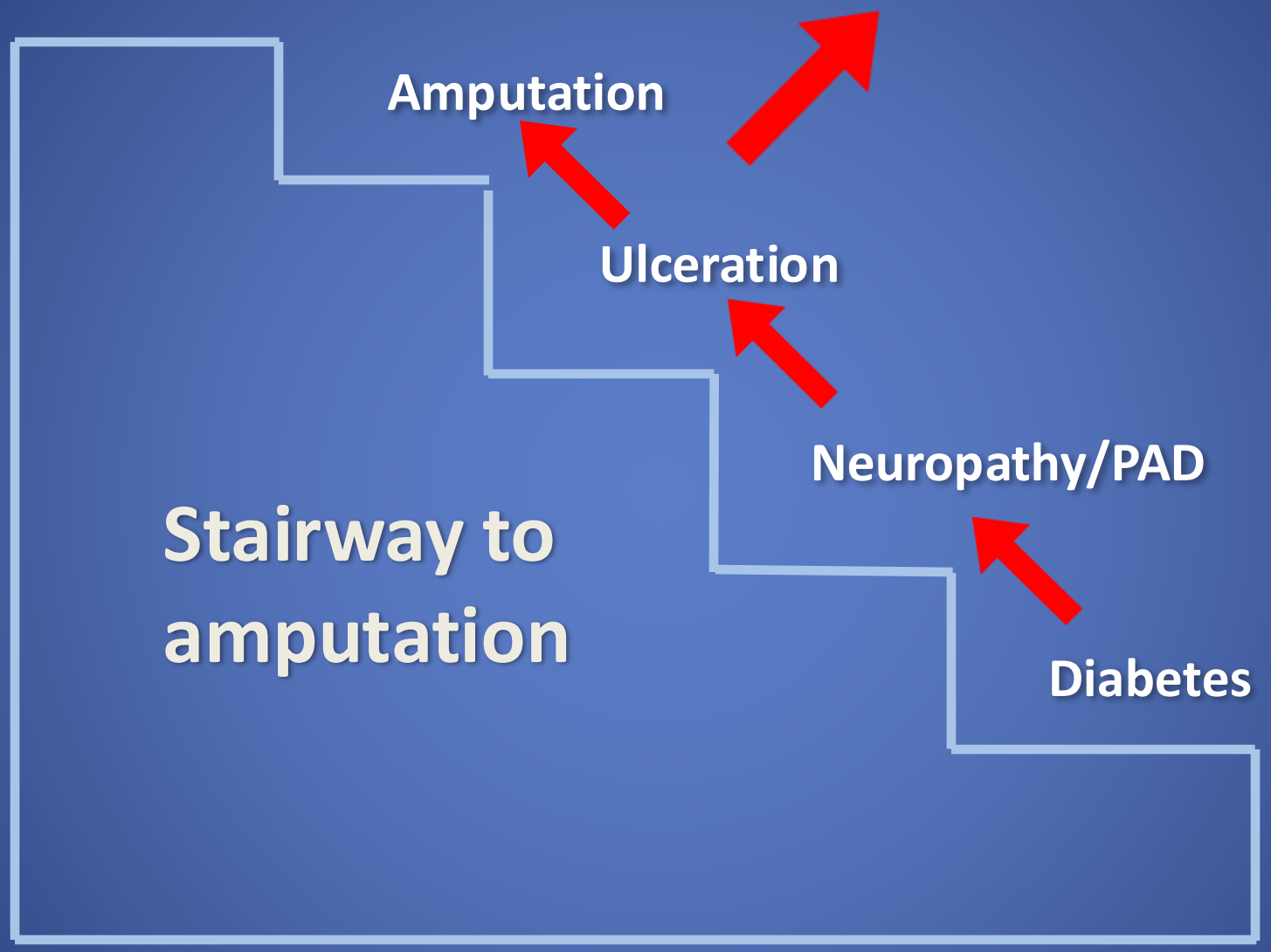
Complications & Mortality Outcomes Dashboard

Figure 14: Percentage of people having major amputation within 6 months of FEA, byaudit year (2018-19 to 2023)



	By ulcer severity		
Audit Year	**All**	**Less severe**	**Severe**
2018-19	1.4	0.5	2.7
2019-20	1.4	0.5	2.6
2020-21	1.6	0.7	2.8
2021-22	1.8	0.7	3.2
2022-23	1.6	0.7	2.8

National Diabetes Footcare Audit 2018-2023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Greatest Fear

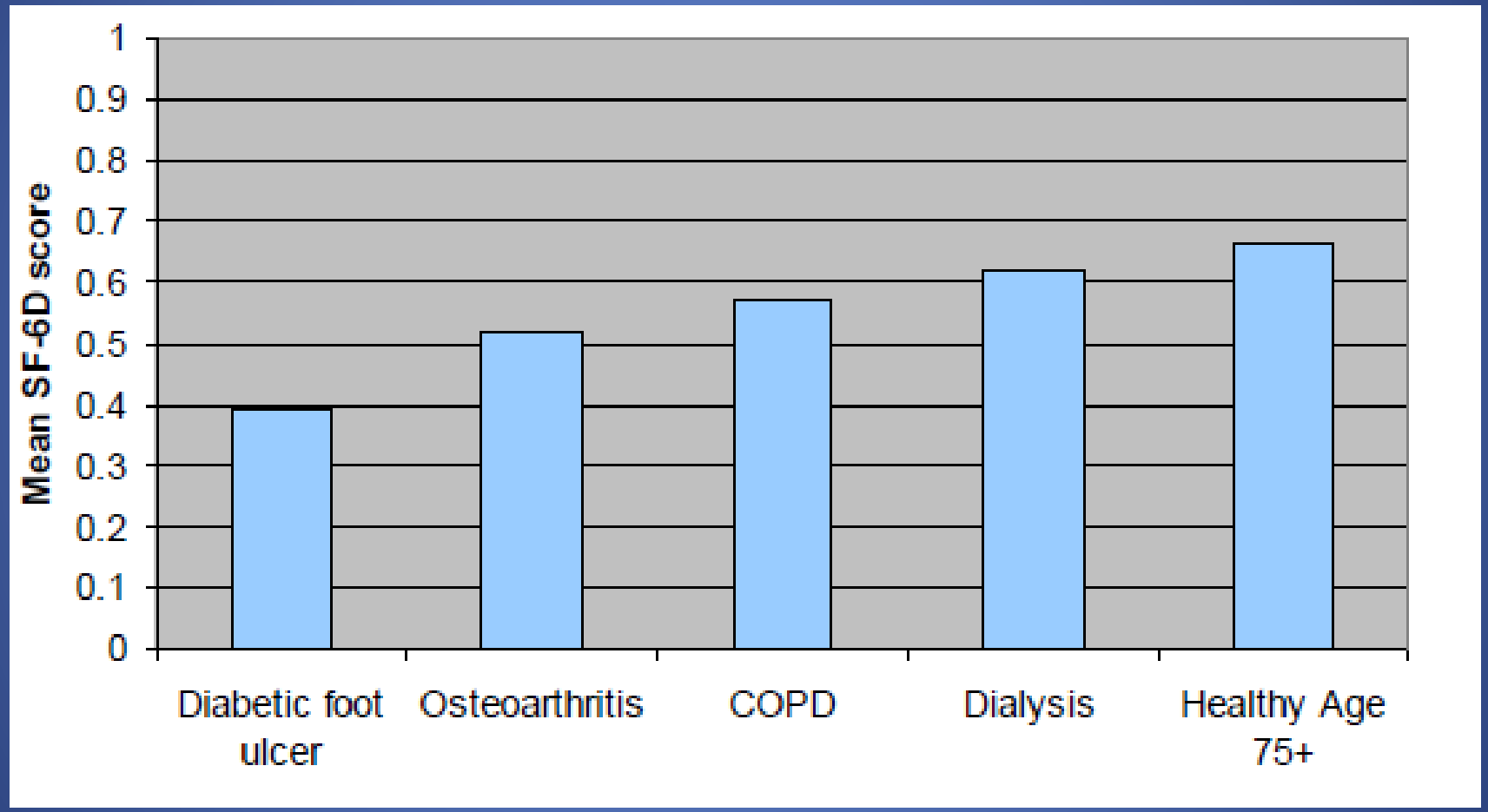
461 patients : 254 patients without diabetic foot complications, 207 patients with diabetic foot problems.

No significant differences between groups : fear of blindness, infection or ESRD.

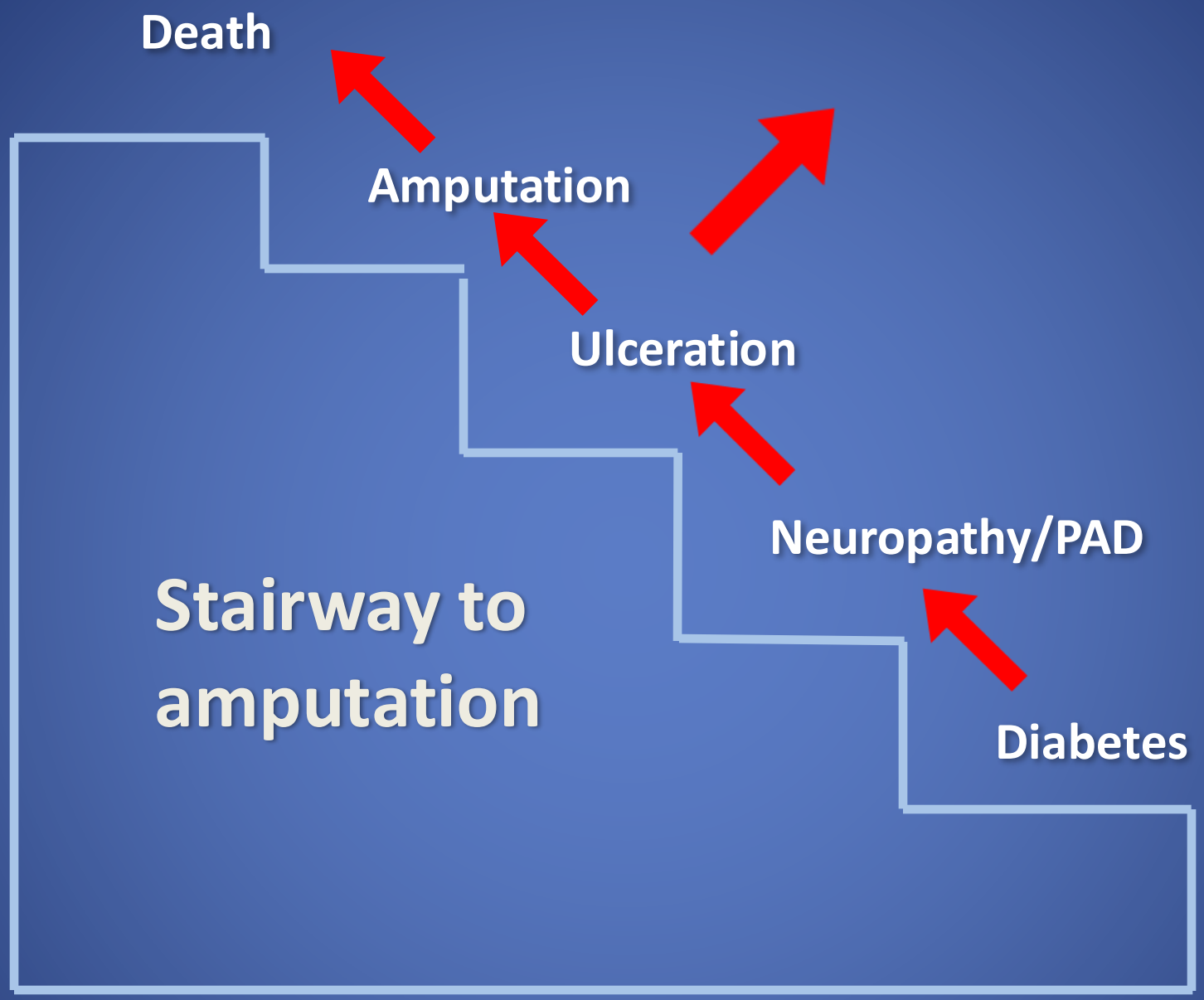
Patients with diabetic foot disease :
More likely to rank major amputation as their greatest fear when compared with diabetic patients without foot disease (OR]= 2.36; 95% CI = 1.51-3.70; P = .002]
Less likely (OR = 0.51; 95% CI = 0.34-0.79; P = .002) to rank death as their greatest fear

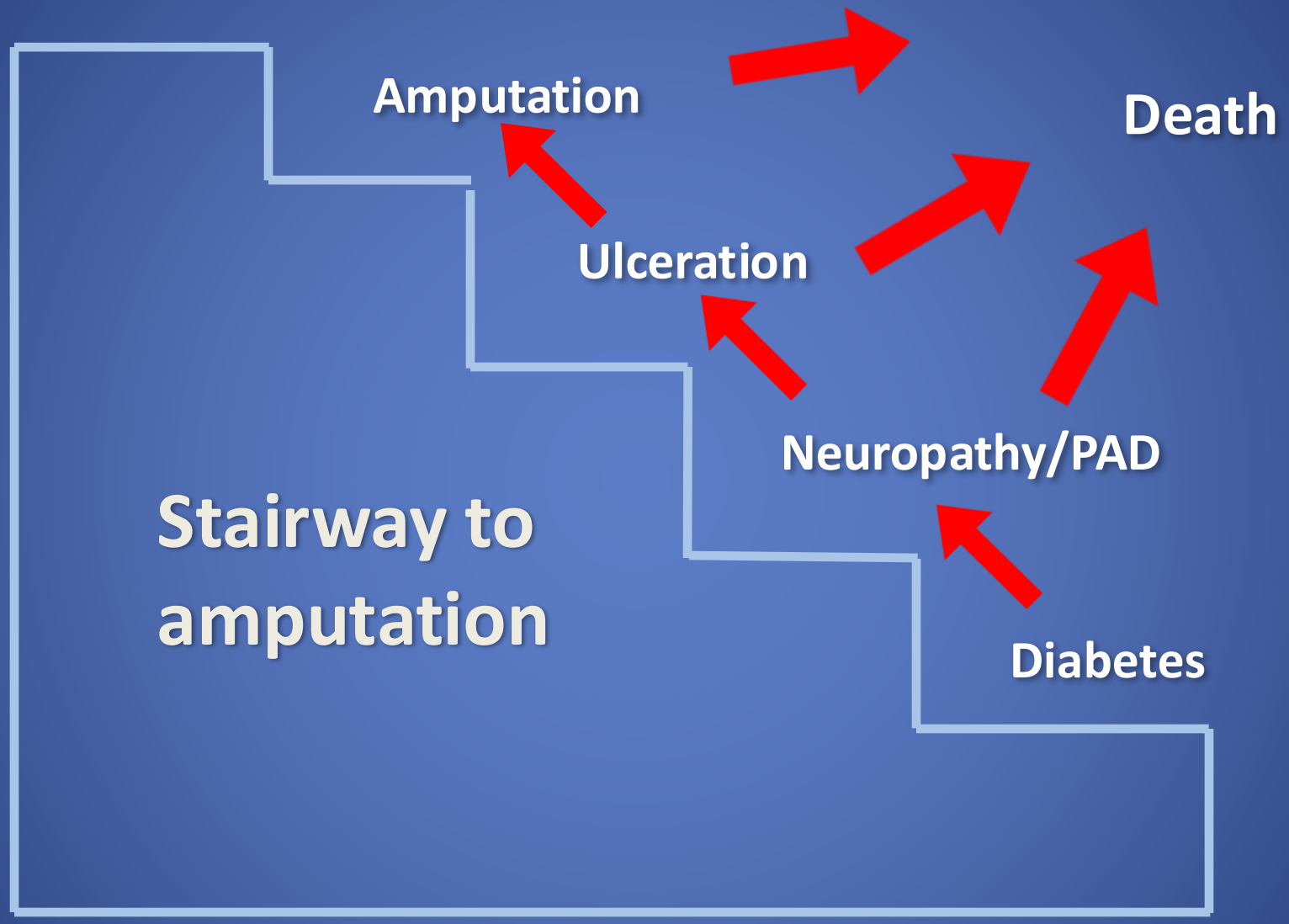
Wukich DK, et al . Ankle Specialist. 2017;11(1):17-21. doi:10.1177/1938640017694722

Quality of Life



Marion Kerr NHS Diabetes 2012


Death
Amputation
Ulceration
Neuropathy/PAD
Diabetes
Stairway to amputation


Amputation
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Diabetes

Mortality vs amputation

17, 353 people at high risk of DFU - 2 year follow-up

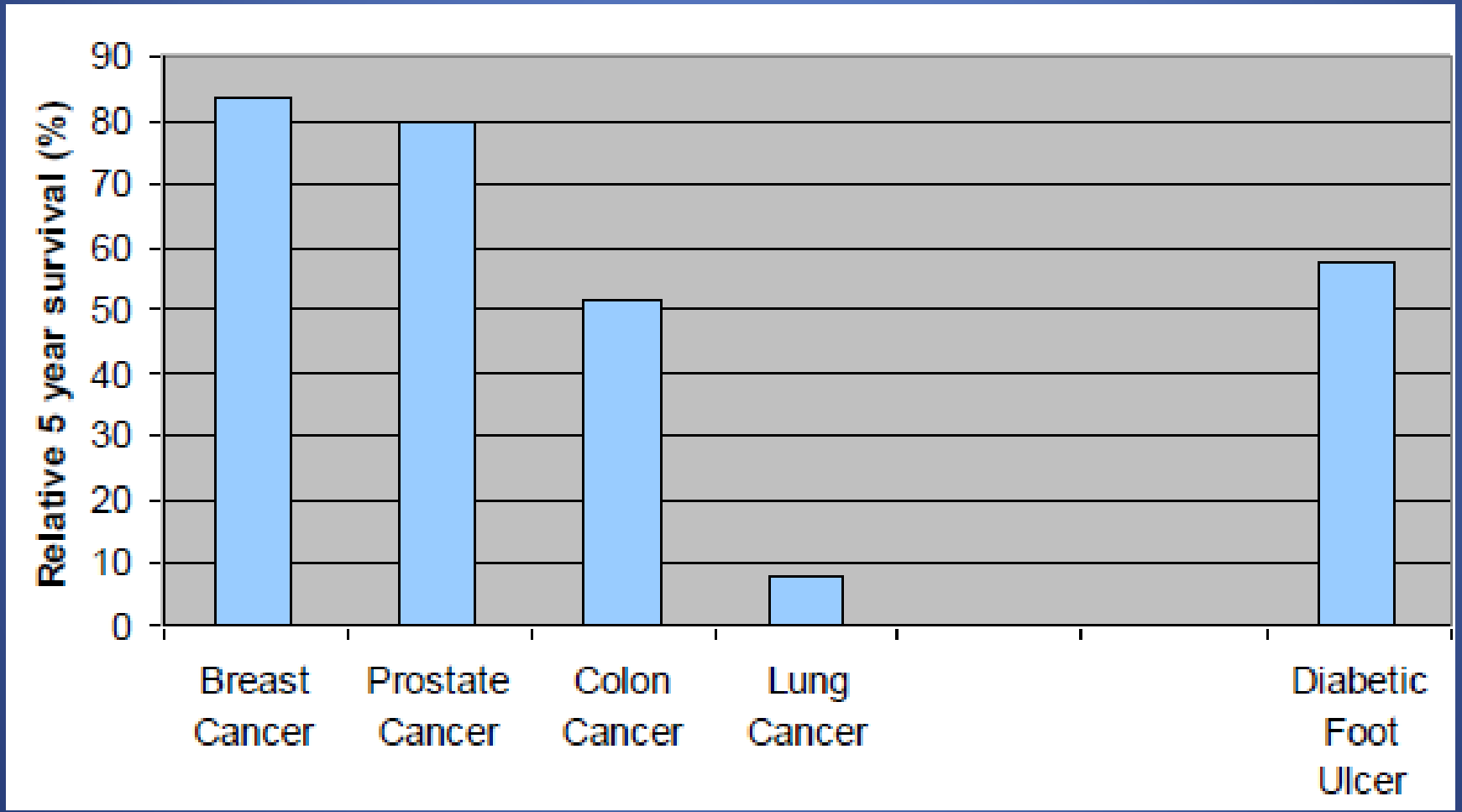
- 2694 had either an amputation (major or minor) or died (15.5%)

Of these

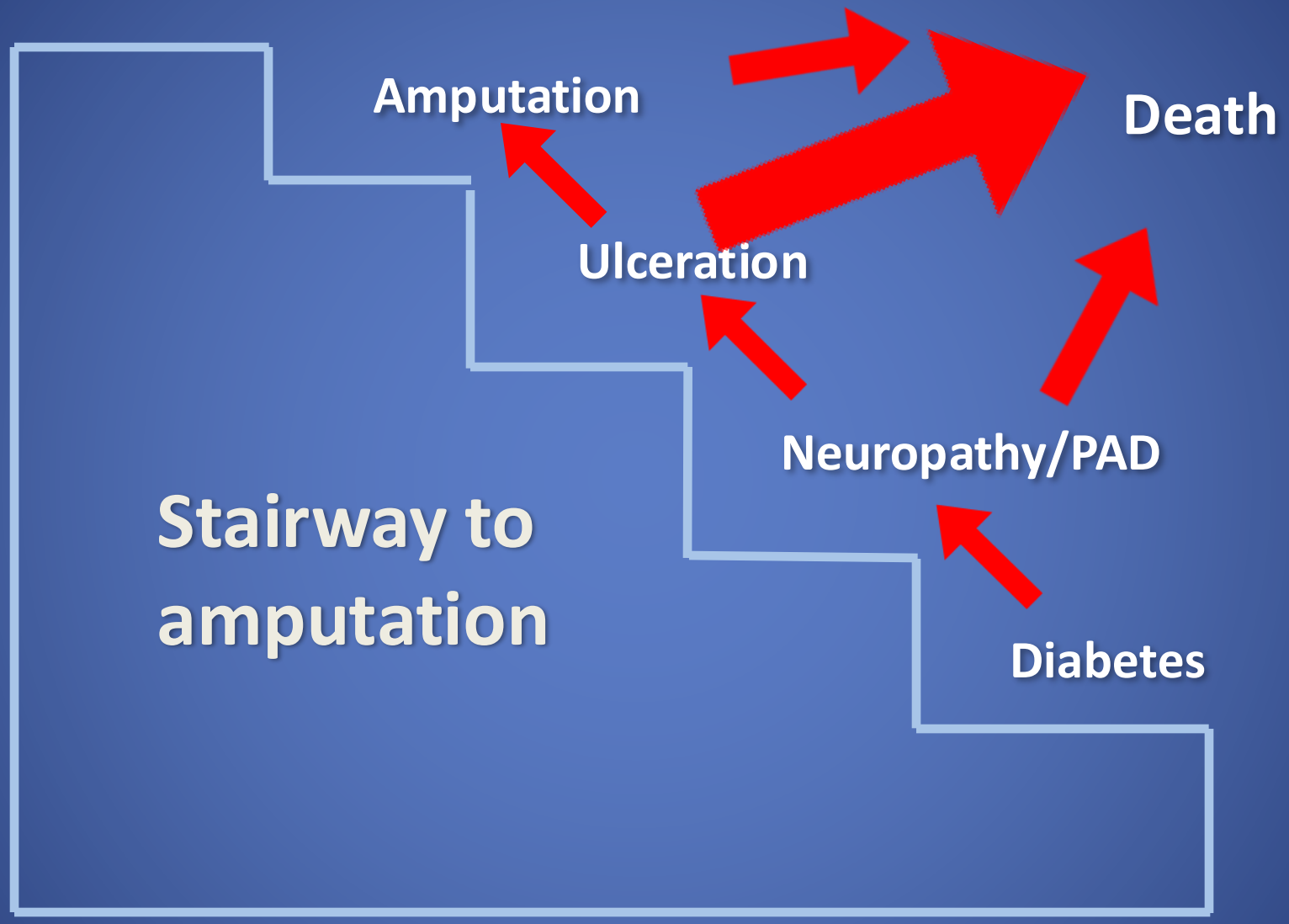
- 90% died
- 10% had an amputation (major or minor)

Vadiveloo et al Diabetologia (2018) 61:2590–2597

Life expectancy



Marion Kerr NHS Diabetes 2012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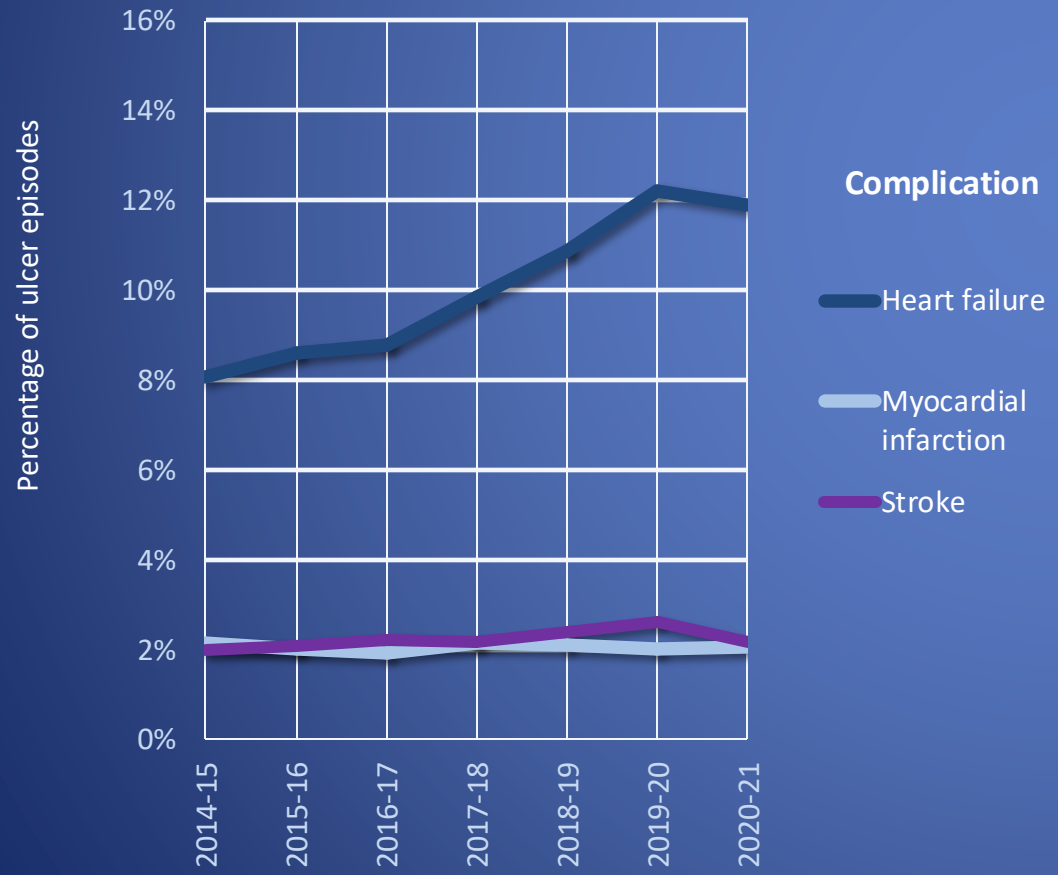
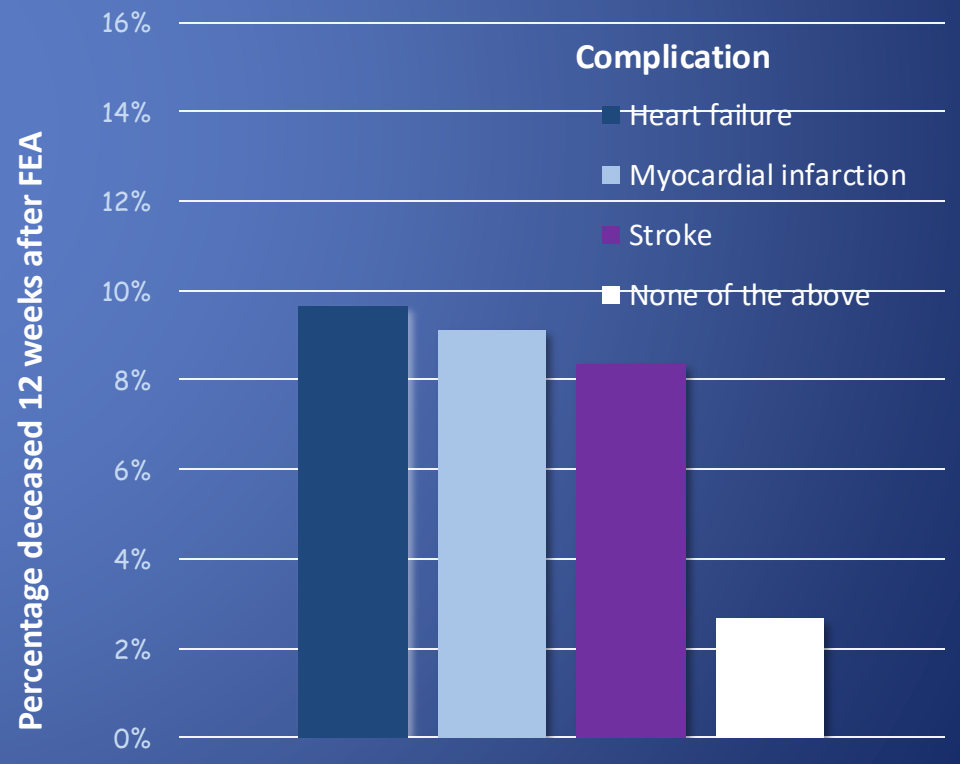
National diabetes Foot Care Audit: Time series 2014-21
Impact of co-morbidities on mortality

Hospital admissions in year prior to FEA, England and Wales, 2014-21

By audit year



Deceased at 12 weeks after FEA



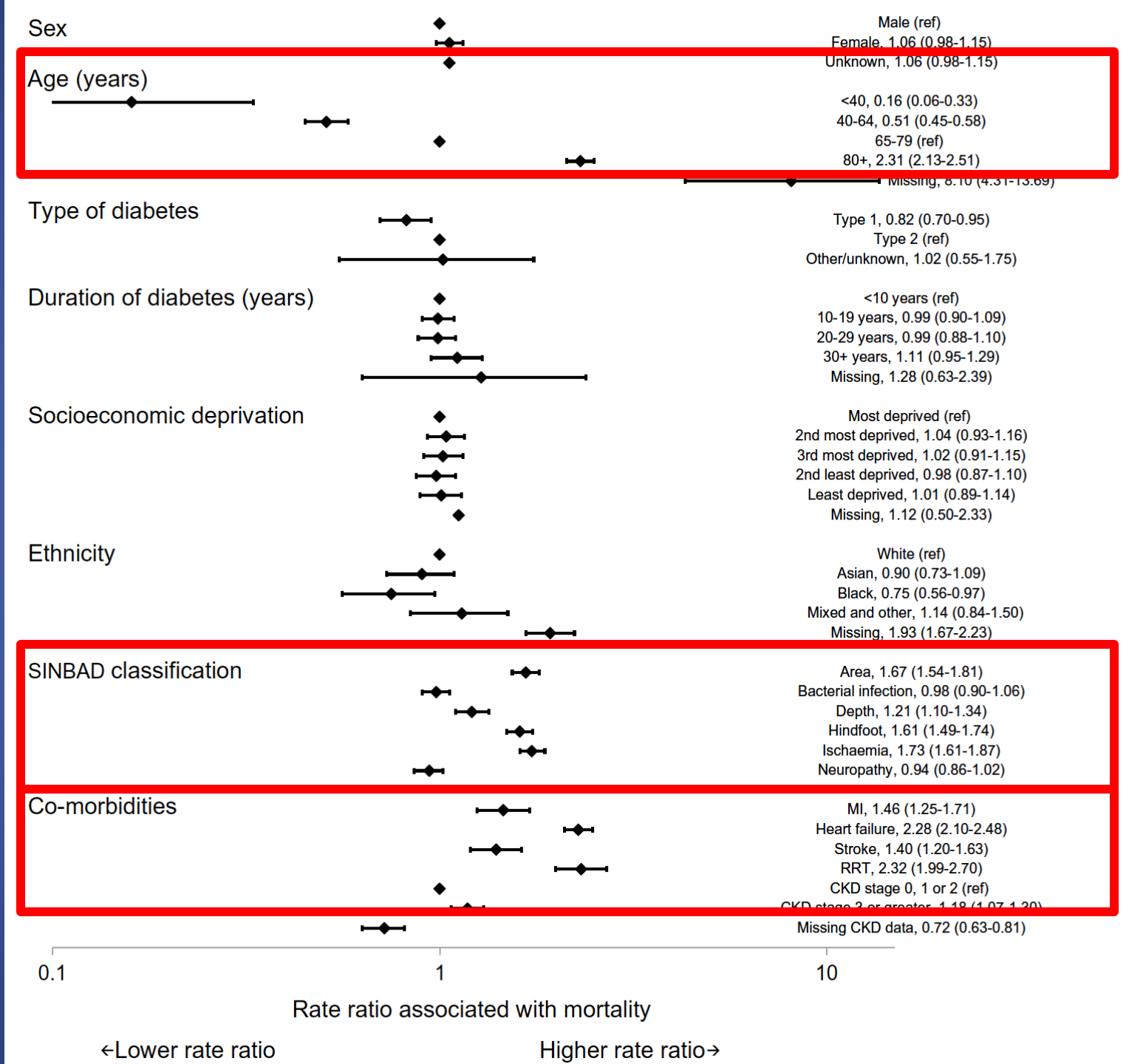
Diabetologia (2024) 67:2691–2701
https://doi.org/10.1007/s00125-024-06262-w

ARTICLE

Mortality rates in people presenting with a new diabetes-related foot ulcer: a cohort study with implications for management

Naomi Holman[1,2] · Arthur C. Yelland[3] · Bob Young[4] · Jonathan Valabhji[3,5,6] · William Jeffcoate[7] · Fran Game[8]

Received: 1 February 2024 / Accepted: 9 May 2024 / Published online: 27 September 2024


Sex
Male (ref)
Female, 1.06 (0.98-1.15)
Unknown, 1.06 (0.98-1.15)
Age (years)
<40, 0.16 (0.06-0.33)
40-64, 0.51 (0.45-0.58)
65-79 (ref)
80+, 2.31 (2.13-2.51)
Missing, 8.10 (4.31-13.69)
Type of diabetes
Type 1, 0.82 (0.70-0.95)
Type 2 (ref)
Other/unknown, 1.02 (0.55-1.75)
Duration of diabetes (years)
<10 years (ref)
10-19 years, 0.99 (0.90-1.09)
20-29 years, 0.99 (0.88-1.10)
30+ years, 1.11 (0.95-1.29)
Missing, 1.28 (0.63-2.39)
Socioeconomic deprivation
Most deprived (ref)
2nd most deprived, 1.04 (0.93-1.16)
3rd most deprived, 1.02 (0.91-1.15)
2nd least deprived, 0.98 (0.87-1.10)
Least deprived, 1.01 (0.89-1.14)
Missing, 1.12 (0.50-2.33)
Ethnicity
White (ref)
Asian, 0.90 (0.73-1.09)
Black, 0.75 (0.56-0.97)
Mixed and other, 1.14 (0.84-1.50)
Missing, 1.93 (1.67-2.23)
SINBAD classification
Area, 1.67 (1.54-1.81)
Bacterial infection, 0.98 (0.90-1.06)
Depth, 1.21 (1.10-1.34)
Hindfoot, 1.61 (1.49-1.74)
Ischaemia, 1.73 (1.61-1.87)
Neuropathy, 0.94 (0.86-1.02)
Co-morbidities
MI, 1.46 (1.25-1.71)
Heart failure, 2.28 (2.10-2.48)
Stroke, 1.40 (1.20-1.63)
RRT, 2.32 (1.99-2.70)
CKD stage 0, 1 or 2 (ref)
CKD stage 3 or greater, 1.18 (1.07-1.30)
Missing CKD data, 0.72 (0.63-0.81)
0.1
1
10
Rate ratio associated with mortality
←Lower rate ratio
Higher rate ratio→

Patient A.
A white man aged 80 years or older in the second most deprived socioeconomic quintile with type 2 diabetes of 10–19 years duration, the most severe foot ulcer (maximum SINBAD score), no hospitalisation for cardiovascular disease but receiving RRT in the previous year, has a 12-week mortality rate of 29.8% and a 26-week mortality rate of 65.2%.

Patient B:
A man aged 40–59 years from an Asian ethnic group and in the second most deprived socioeconomic quintile who has been diagnosed with type 2 diabetes for 5–9 years and who presents with a foot ulcer with the highest SINBAD score, with no hospitalisation for MI, heart failure, stroke or RRT in the previous year but CKD at stage 3 or greater, has an estimated 12-week mortality rate of 3.3% and a 26-week mortality rate of 7.0%.

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ARTICLE

'Discussions [… of management plans..]should therefore include enhanced understanding and acceptance of the prognosis, in order to help frame the scope, location and limitations of interventions and guide choice of the most appropriate support systems.'

Mortalit
ulcer: a

Naomi Holm
Fran Game[8]

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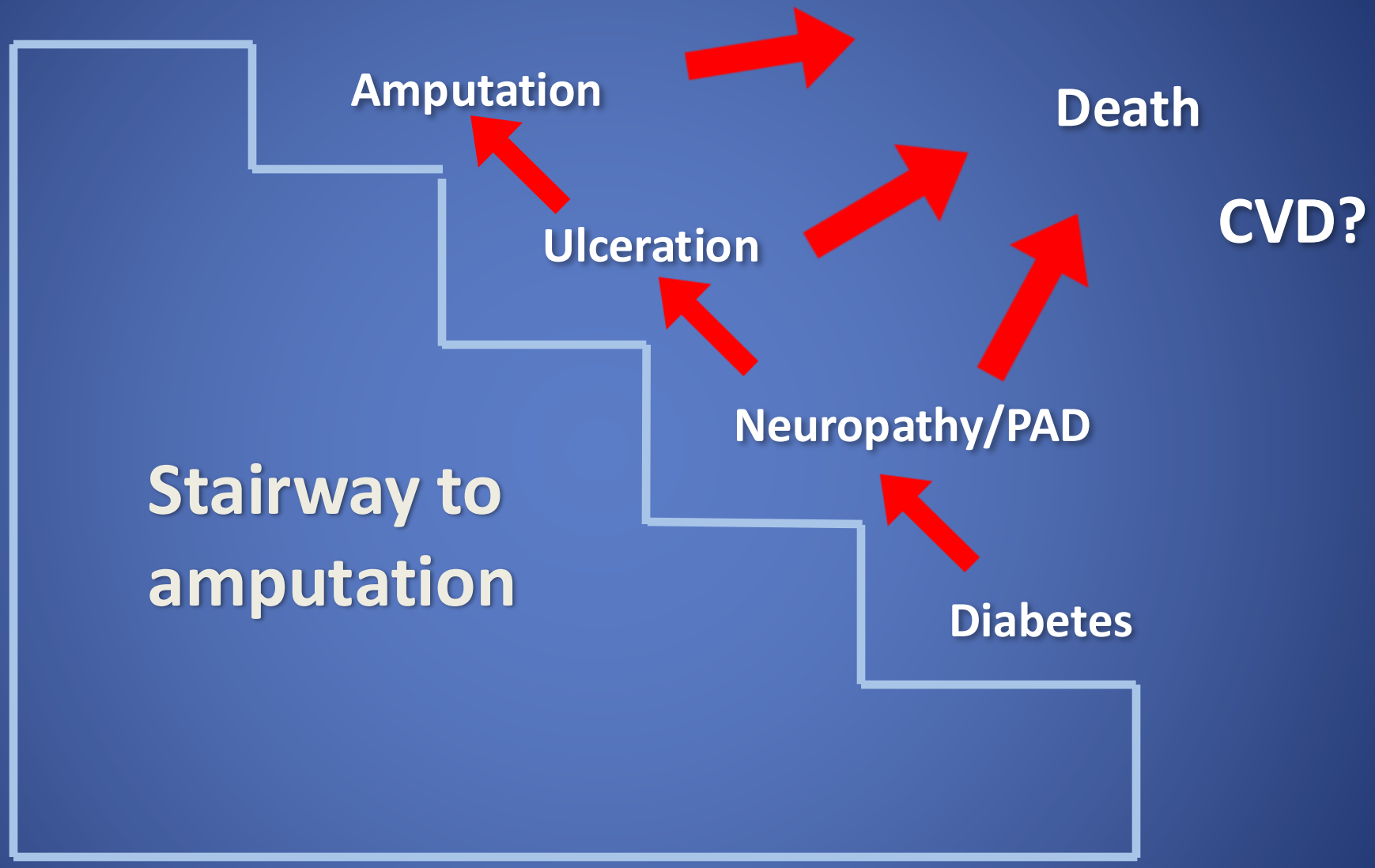
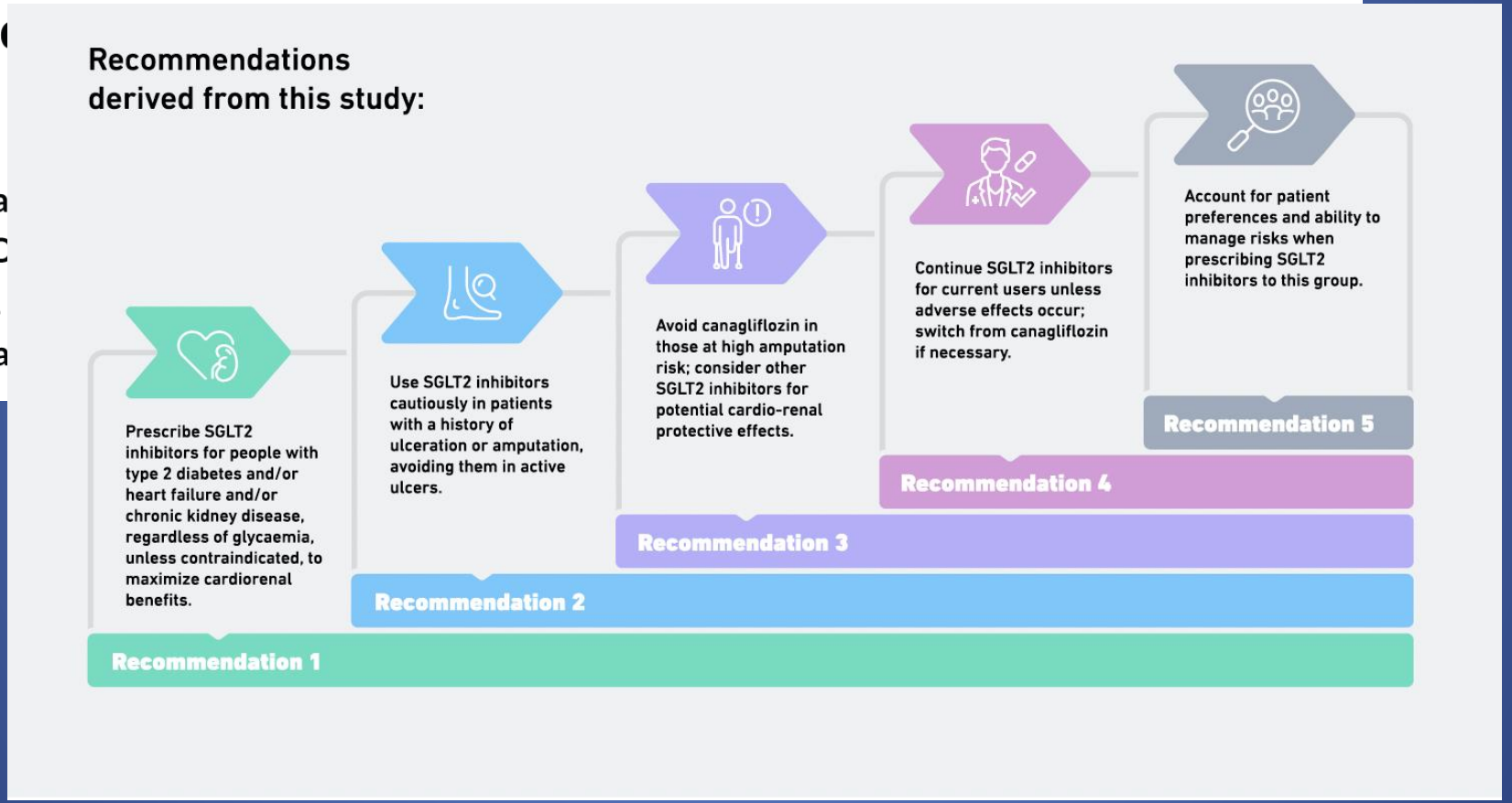

Amputation
Death
CVD?
Ulceration
Neuropathy/PAD
Stairway to amputation
Diabetes

ORIGINAL ARTICLE

WILEY

The use of SGLT2 inhibitors in people with diabetes-related foot

Patrick
Victoria
Ketan D
John R.
Jonatha



Diabetes Obes Metab. 2025;27:4537–4546.

The Impact of Liraglutide on Diabetes-Related Foot Ulceration and Associated Complications in Patients With Type 2 Diabetes at High Risk for Cardiovascular Events: Results From the LEADER Trial

Ketan Dhatariya,[1,2] Stephen C. Bain,[3] John B. Buse,[4] Richard Simpson,[5] Lise Tarnow,[6] Margit Staum Kaltoft,[7] Michael Stellfeld,[7] Karen Tornøe,[7] Richard E. Pratley,[8] and the LEADER Publication Committee on behalf of the LEADER Trial Investigators

Diabetes Care 2018;41:2229–2235 | https://doi.org/10.2337/dc18-1094

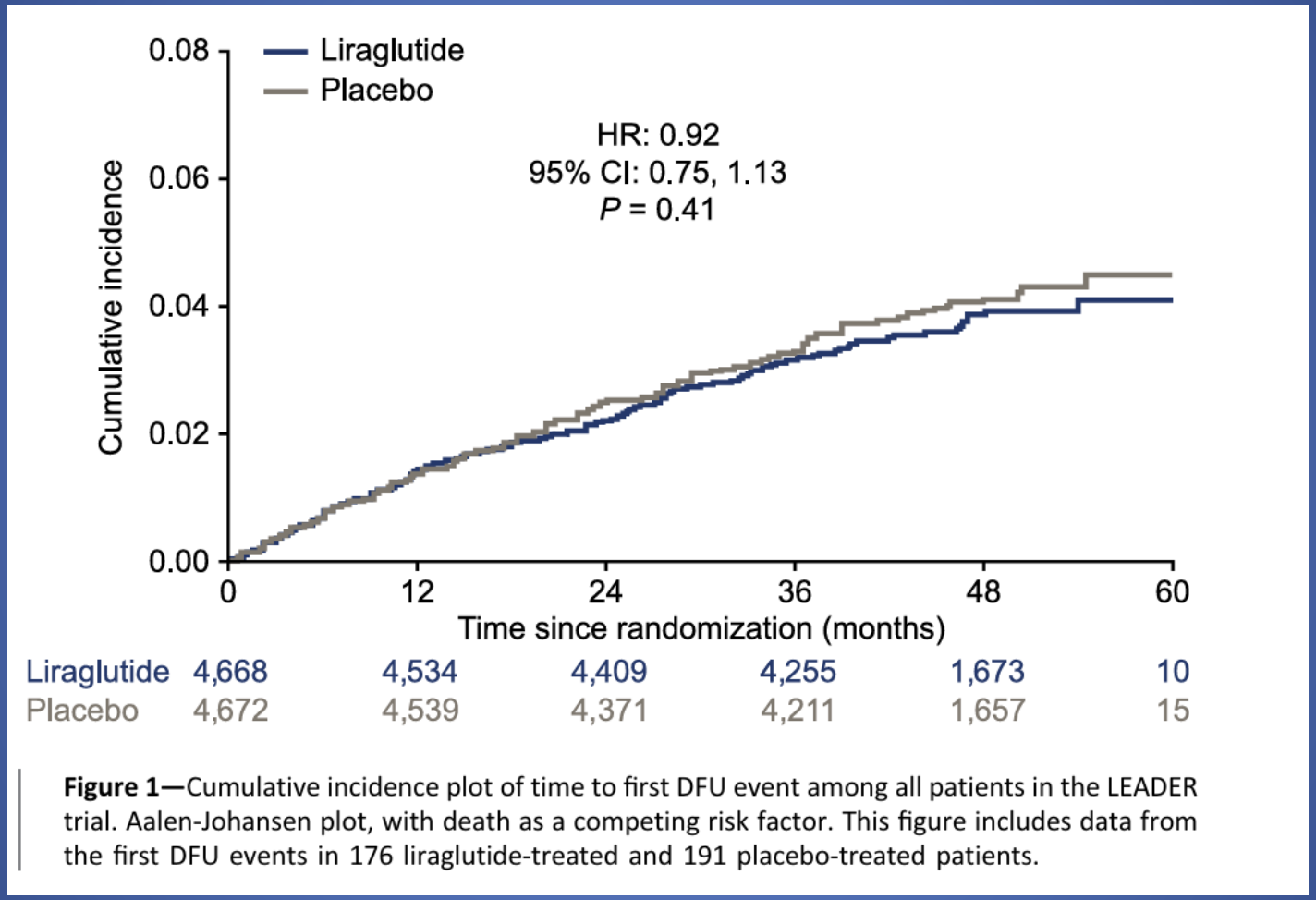


Figure 1—Cumulative incidence plot of time to first DFU event among all patients in the LEADER trial. Aalen-Johansen plot, with death as a competing risk factor. This figure includes data from the first DFU events in 176 liraglutide-treated and 191 placebo-treated patients.

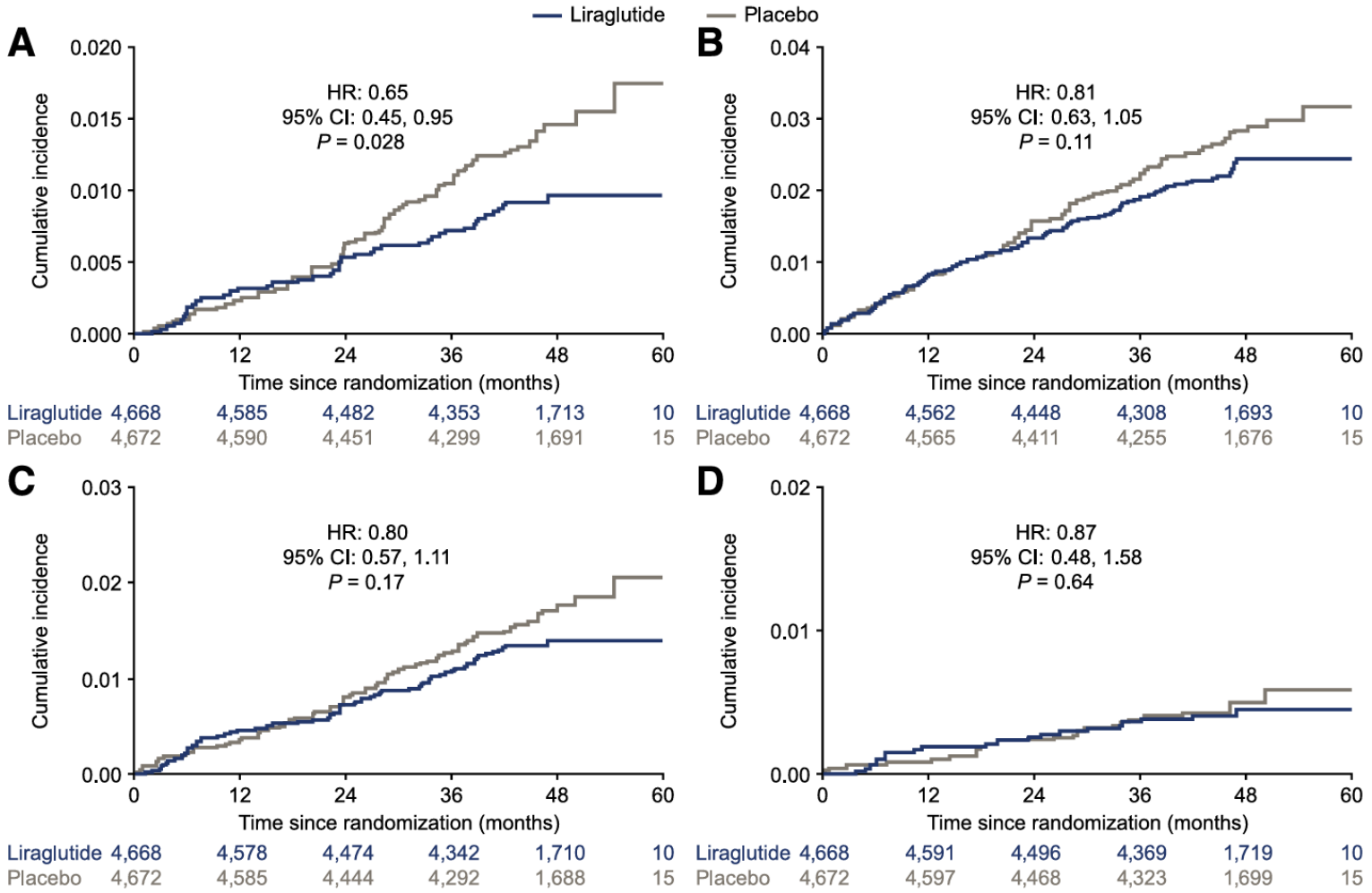
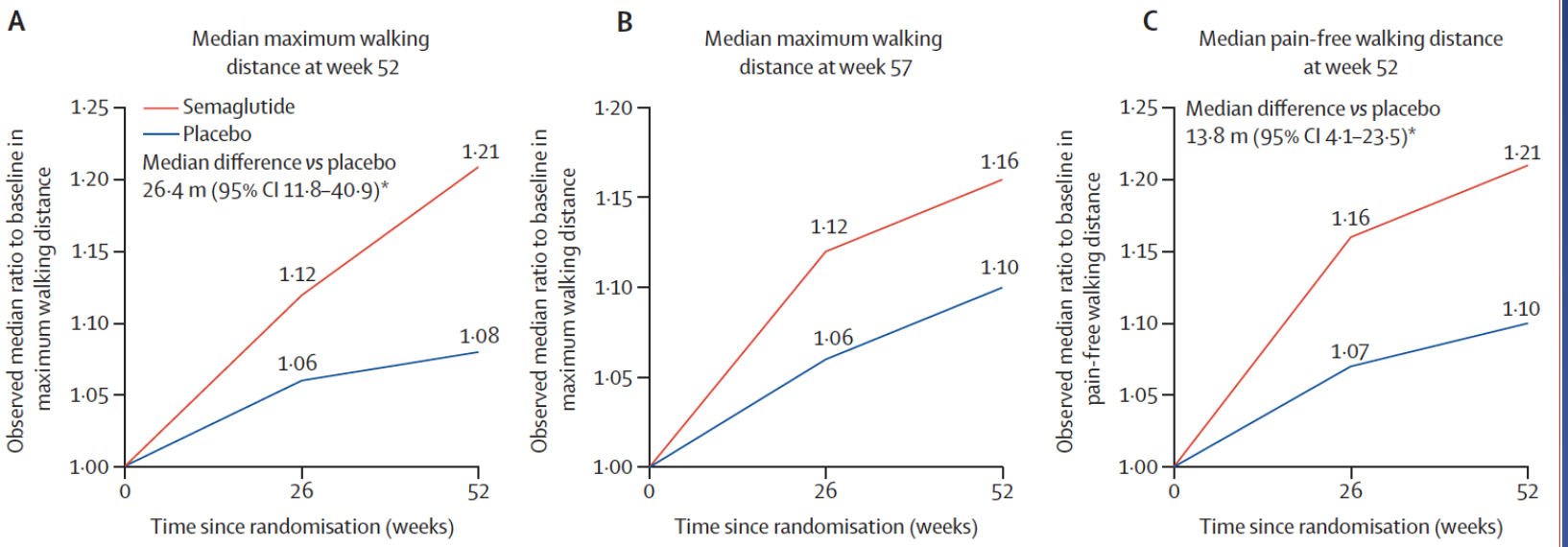
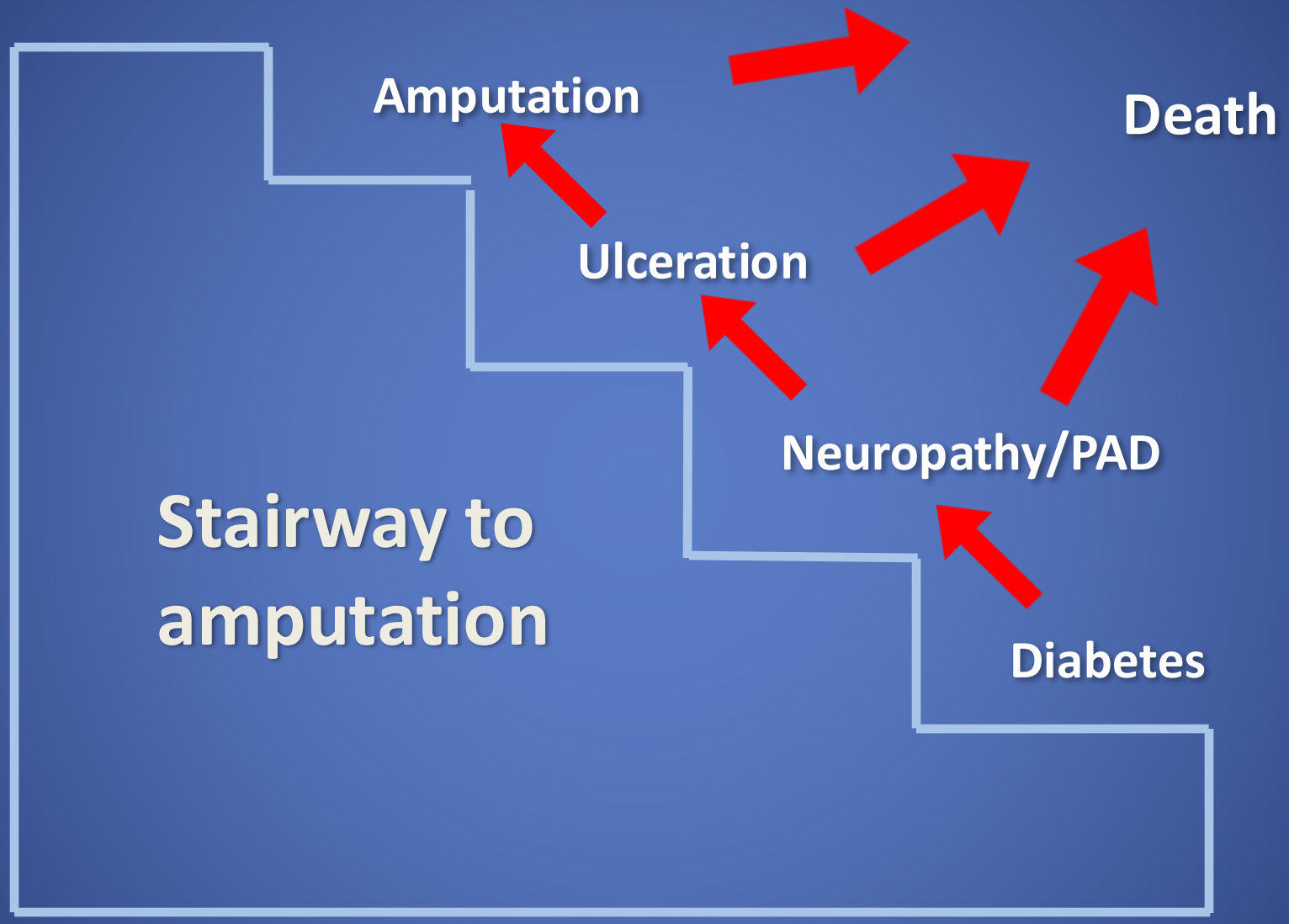


Figure 2—Cumulative incidence plot of time to first DFU-related complication among patients treated with liraglutide vs. placebo in the LEADER trial. *A*: Amputation (44 first DFU events in the liraglutide group and 67 first DFU events in the placebo group). *B*: Infection (107 and 131 first DFU events in liraglutide and placebo groups, respectively). *C*: Involvement of underlying structures (64 and 80 first DFU events in liraglutide and placebo groups, respectively). *D*: Peripheral revascularization (20 and 23 first DFU events in liraglutide and placebo groups, respectively).



D

	Semaglutide (n=396)		Placebo (n=396)		ETR (95% CI) semaglutide vs placebo
	Number of participants	Median (IQR) ratio to baseline	Number of participants	Median (IQR) ratio to baseline	
Maximum walking distance at week 52	338	1·21 (0·95 to 1·55)	345	1·08 (0·86 to 1·36)	1·13 (1·06 to 1·21) p=0·0004
Maximum walking distance at week 57	329	1·16 (0·92 to 1·48)	333	1·10 (0·87 to 1·40)	1·08 (1·00 to 1·16) p=0·038
Pain-free walking distance at week 52	338	1·21 (0·92 to 1·52)	334	1·10 (0·86 to 1·44)	1·11 (1·03 to 1·20) p=0·0046
					1·00 2·00
	Total (IQR) change from baseline				
VascuQoL-6 total score at week 52	362	2·0 (0·0 to 4·0)	362	1·0 (−1·0 to 4·0)	1·00 (0·48 to 1·52) p=0·011
					No change 1·0 2·0
					Favours placebo Favours semaglutide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