



6° Congresso Nazionale del Gruppo di Studio della Podopatia Diabetica

La Sindrome del Piede Diabetico in Italia nel terzo millennio:
un approccio globale, discipline diverse, professionalità integrate
in un percorso unitario con "il paziente diabetico al centro"

Presidente del Congresso: Dr. Roberto Da Ros

Responsabile Scientifico: Dr. Roberto Anichini



Starhotels Savoia Excelsior Palace
Trieste, 31 gennaio / 2 febbraio 2019

**II PIEDE DIABETICO IN ITALIA DA
Cenerentola DELLE COMPLICANZE A
Regina DELLA
SUPERSPECIALIZZAZIONE:
Standard di Cura SID-AMD 2018**

Roberto Anichini MD

Head of Diabetes Unit and Diabetes Foot Unit

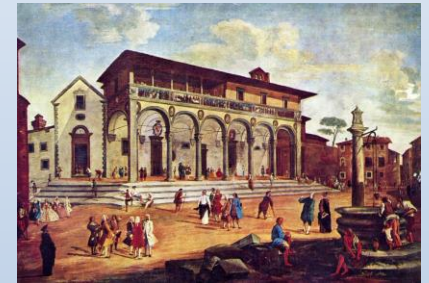
General Hospital of Pistoia Italy

**Italian Coordinator of "Podopatia Diabetica"
Study Group**

European Executive Committee of DFSG

Rivelazioni di interesse (Disclosures)

Non ho alcuna “Rivelazione di interesse” in merito a questa relazione.



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Current Challenges and Opportunities in the Prevention and Management of Diabetic Foot Ulcers

Diabetes Care 2018;41:645–652 | <https://doi.org/10.2337/dc17-1836>

William J. Jeffcoate,¹ Loretta Vileikyte,²
Edward J. Boyko,³ David G. Armstrong,⁴
and Andrew J.M. Boulton²

Diabetic foot ulcers remain a major health care problem. They are common, result in considerable suffering, frequently recur, and are associated with high mortality, as well as considerable health care costs. While national and international guidance exists, the evidence base for much of routine clinical care is thin. It follows that many aspects of the structure and delivery of care are susceptible to the beliefs and opinion of individuals. It is probable that this contributes to the geographic variation in outcome that has been documented in a number of countries. This article considers these issues in depth and emphasizes the urgent need to improve the design and conduct of clinical trials in this field, as well as to undertake systematic comparison of the results of routine care in different health economies. There is strong suggestive evidence to indicate that appropriate changes in the relevant care pathways can result in a prompt improvement in clinical outcomes.

Despite considerable advances made over the last 25 years, diabetic foot ulcers (DFUs) continue to present a very considerable health care burden—one that is widely unappreciated. DFUs are common, the median time to healing without surgery is of the order of 12 weeks, and they are associated with a high risk of limb loss through amputation (1–4). The 5-year survival following presentation with a new DFU is of the order of only 50–60% and hence worse than that of many common cancers (4,5). While there is evidence that mortality is improving with more widespread use of cardiovascular risk reduction (6), the most recent data—derived from a Veterans Health Administration population—reported that 1-, 2-, and 5-year survival was only 81, 69, and 29%, respectively, and the association between mortality and DFU was stronger than that of any macrovascular disease (7). Iversen et al. (8) have also shown that the occurrence of a DFU was an independent predictor of mortality even at 10 years.

The cost to health care services is also enormous. The estimated global cost of diabetes in 2015 was \$1.3 trillion (9), and it has been reported that up to one-third of diabetes expenditure is on lower-limb-related problems in the U.S. (10). The latest data from the U.K. estimate that the total annual cost of management of DFUs exceeds £1 billion (\$1.32 billion) and represents almost 1% of the total National Health Service budget (11). The equivalent figure from the U.S. has been estimated to be \$9–13 billion (12).

GEOGRAPHIC DIFFERENCES IN CLINICAL OUTCOME

There is also wide variation in clinical outcome within the same country (13–15), suggesting that some people are being managed considerably less well than others.

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²Division of Diabetes, Endocrinology and Gastroenterology, Faculty of Biology, Medicine and Health, The University of Manchester, Manchester, U.K., and Diabetes Research Institute, Miller School of Medicine, University of Miami, Miami, FL

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DIABETIC FOOT ULCERS REMAIN A MAJOR HEALTH CARE PROBLEMS

Diabetes Care 2018;41:645–652 | <https://doi.org/10.2337/dc17-1836>

Diabetic Foot Ulcers

- diabetic foot ulcers (DFUs) continue to present a very considerable health care burden.
- to **healing without surgery is of the** order of 12 weeks, and they are associated with a high risk of limb loss through amputation.
- **DFU recurrence 50%.**
- **The 5-year survival following** presentation with a new DFU is of the order of only 50–60% and hence worse than **that of many common cancers**
- **the association between mortality and DFU** was stronger than that of any macrovascular disease
- the occurrence of a DFU was **an independent predictor** of mortality even at 10 years.
- **The cost** to health care services is also enormous

- ## GEOGRAPHIC DIFFERENCES IN CLINICAL OUTCOME

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Aspects of management in the overall care of the foot in diabetes

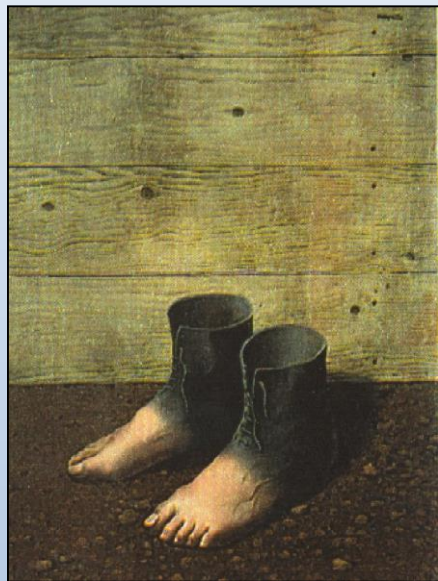
- Primary prevention
- Improving the healing of Diabetic Foot Ulcers
- Secondary prevention: reducing new ulceration after healing (recurrence)
- Improved well-being: the patient agenda
- Improving long-term survival



«CARE OF FOOT NEEDS TO METAMORPHOSE FROM A SUBSPECIALITY TO A IPERSPECIALITY OF DIABETES»



Il Piede Diabetico in Italia: La rete Assistenziale Integrata tra multidisciplinarietà e multiprofessionalità



- ☐ : guardare oggi
PIEDE DIABETICO 2.0:
- ☐ : guardare domani
PIEDE DIABETICO 3.0
- ☐ : Guardare futuro
PIEDE DIABETICO 4.0





5 - 15 ottobre 2016

onal Congress of Italian Study Group of
“**PODOPATIA DIABETICA**”

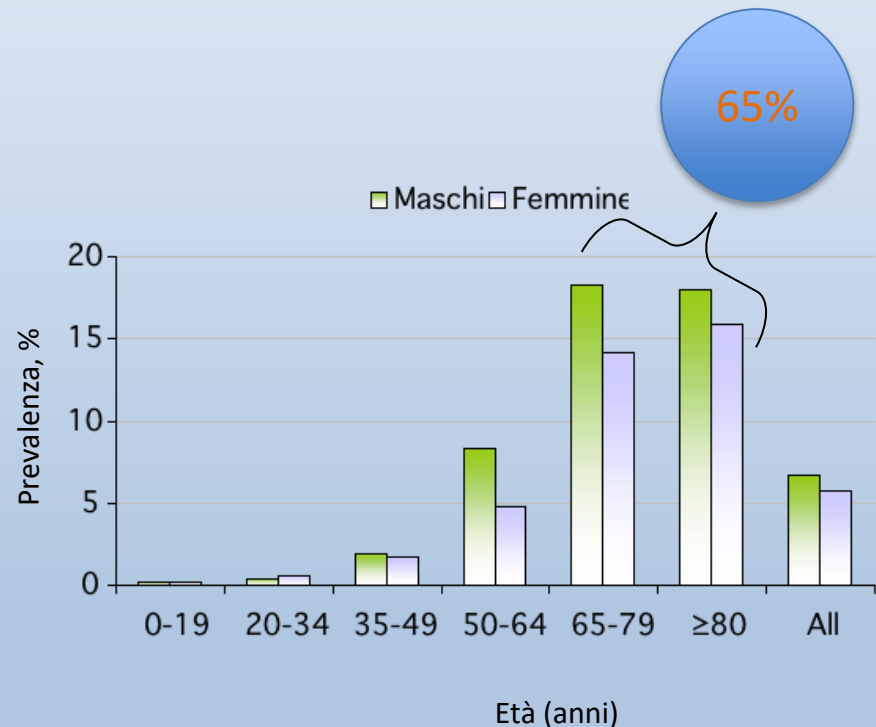


Quale nuovo Scenario.....

Lo «Tsunami Diabete» anche in Italia

- Studio Arno 2017:
- 6.34% Farmaco trattato
- 20% Diabete misconosciuto.
- **Prevalenza intorno 8%**
- **POPOLAZIONE ITALIANA (31.12.2017)**
 - 60.483.973
- **Diabetici stimati: 4.838717**

Invecchiamento della popolazione

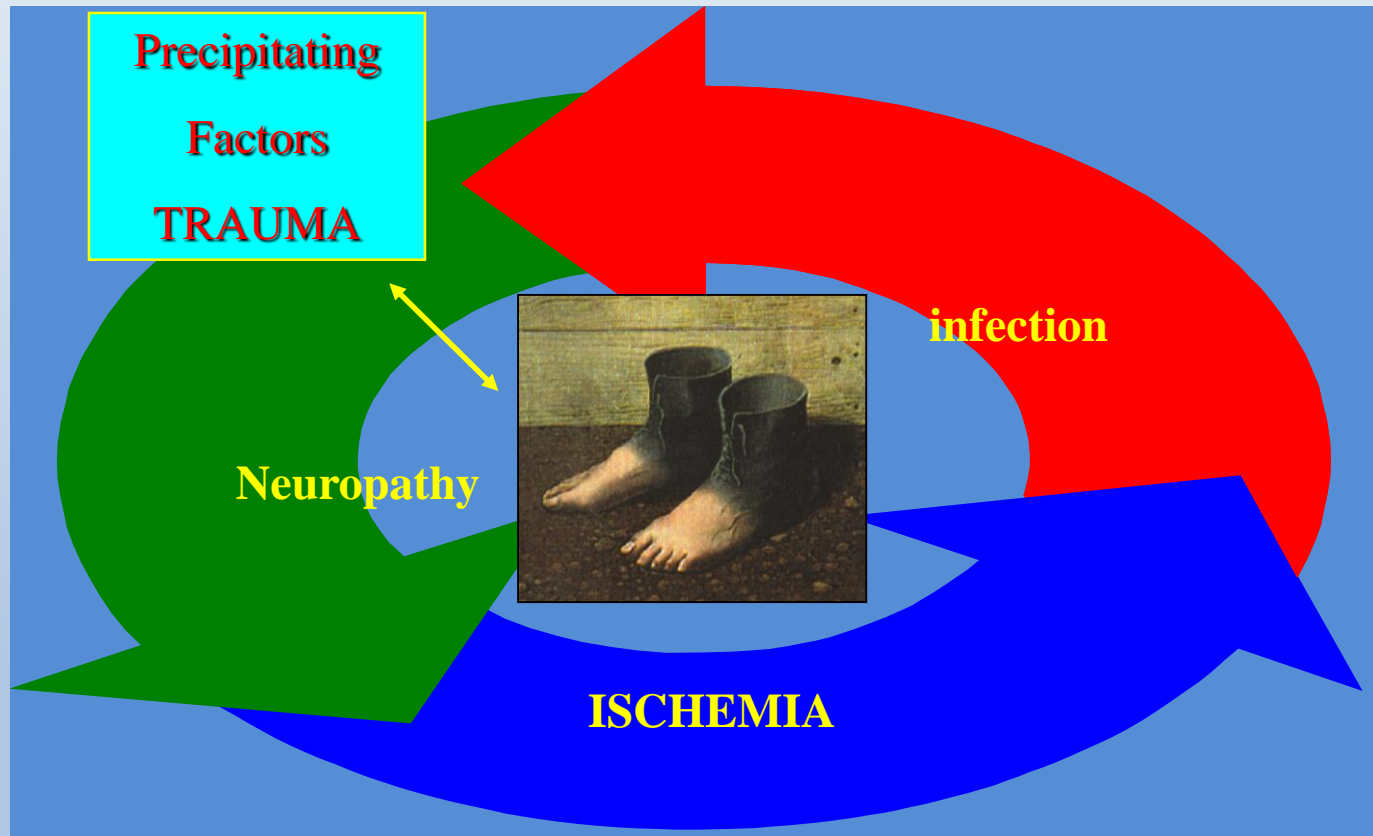




**IS DIABETIC FOOT ONLY A WOUND IN
DIABETICS OR SOMETHING ELSE??
LA CLINICA, OGGI**



The old concept of diabetic foot many years ago



The Diabetic Foot Syndrome... Yesterday



Adapted from Lee Rogers 2017

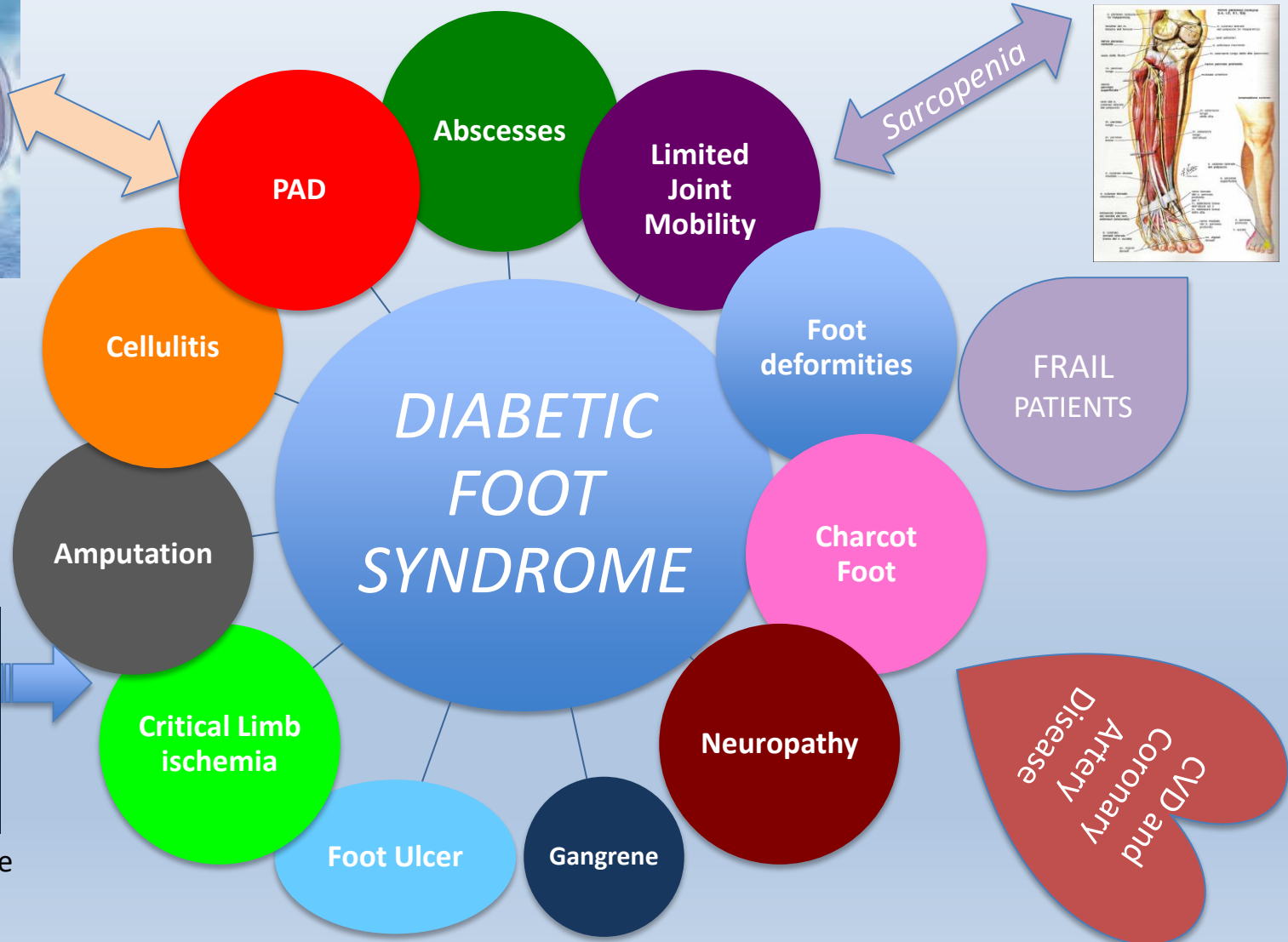
The Diabetic Foot Syndrome... Today



Chronic Kidney Disease



Cerebral Arterial Disease





Current Challenges and Opportunities in the Prevention and Management of Diabetic Foot Ulcers

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Despite considerable advances made over the last 25 years, diabetic foot ulcers (DFUs) continue to present a very considerable health care burden—one that is widely unappreciated. DFUs are common, the median time to healing without surgery is of the order of 12 weeks, and they are associated with a high risk of limb loss through amputation (1–4). The 5-year survival following presentation with a new DFU is of the order of only 50–60% and hence worse than that of many common cancers (4,5). While there is evidence that mortality is improving with more widespread use of cardiovascular risk reduction (6), the most recent data—derived from a Veterans Health Administration population—reported that 1-, 2-, and 5-year survival was only 81, 69, and 29%, respectively, and the association between mortality and DFU was stronger than that of any macrovascular disease (7). Iversen et al. (8) have also shown that the occurrence of a DFU was an independent predictor of mortality even at 10 years.

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La prevenzione primaria e l'educazione continua

La diagnosi trascurata o ritardata

Razionale Trattamento integrato delle lesioni (multiprofessionale e multispecialistica)

La prevenzione secondaria e le recidive delle ulcere

Concetto di guarigione o di remissione.

Continuità cura (presa in carico comune)

PIEDE DIABETICO OGGI: LE TEMATICHE APERTE





Prevalenza ulcere nei pazienti diabetici

EPIDEMIOLOGIA



Diabetic foot ulcer: A review

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²Department of Microbiology, Faculty of Medicine, Aligarh Muslim University, Aligarh, India

Table 3. Summary of selected population based studies estimating incidence and prevalence of diabetic foot ulcers.

Study (country)	Country	Population based	Annual Incidence (%)	Prevalence (%)
Abott et al., [146]	United Kingdom	Registered T1 & T2 in 6 UK districts N=15,692	-	5.5% white european, 1.8% South Asian, 2.7% African Caribbean
CDCP [147]	USA	US BRFSS	-	11.8%
Kumal et al., [44]	UK	3 UK cities N=811	-	5.3%
Moss et al., [22]	USA	Population based study N=1834	2.2%	10.6%
Muller et al., [148]	Netherland	Registered T2DM (1992-1998) N=3827	2.2%	-
Ramsey et al., [149]	USA	Registered T1DM & T2DM (1992-1995) N=8905	1.9%	-
Walter et al., [23]	UK	Registered patient from 10 hospitals N=1077	-	7.4%
Gadepalli et al., [88]	India	T1DM & T2DM, Hospital based N=80	-	-
Zubair et al., [89]	India	T1DM & T2DM, Hospital Based N=162	-	-

Global epidemiology of diabetic foot ulceration: a systematic review and meta-analysis

Pengzi Zhang, Jing Lu, Yali Jing, Sunyinyan Tang, Dalong Zhu & Yan Bi

- We found that that global diabetic foot ulcer prevalence was 6.3% (95%CI: 5.4-7.3%), which was higher in males (4.5%, 95%CI: 3.7-5.2%) than in females (3.5%, 95%CI: 2.8-4.2%), and higher in type 2 diabetic patients (6.4%, 95%CI: 4.6-8.1%) than in type 1 diabetics (5.5%, 95%CI: 3.2-7.7%).
- North America had the highest prevalence (13.0%, 95%CI: 10.0-15.9%), Oceania had the lowest (3.0%, 95% CI: 0.9-5.0%), and the prevalence in Asia, **Europe**, and Africa were 5.5% (95%CI: 4.6-6.4%), **5.1%** (95%CI: 4.1-6.0%), and 7.2% (95%CI: 5.1-9.3%), respectively. Australia has the lowest (1.5%, 95%CI: 0.7-2.4%) and **Belgium has the highest prevalence (16.6%, 95%CI: 10.7-22.4%)**, followed by Canada (14.8%, 95%CI: 9.4-20.1%) and USA (13.0%, 95%CI: 8.3-17.7%).
- The patients **with diabetic foot ulcer were older**, had a lower body mass index, **longer diabetic duration**, and had more hypertension, diabetic retinopathy, and **smoking history** than patients without diabetic foot ulceration.



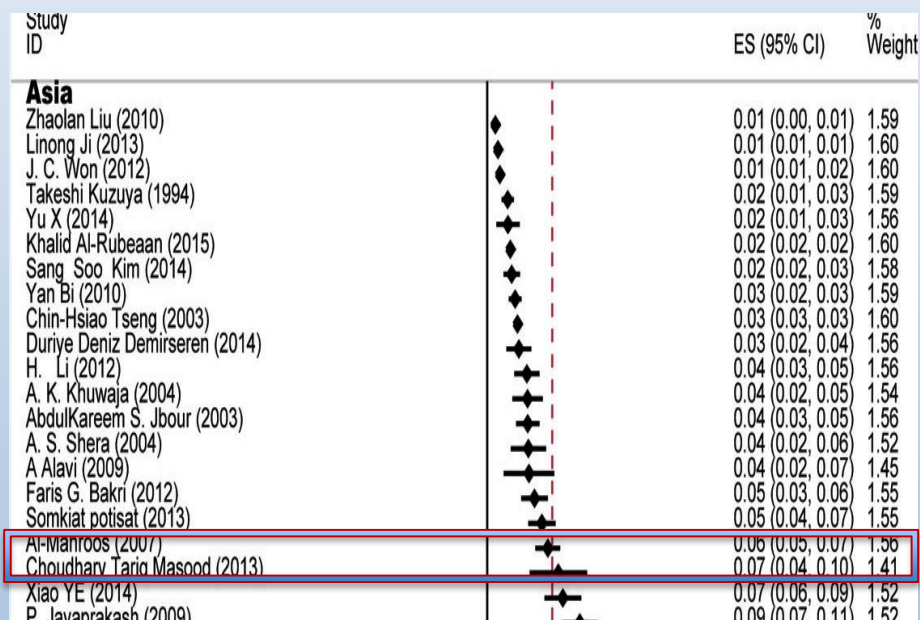
Global epidemiology of diabetic foot ulceration: a systematic review and meta-analysis

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Table 1. Prevalence of diabetic foot ulcer in each country.

Country	No. of studies	Prevalence	95%CI	I ²
Belgium	1	16.6	10.7–22.4	NA
Canada	1	14.8	9.4–20.1	NA
USA	3	13	8.3–17.7	98
Trinidad	1	12.2	10.8–13.6	NA
India	2	11.6	6.4–16.8	90.8
Norway	1	10.4	8.8–11.9	NA
Cameroon	3	9.9	6.3–13.5	86.6
Italy	1	9.7	7.8–11.6	NA
Thailand	2	8.8	1.7–15.9	95
Iran	2	8.1	0.1–16.1	94.9
Denmark	1	7.8	5.6–10.1	NA
Pakistan	4	7.4	0.5–14.3	99
Tanzania	2	7.3	2.1–12.6	83.4
Pacific island countries	1	6.8	4.5–9.0	NA
UK	4	6.3	4.6–8.0	79.8
Egypt	2	6.2	4.1–8.2	49.8
Bahrain	1	5.9	4.7–7.1	NA
South Africa	2	5.8	3.8–7.9	0
France	1	5.6	2.4–8.7	NA
Greece	1	4.8	3.3–6.2	NA
Jordan	2	4.2	3.4–5.1	0
China	10	4.1	3.1–5.2	97.4
Uganda	1	4	1.6–6.4	NA
Ireland	1	3.9	2.3–5.5	NA
Turkey	1	3.1	1.9–4.3	NA
Spain	5	3	1.9–4.4	97
Germany	2	2.8	2.4–3.3	0
Saudi Arabia	1	2.3	2.2–2.4	NA
Japan	1	2	1.4–2.6	NA
Netherlands	2	1.8	1.0–2.6	0
Korea	2	1.7	0.6–2.9	85.1
Poland	1	1.7	1.1–2.3	NA
Australia	2	1.5	0.7–2.4	58.1

NA: not available.



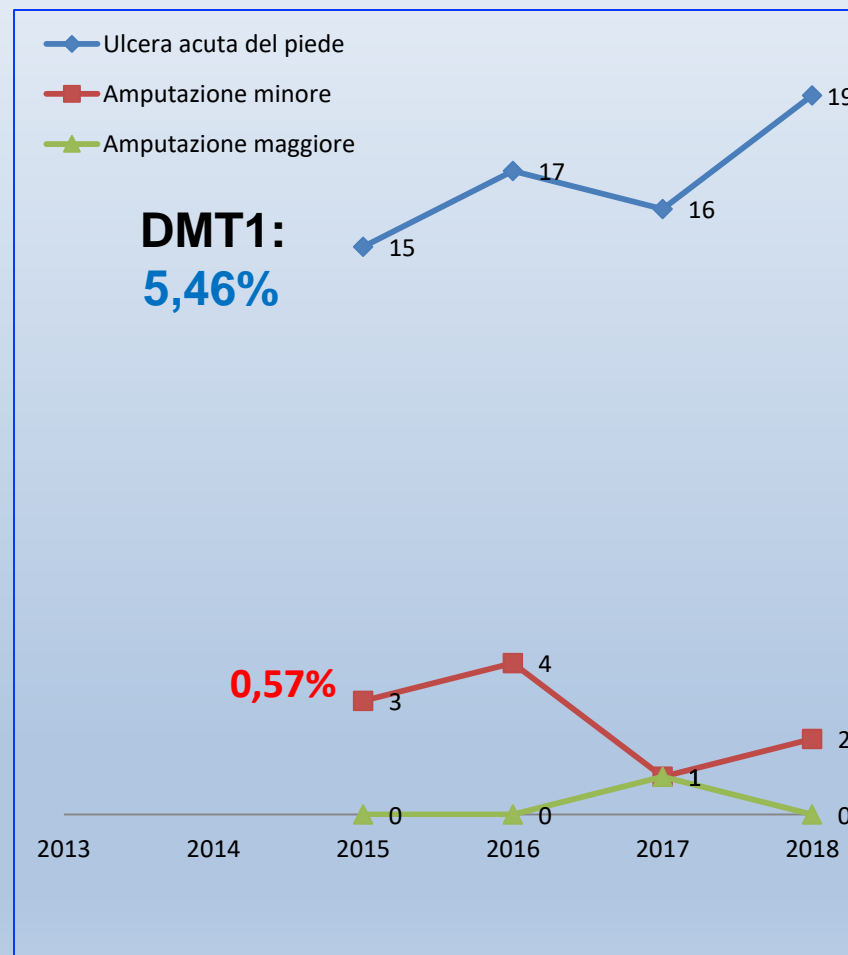
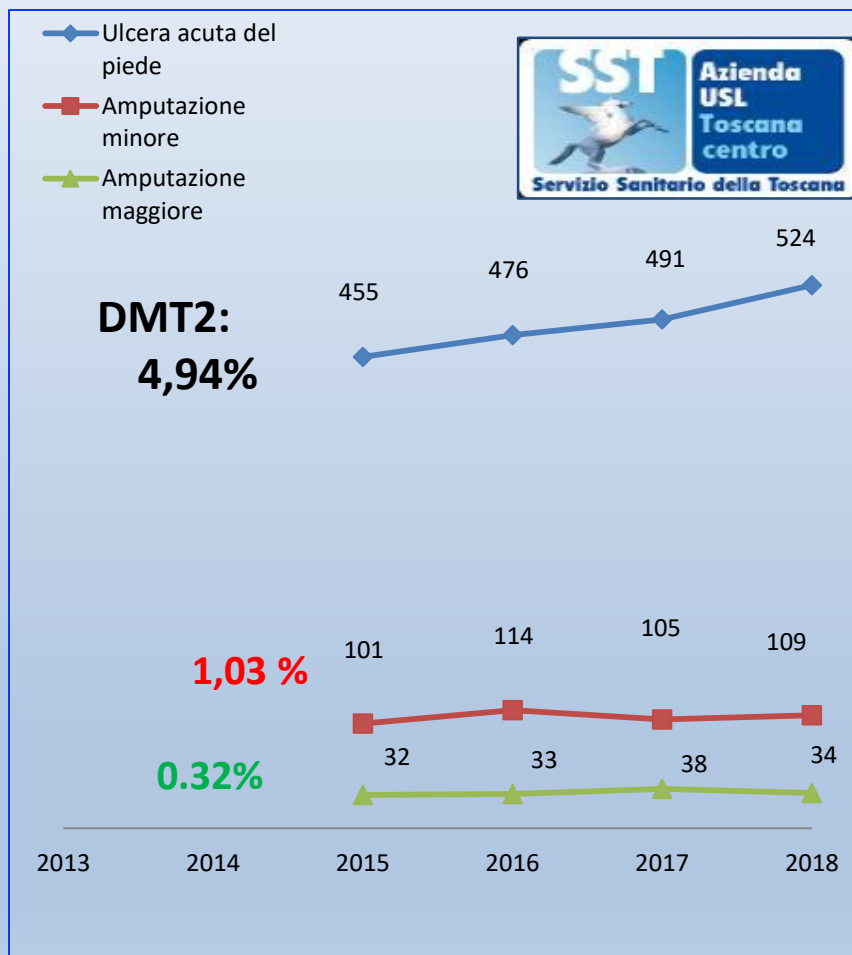
49. Acquati S, Gagliardi L, Taroni S, Tartaglia A, Buci L, Manini F, et al. Diabetic foot screening: an observational study in a population of diabetics in Forlì (Northern Italy). 2010 EASD Abstract, Presentation number 1151.

- Foot ulcers occur in both type 1 diabetes and type 2 diabetes. In elderly patients with diabetes type 2, the reported prevalence of foot ulcers has been 5–10%. In studies that focused on younger subjects with type 2 diabetes or individuals with diabetes type 1, the estimated prevalence was 1.7–3.3% (15.3).

Piaggese A, Apelqvist J (eds): The Diabetic Foot Syndrome. 2018



Prevalenza Lesioni al Piede in Popolazione Coontrollata (area Pistoiese)



Gender difference in the risk for cardiovascular events or mortality of patients with diabetic foot syndrome.

G. Seghieri, R. Anichini Et Al.: Acta Diabetol 2019 In Press

	Males (No. 81,829)	Females (No. 83,121)	P
Age (yr)	64.9±12.7	66.1±15.0	0.0001
Charlson index>2 (%)	22,576 (27.6)	17,840 (21.5)	0.0001
Previous hospitalization for diabetic foot (No. %)	3,119 (68.0)	1,470 (32.0)	0.0001

Ospedalizzati per piede diabetico: 4589 pazienti pari al 2,78% della popolazione diabetica censita al momento dell' inizio dello studio

Outcomes: le amputazioni

EPIDEMIOLOGIA



Le Amputazioni in Italia

OPEN ACCESS Freely available online



Lower Extremity Amputations in Persons with and without Diabetes in Italy: 2001–2010

Flavia L. Lombardo¹, Marina Maggini¹, Alessandra De Bellis², Giuseppe Seghieri², Roberto Anichini^{2*}

¹ National Centre for Epidemiology, Surveillance and Health Promotion, National Institute of Health, Roma, Italy, ² Diabetes Unit and Diabetic Foot Unit, Department of Internal Medicine General Hospital Pistoia, Pistoia, Italy

Abstract

Objective: To analyze hospitalization for lower extremity amputations (LEAs) and amputee rates in persons with and without diabetes in Italy.

Research Design and Methods: All patients with LEAs in the period 2001–2010 were identified analyzing the National Hospital Discharge Record database. For each year, amputee and hospitalization rates for LEAs were calculated either for persons with diabetes or without. Time trend for major and minor amputations were analysed.

Results: From 2001 to 2010 a mean annual number of 11,639 individuals underwent a lower extremity amputation: 58.6% had diabetes accounting for 60.7% of total hospitalizations. In 2010, the crude amputee rate for LEAs was 20.4 per 100,000 inhabitants: 247.2 for 100,000 persons with diabetes, and 8.6 for those without diabetes. Having diabetes was associated to an increased risk of amputation (Poisson estimated RR 10.9, 95%CI 9.4–12.8). Over the whole period, a progressive reduction of amputee rates was observed for major amputations either among persons with diabetes (–30.7%) or without diabetes (–12.5%), while the rates of minor amputations increased progressively (+22.4%) among people without diabetes and were nearly stable in people with diabetes (–4.6%). A greater number of minor amputations were performed among persons with than without diabetes: in 2010, the minor-to-major ratio among persons with diabetes (2.5) was more than twice than in those without diabetes (1.0).

Conclusions: The nationwide analyses confirm a progressive reduction of hospitalization and amputee rates for major LEAs, suggesting an earlier and more diffuse approach aimed at limb salvage.

Citation: Lombardo FL, Maggini M, De Bellis A, Seghieri G, Anichini R (2014) Lower Extremity Amputations in Persons with and without Diabetes in Italy: 2001–2010. PLoS ONE 9(1): e86405. doi:10.1371/journal.pone.0086405

Editor: Christian Herder, German Diabetes Center, Leibniz Center for Diabetes Research at Heinrich Heine University Duesseeldorf, Germany

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Competing Interests: The authors have declared that no competing interests exist.

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Acta Diabetol
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ORIGINAL ARTICLE

Lower extremity amputation rates in people with diabetes as an indicator of health systems performance. A critical appraisal of the data collection 2000–2011 by the Organization for Economic Cooperation and Development (OECD)

F. Carinci¹ · M. Massi Benedetti² · N. S. Klazinga^{3,4} · L. Uccioli⁵

Lower Extremity Amputations in Persons with and without Diabetes in Italy: 2001–2010

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Table 2. Amputee rate in people with diabetes (rates per 100,000 persons with diabetes) and without diabetes (rates per 100,000 persons without diabetes).

AMPUTEES												
People with diabetes						People without diabetes						
Minor			Major		Total		Minor		Major		Total	
N		Amputee rate	N	Amputee rate	N	Amputee rate	N	Amputee rate	N	Amputee rate	N	Amputee rate
2001	3,024	na	2,232	na	5,523	na	1,652	na	2,597	na	4,628	na
2002	3,506	na	2,563	na	6,371	na	1,744	na	2,642	na	4,764	na
2003	3,752	168.8 (95.7)	2,538	114.5 (43.4)	6,584	296.6 (149.8)	1,784	3.2 (3.4)	2,641	4.8 (5.3)	4,691	8.5 (9.2)
2004	4,143	178.0 (102.6)	2,465	105.9 (44.1)	6,860	294.7 (150.8)	1,797	3.2 (3.4)	2,586	4.7 (5.0)	4,667	8.4 (9.0)
2005	4,298	177.0 (95.1)	2,464	101.4 (42.8)	7,014	288.7 (142.3)	1,954	3.5 (3.7)	2,467	4.4 (4.7)	4,723	8.4 (8.9)
2006	4,351	167.3 (93.7)	2,469	94.9 (41.8)	7,096	272.8 (139.8)	2,164	3.9 (4.0)	2,483	4.4 (4.6)	4,917	8.8 (9.1)
2007	4,258	156.9 (94.6)	2,284	84.1 (36.1)	6,788	250.1 (134.3)	2,102	3.7 (3.8)	2,478	4.4 (4.5)	4,849	8.6 (8.8)
2008	4,482	155.1 (85.5)	2,517	87.1 (36.8)	7,241	250.6 (125.4)	2,151	3.8 (3.9)	2,608	4.6 (4.7)	5,051	8.9 (9.1)
2009	4,765	161.1 (94.4)	2,382	81.9 (33.2)	7,370	253.8 (128.3)	2,191	3.8 (3.9)	2,474	4.3 (4.4)	4,945	8.7 (8.8)
2010	4,794	161.1 (94.4)	2,362	79.3 (36.1)	7,373	247.2 (128.7)	2,267	4.0 (4.0)	2,411	4.2 (4.2)	4,922	8.6 (8.6)

From the National Hospital Discharge Record database

January 2014 | Volume 9 | Issue 1 | e86405

Adapted from nicoletti

- 30.7%



Lower Extremity Amputations in Persons with and without Diabetes in Italy: 2001–2010

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Table 4. Relative risk of lower extremity amputation in people with diabetes, compared with those without diabetes, adjusted for age, sex and calendar year: results of the Poisson models.

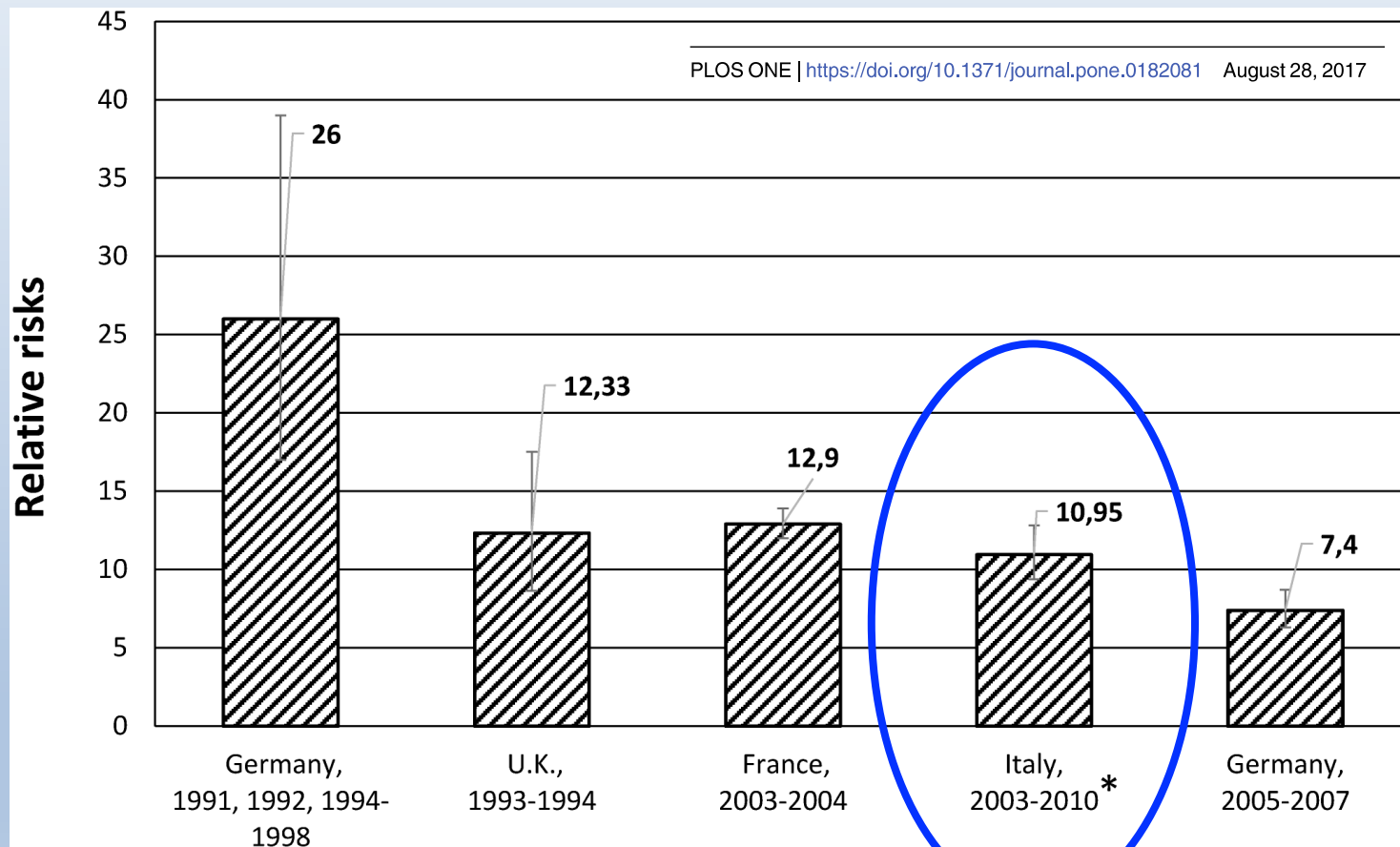
	MINOR			MAJOR			TOTAL		
	RR	(95%CI)	<i>p</i>	RR	(95%CI)	<i>p</i>	RR	(95%CI)	<i>p</i>
Diabetes (yes vs no)	19.37	(16.49–22.77)	<0.001	6.36	(5.60–7.23)	<0.001	10.95	(9.37–12.81)	<0.001
Year*	1.01	(0.99–1.03)	0.443	0.96	(0.94–0.98)	0.001	0.98	(0.96–1.01)	0.203
Sex (M vs F)	2.56	(2.27–2.88)	<0.001	2.10	(1.86–2.38)	<0.001	2.33	(2.03–2.67)	<0.001
Age [§]									
35–44	1.75	(1.39–2.21)	<0.001	3.04	(2.44–3.77)	<0.001	2.07	(1.65–2.61)	<0.001
45–54	5.01	(3.86–6.51)	<0.001	9.82	(7.32–13.19)	<0.001	6.50	(4.81–8.78)	<0.001
55–59	7.68	(6.34–9.32)	<0.001	22.53	(17.63–28.78)	<0.001	11.81	(9.40–14.84)	<0.001
60–64	9.86	(8.34–11.65)	<0.001	35.36	(28.92–43.23)	<0.001	16.49	(13.72–19.83)	<0.001
65–74	12.15	(10.58–13.96)	<0.001	63.52	(55.77–72.34)	<0.001	23.88	(21.12–27.01)	<0.001
75 and over	15.77	(12.68–19.62)	<0.001	163.49	(142.16–188.02)	<0.001	43.92	(36.52–52.83)	<0.001

*Relative risk per one year increment;

[§]reference group 0–34 years.

doi:10.1371/journal.pone.0086405.t004

Rischio relativo di amputazione agli arti inferiori nei soggetti diabetici vs non diabetici

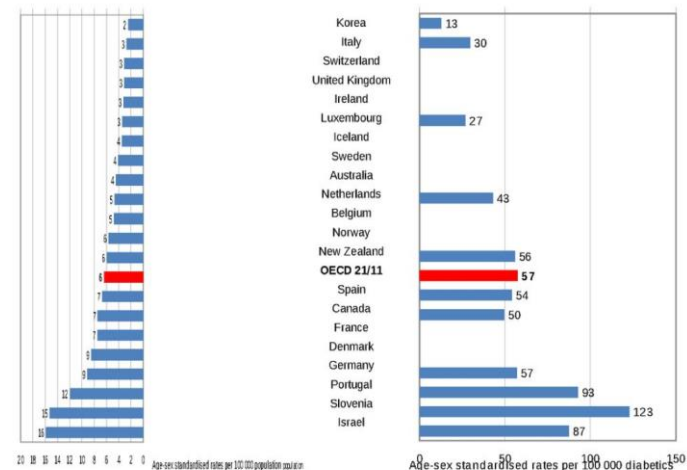


ORIGINAL ARTICLE

Lower extremity amputation rates in people with diabetes as an indicator of health systems performance. A critical appraisal of the data collection 2000–2011 by the Organization for Economic Cooperation and Development (OECD)

F. Carinci¹ · M. Massi Benedetti² · N. S. Klazinga^{3,4} · L. Uccioli⁵

8.4. Major lower extremity amputation in adults with diabetes, 2013 (or nearest year)



Note: Three-year average for Iceland and Luxembourg.

Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.

Lower extremity amputation rates in people with diabetes as an indicator of health systems performance. A critical appraisal of the data collection 2000–2011 by the Organization for Economic Cooperation and Development (OECD)

F. Carinci¹ · M. Massi Benedetti² · N. S. Klazinga^{3,4} · L. Uccioli⁵

Acta Diabetol (2016) 53:825–832

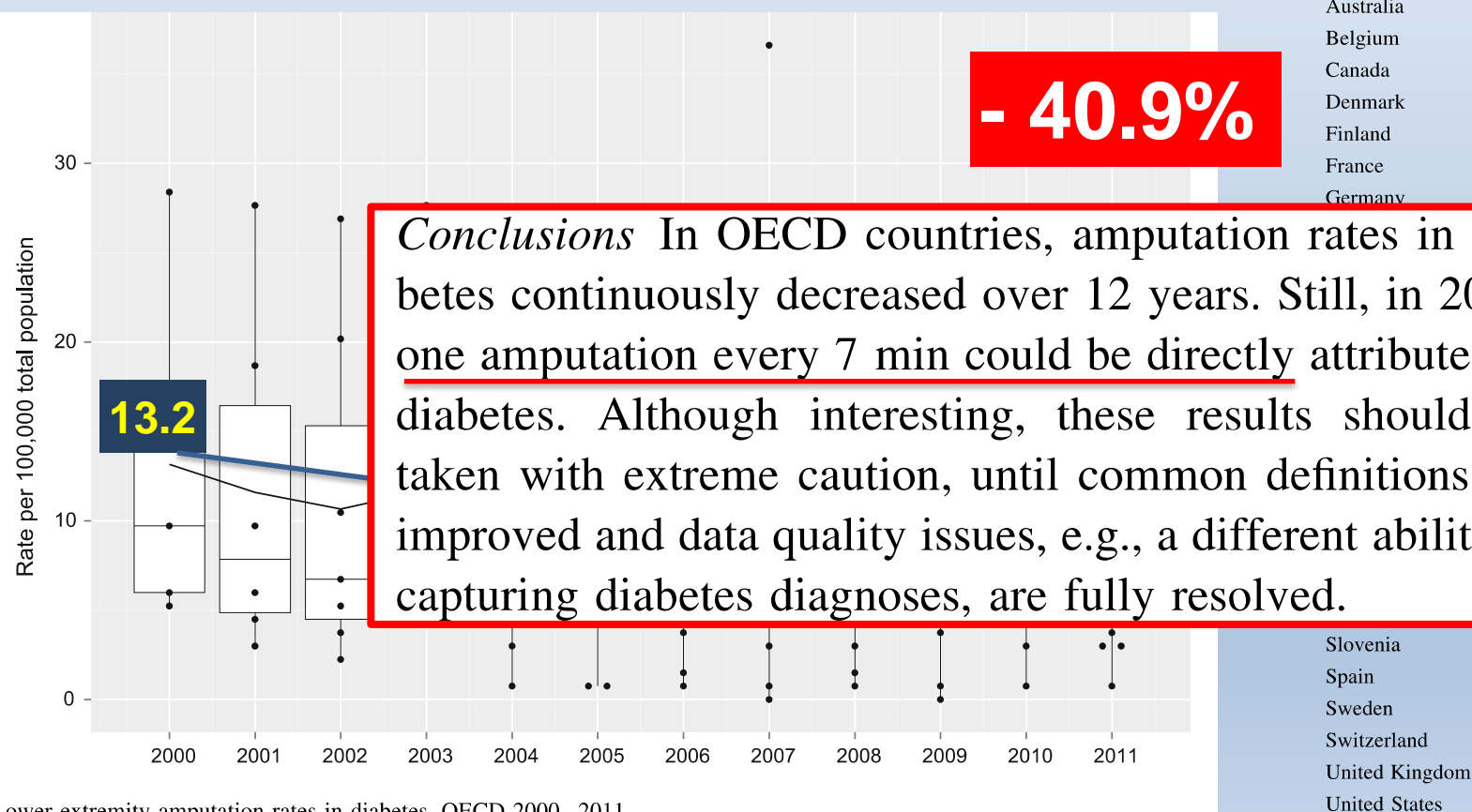


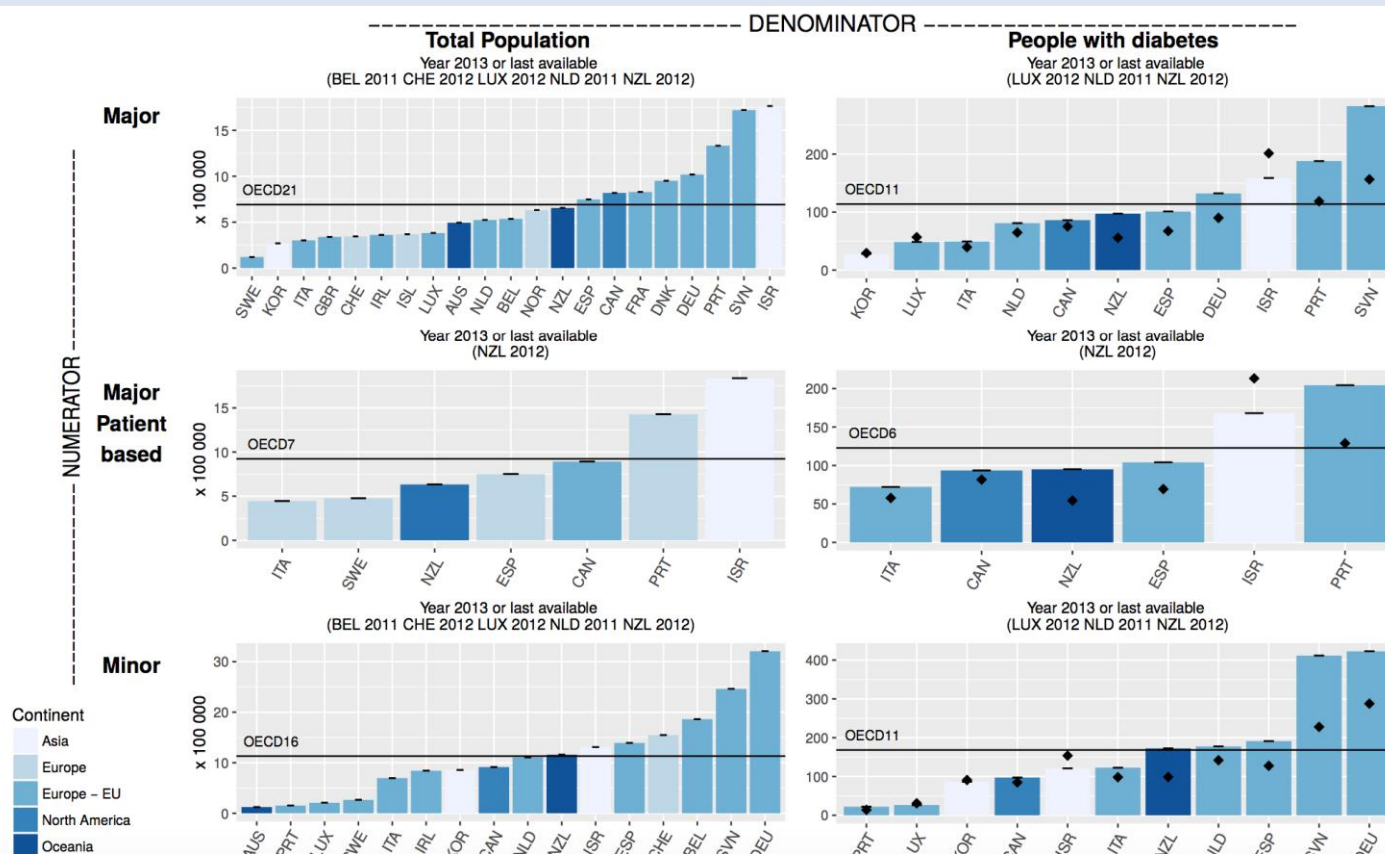
Fig. 1 Lower extremity amputation rates in diabetes, OECD 2000–2011

International comparisons of diabetes related amputation rates: results over fourteen years using a refined methodology for the OECD data collection

F Carinci^{1,2}, L Uccioli³, M Massi Benedetti⁴ and NS Klazinga^{5,6}

¹University of Bologna, Bologna, Italy; ²National Agency for Regional Health Services (AGENAS), Rome, Italy; ³Università Tor Vergata, Rome, Italy; ⁴Hub for International health ReSearch, Perugia, Italy;

⁵Organisation for Economic Co-operation and Development (OECD), Paris, France; ⁶Academic Medical Centre, University of Amsterdam, The Netherlands.



Lo Tsunami Diabete e le comorbidità (strategie intervento)

- PDTA vengono utilizzati per migliorare la qualità ed efficienza delle cure, ridurre la variabilità nelle cure e garantire cure appropriate al maggior numero di pazienti.



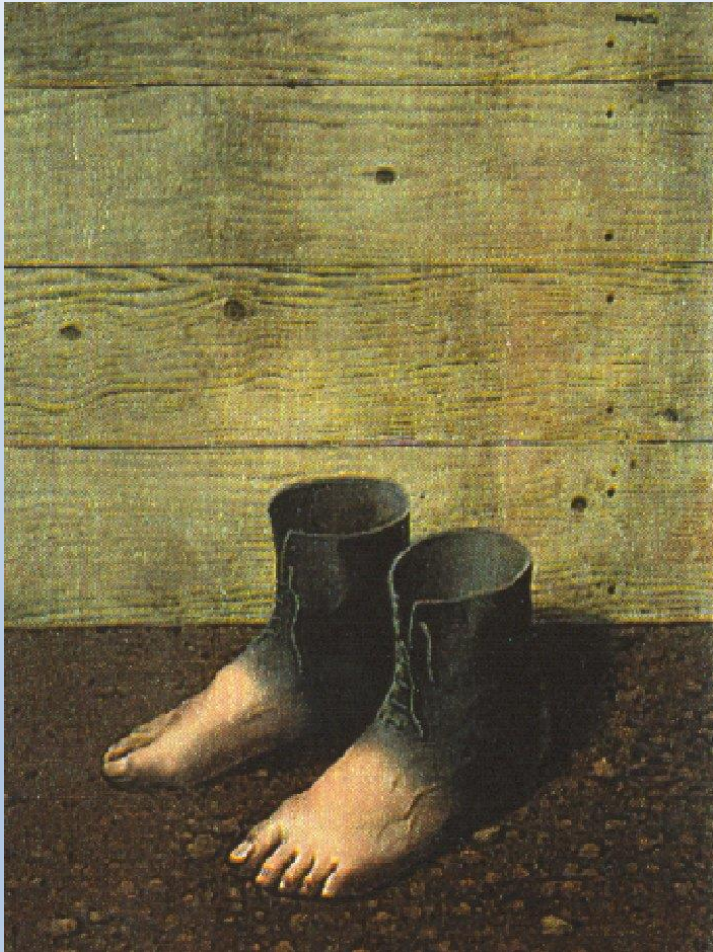
L'era dei PDTA: Il Piede Diabetico in Italia: La rete Assistenziale Integrata



Nella Stragrande
maggioranza delle
regioni o delle AUSL
sono stati approntati
PDTA sul Piede
Diabetico.



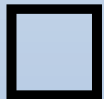
Era dei PDTA: Il Piede Diabetico in Italia: La rete Assistenziale Integrata



- □: guardare oggi
- □: guardare domani
- □: Guardare futuro

Il diabete oggi, e il piede diabetico oggi

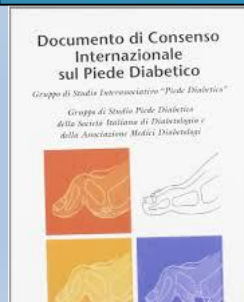
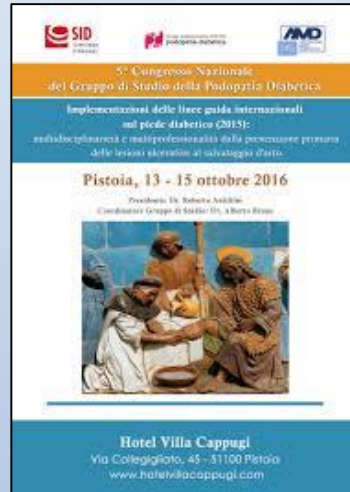
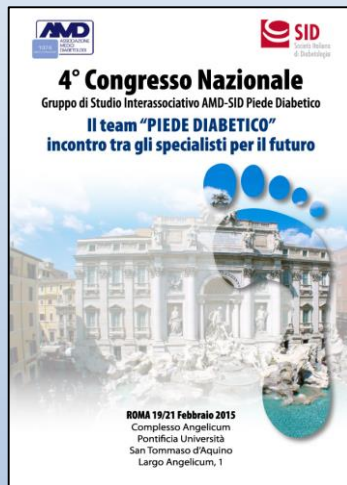
- Dallo Tsunami Diabete
- Alla prevalenza del diabete
- Condizioni socioeconomiche del paese
- Popolazione Anziana
- Marginalizzazione delle cure.
- Ridotte risorse personali



▪ guardare oggi



30 anni Storia



Approccio globale alla Patologia Diabetica

ESPERIENZA ITALIANA

- Multiprofessionalità e multidisciplinarietà e paziente diabetico.
- Organizzazione per livelli assistenziale
- TEAM presa in carico «globale».



Implementing Diabetic Foot Program: The Italian experience

- Patients Centered
- Pathway of care
- Organization of different level of Care.
- To improve different approaches and different collaboration with common aims.
- *Diabetes care patients as a whole but with their target in Education and Prevention (instigating Awareness of patients education and knowledge)*
- On preventing (primary and secondary) diabetes complications



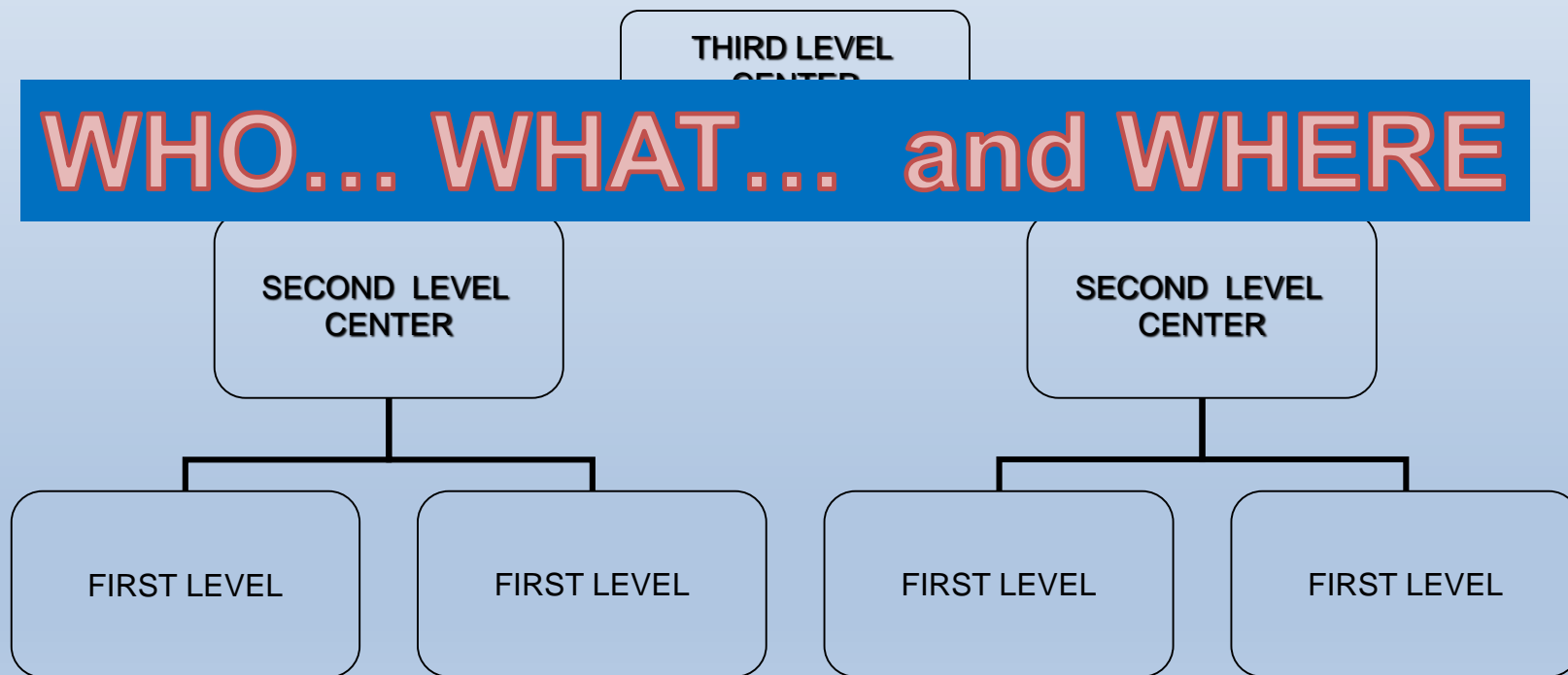
Implementation of International Consensus of diabetic foot in an organized approach.



REGIONE TOSCANA
GIUNTA REGIONALE

ESTRATTO DAL VERBALE DELLA SEDUTA DEL 09-12-2003 (punto N. 26)

ORGANIZATION OF CARE FOR the Diabetic Foot



Implementing Italian Diabetic Foot Program (3)

LEVEL ORGANIZZATION

BASAL level

- **outpatients clinic**; screening and first-line treatment. Management of simple cases.
- It will provide risk factors diagnosis (PVD and Neuropathy), prevention and education.
- The team will include general practitioners, specialized nurses and diabetologists, podologist.
- **Every diabetologic service** will have the first level activity based on **Education, prevention and training** for patients and care givers

MID level - **Hospital or clinic diabetologic services; dedicated on Diabetes foot**

- **It will provide dedicated structure with equipped offices**
- **Activity characterized by prevention and treatment of wounds.**
- **The following is guaranteed:**
 - Treatment of neuropathic/vascular ulcers and infections
 - Minor surgery
 - Off loading of plantar ulcers.



Diabetic foot Unit (ex third Level)

The minimum requirements for the activities (1)

1. **Equipped spaces dedicated** to medications, access to operating rooms, with dedicated space in programming and increasable in case of need;
2. **Availability of specific technology** (VAC-therapy, oximetry monitoringtranscutaneous, tissue engineering, dermal substitutes, etc);
3. **Availability of spaces** suitable for prolonged intravenous therapy in ordinary hospitalization / Day Hospital / Day Service
4. Availability of spaces devote (within the facility or through agreements with nearby structures in the same hospital) vascular non-invasive diagnostics and radiological (x-ray, MRI, MRA, CT angiography ...);
5. **Relations with GPs** to send urgent or **fastrack** , **Continuity care of treatment** sheared with district health care Team.
6. **Access dedicated to advanced vascular diagnostics** (CT angiography and MRA);
7. Presence of Vascular Surgery and Cardiology / Radiology able to perform revascularization procedures;



Diabetic foot Unit (ex third Level)

The minimum requirements for the activities (2)

1. **structured connections** with General / orthopedic surgeon; with radiologist / interventional cardiologist / vascular surgeon;
2. **structured connections** with the nephrologist and the Infectious Disease;
3. **Direct connection with the First Aid** / Emergency Medicine with shared protocols for emergencies and hospitalizations in urgency;
4. **Preferential Routes agreed** with hospital departments for admission to inpatient.

The sharing of the event must occur in "consultations between equals", where the **Diabetologist plays** the role of tutor.



□: guardare domani

- La popolazione diabetica in toto.
- Quali Strategie ??
- Individuazione delle classi a rischio (risk score??).
- Complicanze associate
- Condizioni Socio-economiche??
- Equità dell' accesso assistenza ??

Team.....today new conceptual way

- From (**only**) take care ulcer and wound healing to global approaches at diabetes patients.
- Raising the awareness of Diabetes Complications.
- Improve the knowledge and skills of the whole team



Team Aims in global approaches TAKE CARE

- Improve Diabetes care everywhere from lifestyle to more complex therapy.
- Keeping in mind to improve diabetes care





Programmazione ed organizzazione multidisciplinare e multiprofessionale

DIABETOLOGO DALLA TEORIA ALLA PRASSI

Specialisti diabetologi percezione del problema

PIEDE DIABETICO (RETE ASSISTENZIALE DIABETOLOGICA)



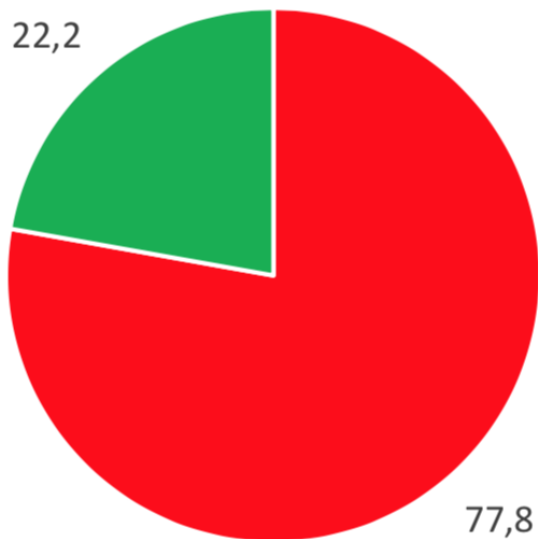
Soggetti con almeno una determinazione dell'HbA1c (%)

DM1

DM2

Soggetti monitorati per il piede (%)

DM1



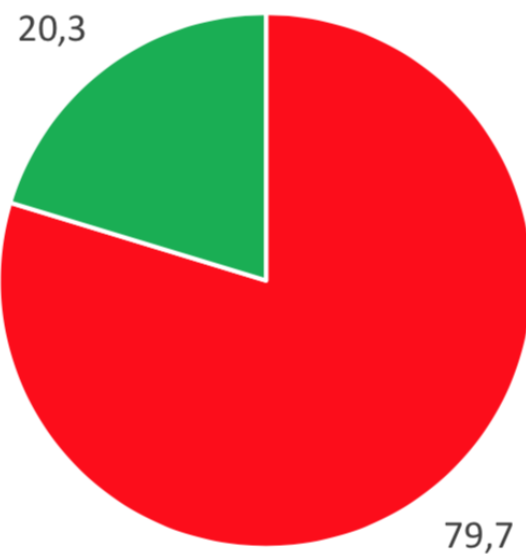
■ No ■ Si

Soggetti con almeno una misurazione della pressione arteriosa (%)

DM1

DM2

DM2



■ No ■ Si



Si

63,8

Starplot degli indicatori di processo

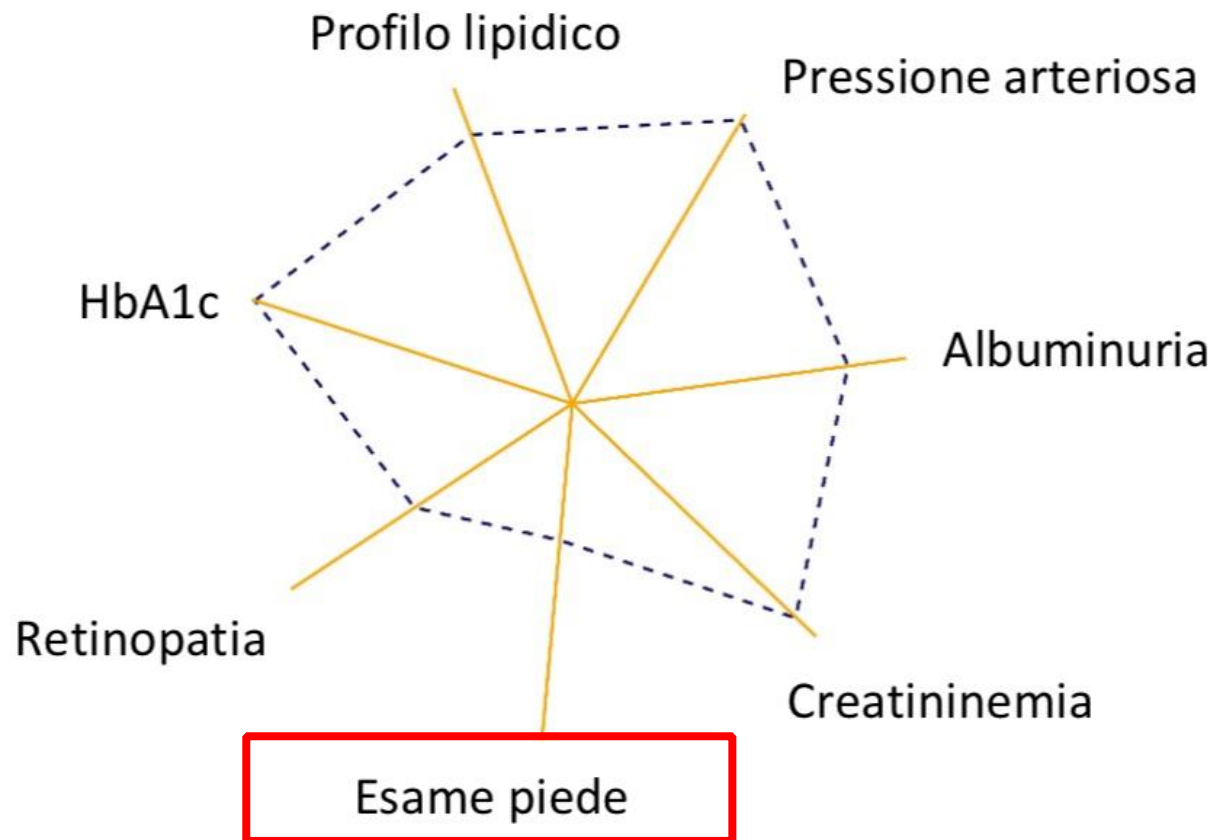


Tabella 2. Confronto degli indicatori di qualità dell'assistenza fra il 2011 e il 2016: **Diabete di tipo 2.**

Indicatore	2011 (%)	2016 (%)	Delta (%)
Monitoraggio HbA1c	92.3	97.0	+5.1
Monitoraggio profilo lipidico	73.8	72.3	-2.0
Monitoraggio pressione arteriosa	77.8	90.2	+15.9
Monitoraggio albuminuria	44.1	55.5	+25.9
Monitoraggio retinopatia	32.3	36.2	+12.1
Esame piede	14.9	20.3	+36.2
HbA1c $\leq 7.0\%$	43.8	50.9	+16.2
HbA1c $> 8.0\%$	27.2	19.8	-27.2
HbA1c $\geq 9.0\%$, non trattati con insulina	40.5	27.5	-32.1
HbA1c $\geq 9.0\%$ nonostante terapia insulinica	25.7	18.5	-28.0
C-LDL < 100 mg/dl	48.1	58.9	+22.5
C-LDL ≥ 130 mg/dl	21.7	14.8	-31.8
C-LDL ≥ 130 mg/dl, non trattati con statine	57.5	52.0	-9.6
C-LDL ≥ 130 mg/dl nonostante terapia con statine	18.1	11.9	-34.3



Dalla definizione dei livelli alla concreta azione.

SPECIALISTICA DIABETOLOGICA E PIEDE DIABETICO. OPPORTUNITÀ E CONVINZIONI



Federici G.¹ - Canzoneri G.² - Hazbiu A.³ - Sepe M.⁴ - Teobaldi I.⁵

¹ Podologo - Ospedale San Pietro Fatebenefratelli Roma Italy

² Podologo - Ambulatorio piede diabetico ARNAS Civico Palermo. Italy

³ Podologo - Poliambulatorio Cimaù, Vasto (CH). Italy

⁴ Podologo - Medicina Più, Palma Campania Napoli. Italy

⁵ Podologo - Azienda Ospedaliera Universitaria integrata Verona. UO Malattie Metaboliche Endocrinologia, ambulatorio piede diabetico Verona. Italy

Obiettivo: L'obiettivo di questo studio è la valutazione della percezione e della reale conoscenza che il medico che opera in ambito diabetologico ha della figura del Podologo.

Materiali e Metodi: E' stato distribuito un questionario con 22 domande in occasione di due eventi nazionali (congresso nazionale diabetologia). Le domande erano divise in due sezioni: la prima (1-8) per l'inquadramento del campione di medici e la seconda (9-22) per sondare i rapporti tra diabetologo e podologo. Le risposte quando non codificate sono state preventivamente classificate in coerenti, dubbie e non coerenti per facilitare l'analisi dei dati. Sono stati analizzati solo i questionari compilati da medici. Il campione è composto da 81 medici di età media di $51.6 \pm 9,6$ anni ed con una esperienza lavorativa di $20,7 \pm 10,8$ anni, appartenenti all'area endocrino metabolica (60%) o di medicina generale (40%) e con una distribuzione omogenea sul territorio italiano (31% nord, 41% centro e 28% sud), impegnati in strutture ospedaliere per il 74.1% dei casi e con una prevalenza di donne (65%).

Risultati: Sono stati analizzati solo gli 81 questionari che sono stati consegnati agli eventi, o quelli inviati come risposta alla mail. I soggetti che hanno risposto sono prevalentemente femminile (65% femmine) con età media di $51.6 \pm 9,6$ anni ed una esperienza lavorativa di $20,7 \pm 10,8$ anni di lavoro, appartengono prevalentemente all'area endocrino metabolica (60%) e con una distribuzione omogenea sul territorio italiano (31% nord, 41% centro e 28% sud) impegnati in strutture ospedaliere per il 74.1% dei casi.

Conclusioni: La figura del Podologo, allo stato attuale delle conoscenze è risultata essere molto poco conosciuta dalla classe medica, e coinvolta solo per piccole patologie. Sarebbe auspicabile un aggiornamento del profilo professionale così da essere equiparabile a quello delle altre nazioni Europee.



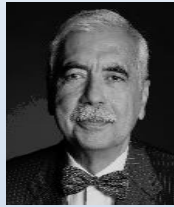
Percezione Pratica «piede Diabetico»

- Hanno risposto al questionario >5% degli invitati Medici diabetologi. 81 su più di 1500 questionari consegnati.
- Podologo presente per il 32% strutture 1 livello, il 48% di 2 livello e il 71% di 3 livello.

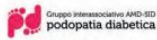


GRUPPO PODOPATIA DIABETICA

Distribuzione sul territorio nazionale delle strutture che si occupano di "piede diabetico"



a cura di A. Bruno
per il Gruppo AMD-SID
Podopatia diabetica*

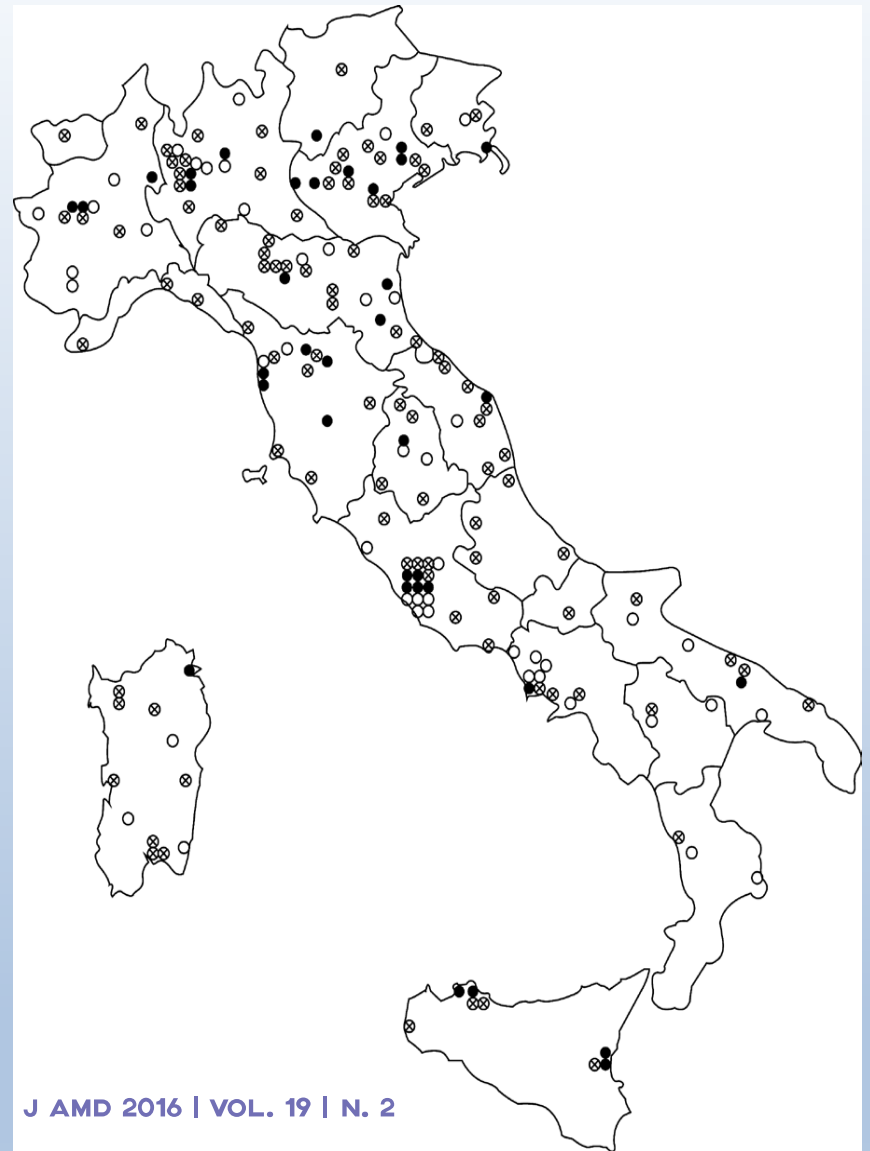


○ Level 1

⊗ Level 2

● Level 3

TOT 177



J AMD 2016 | VOL. 19 | N. 2

Mappa delle Strutture Diabetologiche Italiane e delle diabetic foot Unit

Strutture Diabetologiche



Diabetic Foot Unit





FUTURO PROSSIMO

**LA FORZA DELLA COLLABORAZIONE IN
SANITA' DAL MONITORAGGIO DEGLI EVENTI
ALLE POLITICHE PREVENZIONE DELLE ULCERE
NEI DIABETICI**

Improve Diabetic Foot Care

**Regional diagnostic
therapeutic and welfare
Pathway of the person with
diabetes foot:
General guidelines**



REGIONE TOSCANA
UFFICI REGIONALI GIUNTA REGIONALE

ESTRATTO DAL VERBALE DELLA SEDUTA DEL 19-07-2016 (punto N 36)

Delibera	N 698	del 19-07-2016
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<i>Proponente</i>
STEFANIA SACCARDI
DIREZIONE DIRITTI DI CITTADINANZA E COESIONE SOCIALE

<i>Pubblicità'/Pubblicazione</i> Atto soggetto a pubblicazione su Banca Dati (PBD)
<i>Dirigente Responsabile</i> Lorenzo ROTI
<i>Estensore</i> ANTONELLA FRANCESCHELLI
<i>Oggetto</i>
Percorso Diagnostico Terapeutico Assistenziale della persona affetta da Piede Diabetico: Linee di indirizzo regionali.

<i>Droconti</i>		
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Diabetic Foot Unit as a paradigmatic organization which is patient centered (1)

Organization Criteria

- role of the diabetologist as the coordinator of the entire care with a pathway-oriented approach, regardless of organizational boundaries;
- interdisciplinary collaboration of clinicians involved in the pathway at the health care district and in the hospital level (radiologists, podiatrists, diabetologists, vascular and orthopedic surgeons, cardiologists, etc.); implementation of flexible and shared fast-track pathways for urgent treatments and diagnostic tests;
- Unification and sharing of reception Urgent emergency department triage procedures
- Implementation of surgical techniques and dressing in the professionals working on the treatment of wounds.
- Unification and share of vascular intervention procedures with update of new techniques in use, and required objectives.
- Organization Routes in the hospital (Packages of internal performance) the introduction and management of new technologies for the diagnosis and treatment of ulcerative lesions



Diabetic Foot Unit as a paradigmatic organization which is patient centered (2)

Improve training and skills of team: Education and Training

- **Education and training for users and care givers**
- On the job training for all professionals involved
- training: for diabetologists in basic surgical skills; for general practitioner and territorial structures
- clear and periodic communication, coordination and training initiatives between hospitals and primary care professionals in order to improve both preventive and follow-up care;
- reinforcement of the network of professionals in the different HAs, not just between the diabetologists but also between GPs, nurses, podiatrists, footwear Technicians.



Minimal skills to manage as team leader acute diabetic foot (COMPLEXITY OF TAKE CARE)

- basic surgery to drain abscesses and basic debridement
- management of impaired metabolic control with subcutaneous and eventually intravenous insulin
- management of fluids and nutrition
- management of renal function
- management antibiotic therapy
- ability to interpret images for osteomyelitis
- ability to interpret images for pvd
- Knowledge of guidelines for treatment
- ability to manage occurring complications
- ability to interact with the other members of the team



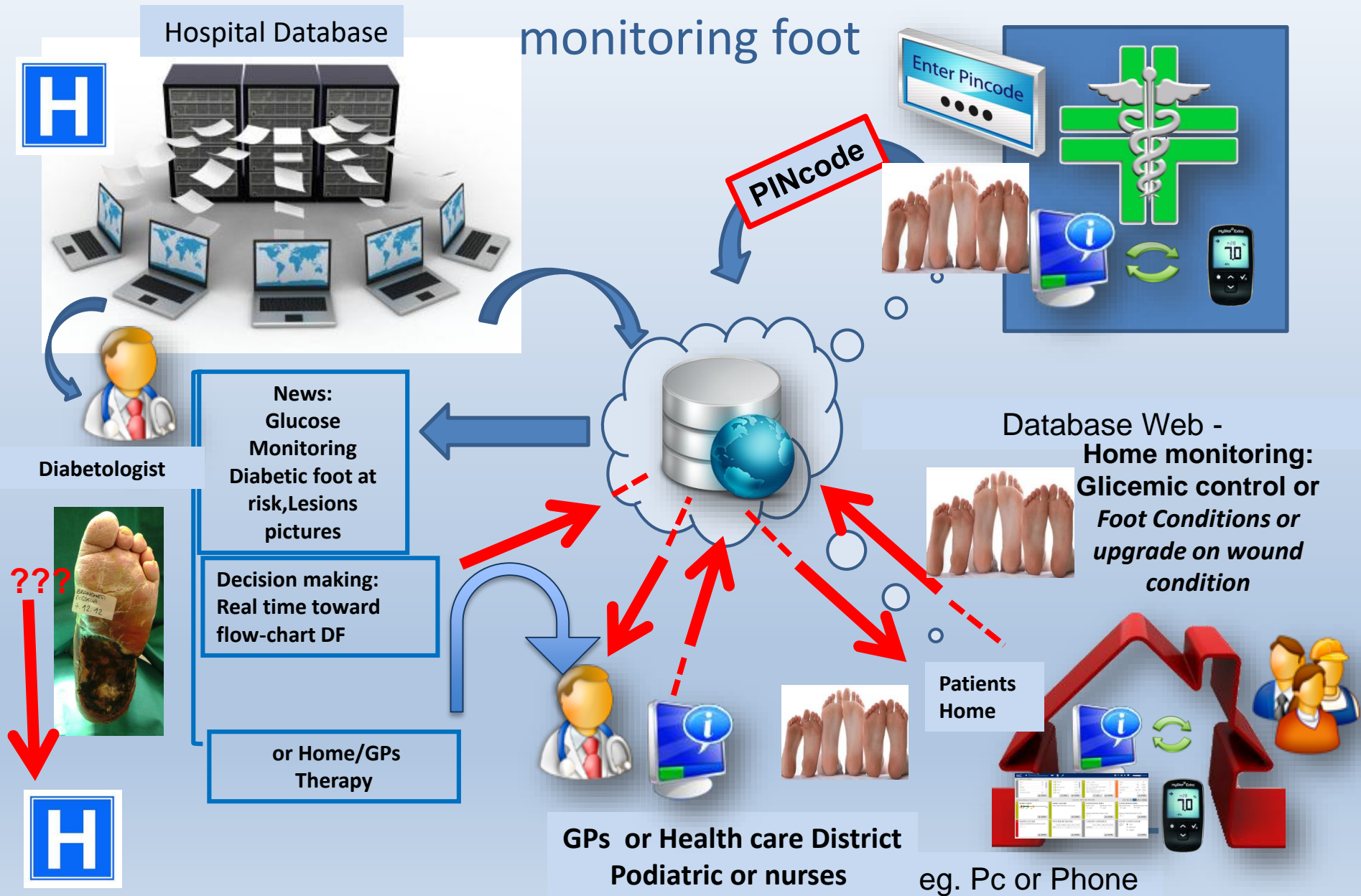
Diabetic Foot Unit as a paradigmatic organization which is patient centered (3)

Monitoring

- Use of integrated clinical records and telemedicine for monitoring patients in Health care district



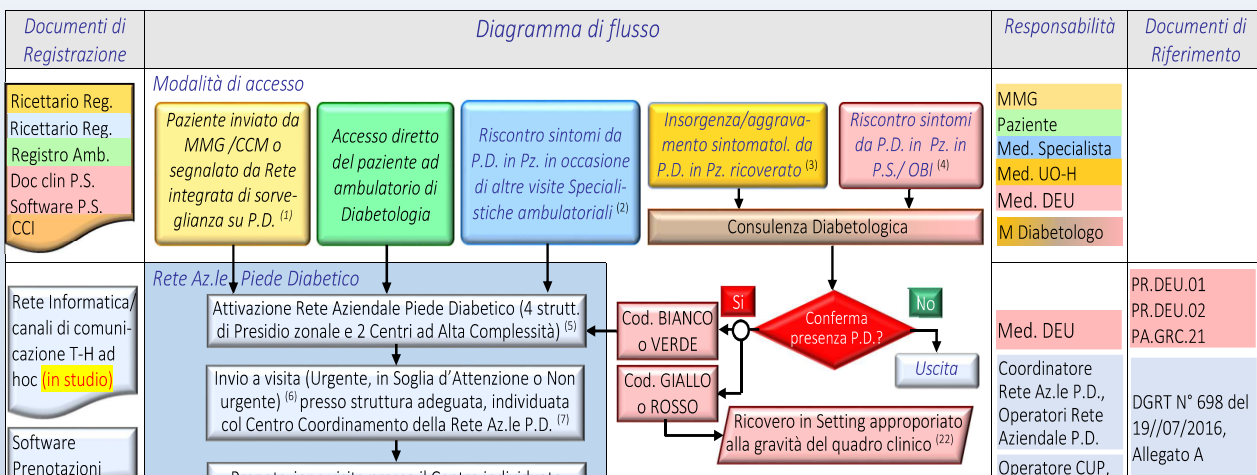
"Telemedicine" connection for active real time monitoring foot



Diabetic Foot, Diagnostic and Therapeutic Flow-chart USLCENTRO TOSCANA

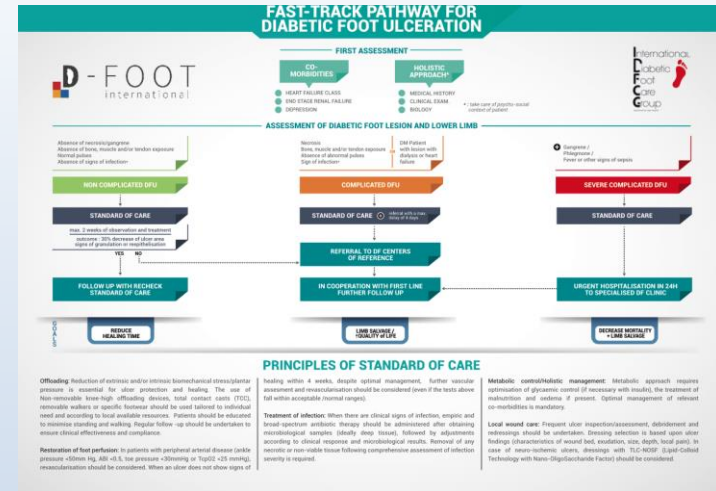


R.Anichini MD Houston 2017



Il Territorio:educazione continua sorveglianza su tutti i pazienti diabetici
 Programma integrazione (MMG, Infermieri, Podologi e Diabetologi) e
 rapida diagnosi in caso eventi acuti e presa in carico precocissima del
 Paziente da parte dello Specialista del percorso

• IL FAST TRACK



Opzione innovativa

FAST TRACK: DECISIVO NEL FUTURO DEGLI OUTCOMES

FAST-TRACK PATHWAY FOR DIABETIC FOOT ULCERATION



FIRST ASSESSMENT

CO-MORBIDITIES

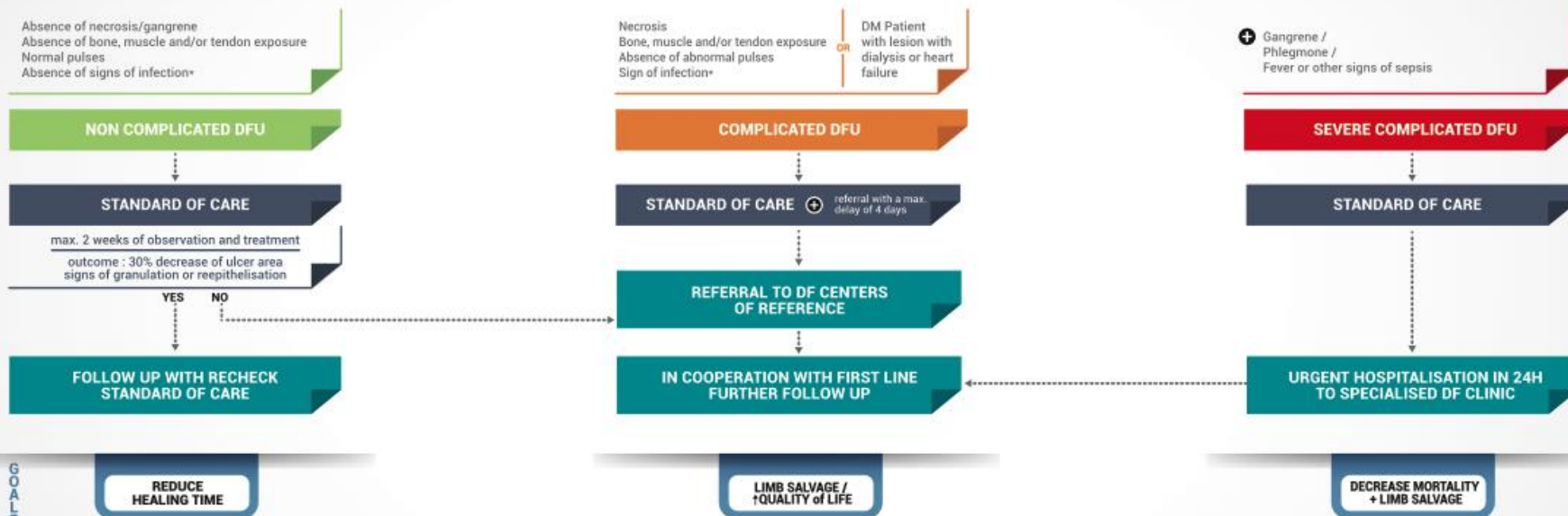
- HEART FAILURE CLASS
- END STAGE RENAL FAILURE
- DEPRESSION

HOLISTIC APPROACH*

- MEDICAL HISTORY
- CLINICAL EXAM.
- BIOLOGY

* : take care of psycho-social context of patient

ASSESSMENT OF DIABETIC FOOT LESION AND LOWER LIMB



PRINCIPLES OF STANDARD OF CARE

Offloading: Reduction of extrinsic and/or intrinsic biomechanical stress/plantar pressure is essential for ulcer protection and healing. The use of Non-removable knee-high offloading devices, total contact casts (TCC), removable walkers or specific footwear should be used tailored to individual need and according to local available resources. Patients should be educated to minimise standing and walking. Regular follow -up should be undertaken to ensure clinical effectiveness and compliance.

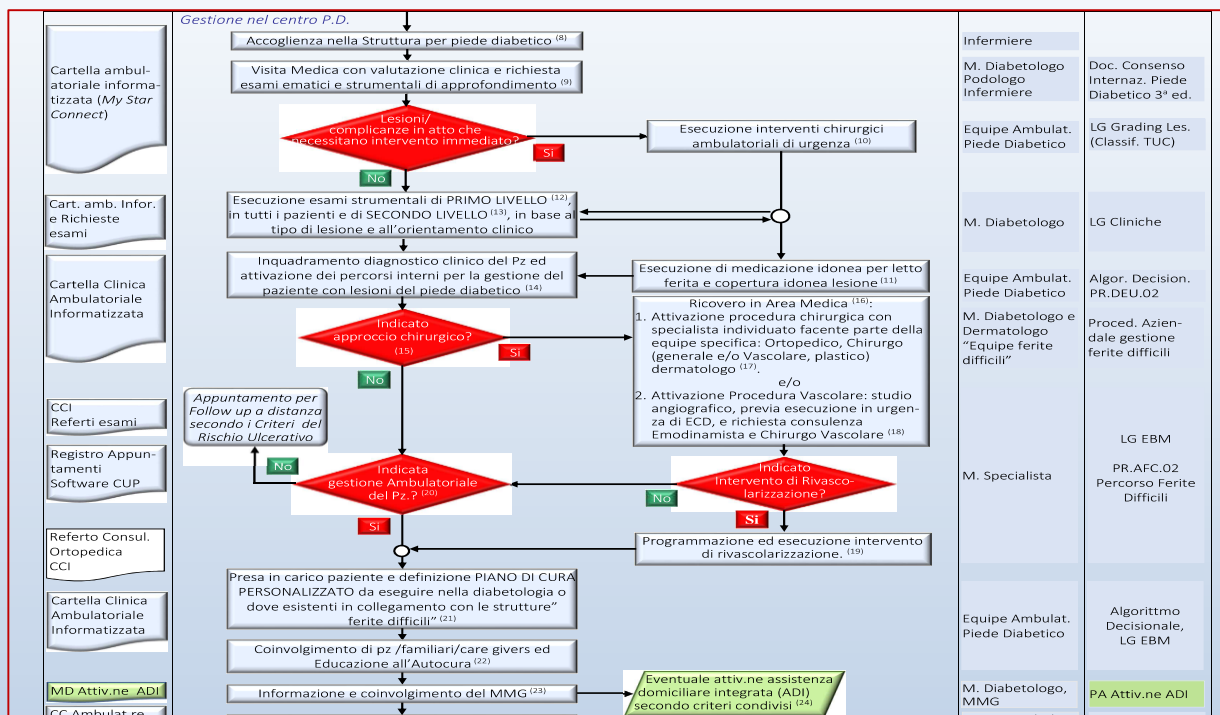
Restoration of foot perfusion: In patients with peripheral arterial disease (ankle pressure <50mm Hg, ABI <0.5, toe pressure <30mmHg or TcpO2 <25 mmHg), revascularisation should be considered. When an ulcer does not show signs of

healing within 4 weeks, despite optimal management, further vascular assesment and revascularisation should be considered (even if the tests above fall within acceptable /normal ranges).

Treatment of infection: When there are clinical signs of infection, empiric and broad-spectrum antibiotic therapy should be administered after obtaining microbiological samples (ideally deep tissue), followed by adjustments according to clinical response and microbiological results. Removal of any necrotic or non-viable tissue following comprehensive assessment of infection severity is required.

Metabolic control/Holistic management: Metabolic approach requires optimisation of glycaemic control (if necessary with insulin), the treatment of malnutrition and oedema if present. Optimal management of relevant co-morbidities is mandatory.

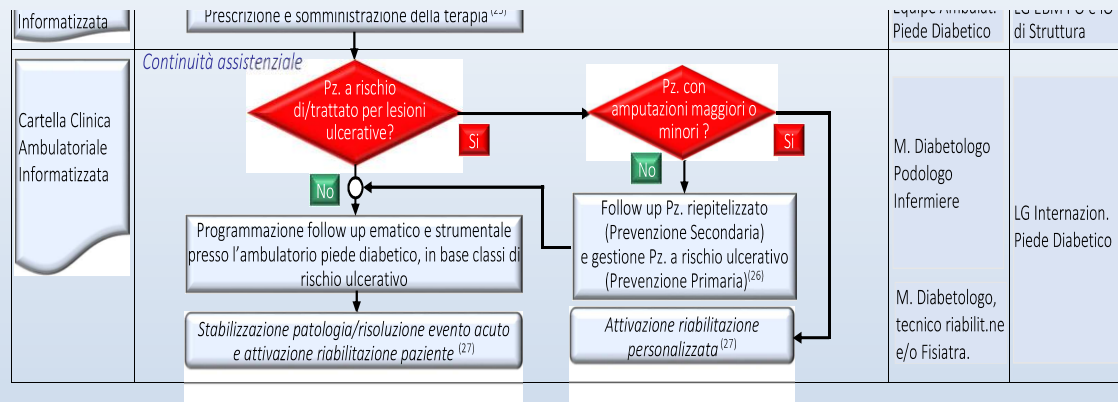
Local wound care: Frequent ulcer inspection/assessment, debridement and redressings should be undertaken. Dressing selection is based upon ulcer findings (characteristics of wound bed, exudation, size, depth, local pain). In case of neuro-ischemic ulcers, dressings with TLC-NOSF (Lipid-Colloid Technology with Nano-OligoSaccharide Factor) should be considered.



Ospedale

SNODI ASSISTENZIALI

COORDINAMENTO CONDIVISIONE TRA EGUALI, SEGUENDO SEMPRE UN TRAGITTO CONDIVISO E PREORDINATO



Territorio e continuita' Assistenziale:

Presa in carico paziente dimesso

Condivisione tragitto cura e verifiche temporizzate

Riabilitazione e *protesizzazione*.

Presata In carico condivisa con intervalli di verifica legati alle Classi di rischio (Remissione e non guarigione, rischio di recidive)



Diagnostic and Therapeutic Flow-chart USLCENTRO TOSCANA



Prevention,
early
Diagnosis
Health Care
District

Il team: everyWhere

**multiprofessional
Team In Hospital**

Servizio Sanitario della Toscana

**Continuity of
the Care**

Diagnostic and Therapeutic Flow-chart USLCENTRO TOSCANA

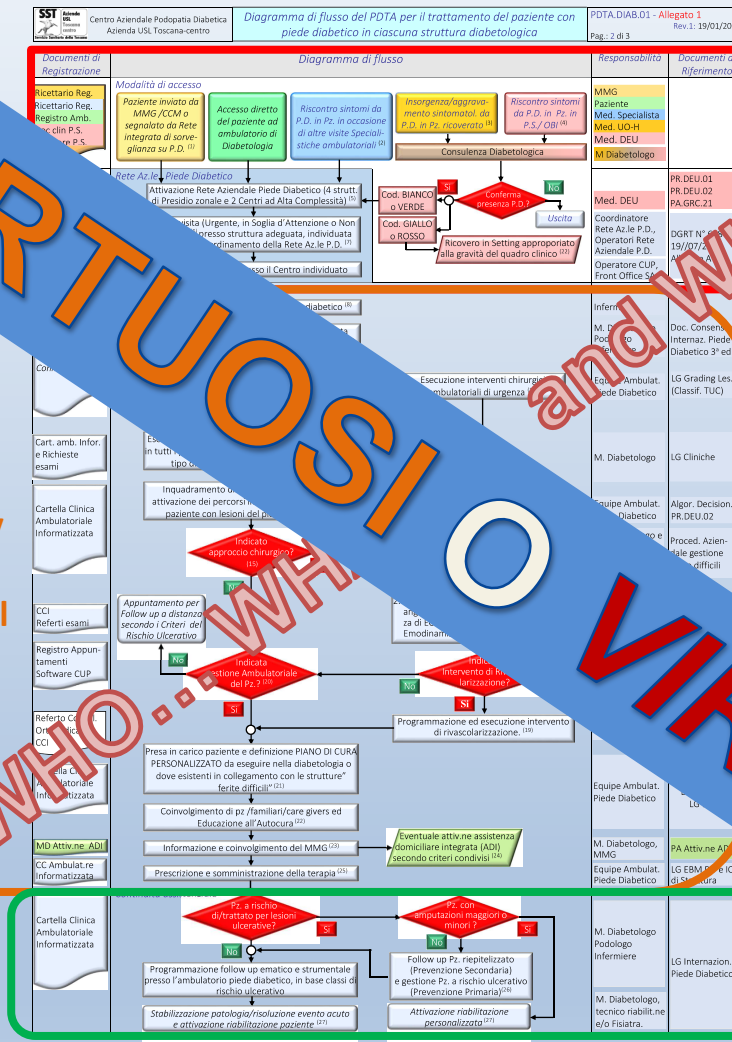
PDTA

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The care of the Multidisciplinary and multiprofessional Team In Hospital

Prevention,
early
Diagnosis
Health Care
District

Continuity the Care



☐ : guardare oggi PIEDE DIABETICO 2.0:

☐ : guardare domani PIEDE DIABETICO 3.0

☐ : Guardare futuro PIEDE DIABETICO 4.0

MISURARE E VALUTARE I DATI

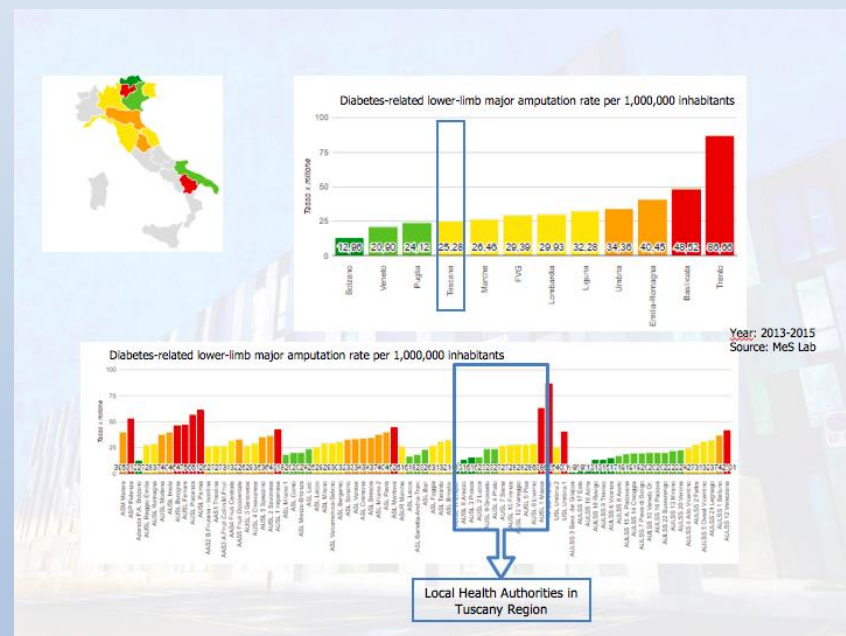
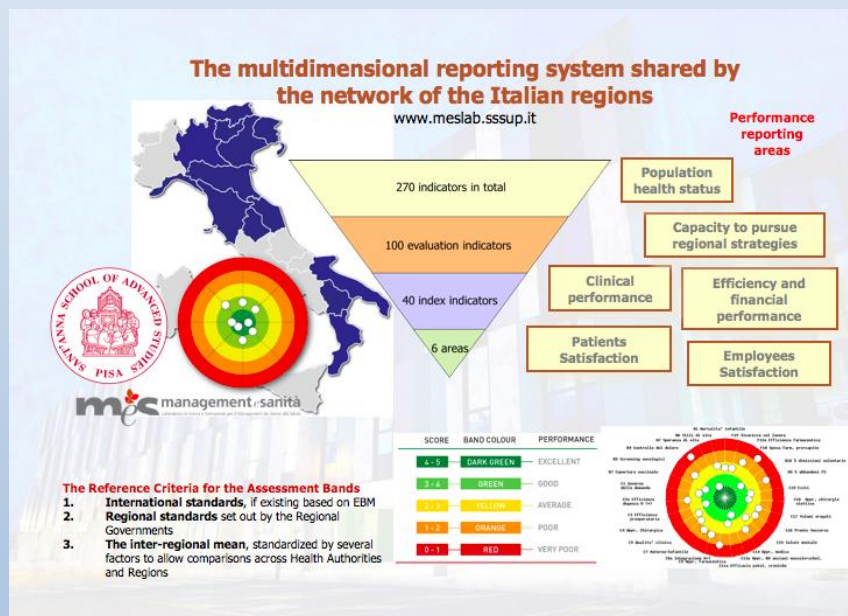
ACCREDITAMENTO DEI PERCORSI

benchmarking

Audit sui risultati.

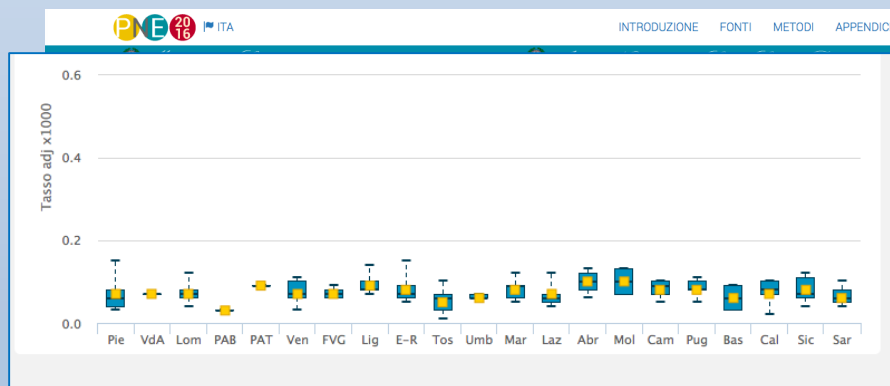


Monitoring Outcomes. (inpatients) Based on “DRG”

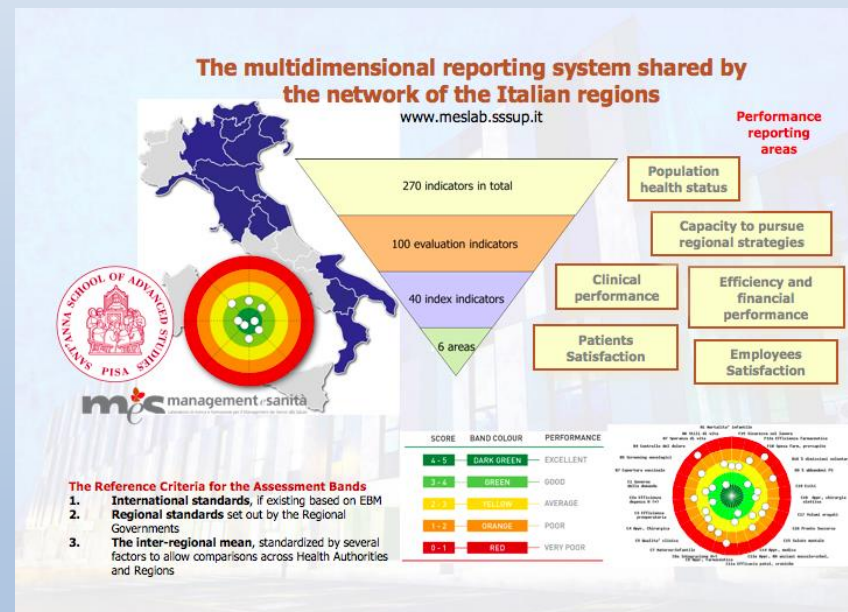


Monitoring Outcomes. (inpatients) Based on “DiseaseRelatedGroup”

National Audit



Regional Audit



Evaluation system

- analyze results
- encourage clinicians to focus on the geographic variation issue; systematic benchmarking
- spread the Population Medicine perspective;
- engage clinicians in a stable community of practice in order to identify gaps in integration and practical models of Integrated Care



Nuti, S et al 2016 Bridging the Gap between Theory and Practice in Integrated Care: The Case of the Diabetic Foot Pathway in Tuscany. *International Journal of Integrated Care* XX(X): X, pp.1-14, DOI: <http://dx.doi.org/10.5334/ijic.1991>

RESEARCH AND THEORY

Bridging the Gap between Theory and Practice in Integrated Care: The Case of the Diabetic Foot Pathway in Tuscany

Sabina Nuti*, Barbara Bini*, Tommaso Grillo Ruggieri*, Alberto Piaggese† and Lucia Ricci†

Introduction and Background: As diabetic foot (DF) care benefits from integration, monitoring geographic variations in lower limb Major Amputation rate enables to highlight potential lack of Integrated Care. In Tuscany (Italy), these DF outcomes were good on average but they varied within the region. In order to stimulate an improvement process towards integration, the project aimed to shift health professionals' focus on the geographic variation issue, promote the Population Medicine approach, and engage professionals in a community of practice.

Method: Three strategies were thus carried out: the use of a transparent performance evaluation system based on benchmarking; the use of patient stories and benchmarking analyses on outcomes, service utilization and costs that cross-checked delivery- and population-based perspectives; the establishment of a stable community of professionals to discuss data and practices.

Results: The project enabled professionals to shift their focus on geographic variation and to a joint accountability on outcomes and costs for the entire patient pathways. Organizational best practices and gaps in integration were identified and improvement actions towards Integrated Care were implemented.

Conclusion and Discussion: For the specific category of care pathways whose geographic variation is related to a lack of Integrated Care, a comprehensive strategy to improve outcomes and reduce equity gaps by diffusing integration should be carried out.

Keywords: diabetes; diabetic foot; geographic variation; performance evaluation; benchmarking; sentinel events; engagement

MODELLI CONDIVISI

ACCREDITAMENTO PROFESSIONALE ESPERIENZA ITALIANA.....



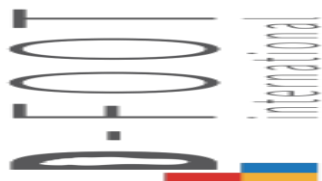
AB(b)A *Auditing, Benchmarking, & Accreditation*

- Co-Chairs

Lee C. Rogers, DPM, FFPM FRCPS(Glasg)

Roberto Anichini, MD (Italy)

Madrid 2018



AB(b)A

Range of Accreditation

LEVEL ONE



LEVEL FOUR



Who Do I Need on My Team?

What skills are needed?

1. The ability to perform hemodynamic and anatomic vascular assessment with revascularization
2. The ability to perform a neurologic work-up
3. The ability to perform site-appropriate culture technique
4. The ability to perform wound assessment and staging/grading of infection and ischemia
5. The ability to perform site-specific bedside and intraoperative I&D/debridement
6. The ability to initiate and modify culture-specific and patient-appropriate antibiotic therapy
7. The ability to perform appropriate postoperative monitoring to reduce the risk of reulceration and infection

AB(b)A Critical Elements

1. QUANTIFICATION OF RISK
2. MEDICAL MANAGEMENT
3. PREVENTION
4. INFECTION
5. VASCULAR
6. WOUND CARE
7. REHABILITATION
8. QUALITY ASSURANCE AND IMPROVEMENT

MEDICAL MANAGEMENT

LEVEL
ONE

Able to assess and manage diabetes and basic prevention of complications

LEVEL
TWO

Able to manage complicated outpatients with diabetes

LEVEL
THREE

Able to manage the inpatient with diabetic foot problems and acute or chronic complications

LEVEL
FOUR

Able to manage the critical inpatient with diabetes and complications

INFECTION

LEVEL
ONE

Able to assess, classify, and empirically treat soft tissue infections

LEVEL
TWO

Able to appropriately use laboratory assessment, basic imaging, and outpatient treatment of soft tissue and bone infections

LEVEL
THREE

Able to utilize advanced imaging, surgical and inpatient management of soft tissue

LEVEL
FOUR

Able to surgically manage osteomyelitis, have pathways for the treatment of MDROs

FUTURO

ARTICLE

The POINT project

Pauline Wilson, Neil Baker, Kristien Van Acker, Norina Gavan, Esther Garcia Morales, Matthew Garafoulis, Stuart Baird, Caroline Teugels, Luc Hendrix, Meike Fransen

Citation: Wilson P, Baker N, Van Acker K et al (2018) The POINT project. *The Diabetic Foot Journal* 2(2): XX–XX

Article points

1. Podiatrists are important in the overall management of diabetic foot through prevention, management and remission
2. The presence and practice of podiatry is greatly varied worldwide with low and middle income countries often without appropriately trained health care professionals
3. A The point document guides multi-disciplinary teams as to which podiatric skills are needed to deliver evidence based foot care irrespective of the presence of podiatrists.

Key words

- Collaboration
- Competency
- Podiatry

Authors

Pauline Wilson is Xxx International Federation of Podiatrists and D-Foot international; Neil Baker is Xxx D-Foot international; Kristien van Acker is Xxx D-Foot international; Norina Gavan is Xxx International Federation of Podiatrists and D-Foot international; Esther Garcia Morales is Xxx D-Foot international; Matthew Garafoulis is Xxx International Federation of Podiatrists; Stuart Baird is Xxx International Federation of Podiatrists; Caroline Teugels is Xxx International Federation of Podiatrists; Luc Hendrix is Xxx D-Foot international; Meike Fransen is Xxx International Federation of Podiatrists

The POINT project is a collaboration between D-Foot international and the International Federation of Podiatrists. The point documents create a standardised staged competency framework for the inclusion of podiatric skills worldwide in the management of diabetic foot disease. The presence of podiatrists with unique skill sets as part of the multidisciplinary diabetic foot team is well established in the literature. Many countries, especially those in lower- and middle-income regions do not have podiatrists available as part of their team. The point document, which is a multidisciplinary consensus, identifies the skills needed to provide podiatric skills across four levels irrespective of the presence of podiatrists. The point document provides guidance for three groups: firstly, for diabetic foot teams in identifying areas of strength and weakness; secondly, for teams without podiatrists to identify the podiatric skills needed; finally, for decision makers to be informed of the skills, which can be provided by podiatrists. The point document is now to be disseminated widely for local translation and implementation.

The POINT (podiatry for international diabetic foot teams) project is a collaboration between D-Foot International and The International Federation of Podiatrists (FIP-IFP). D-Foot international, formerly the Implementation arm of the International Working Group of the Diabetic Foot (IWGDF), is an international non-profit registered association, promoting the global profile of diabetic foot prevention and care through awareness, guidance, education, research and professional development (www.d-foot.org). It is a multidisciplinary network of clinicians involved in the management of diabetic foot disease with a network of over 150 countries around the world. FIP-IFP is an international membership organisation of podiatrists representing 28 countries. It has, for 70 years, promoted the practice of podiatry worldwide showcasing what podiatrists can offer in all areas of lower-limb and foot health.

The aims and objectives of this collaboration were to:

- Facilitate the introduction of a staged podiatry competency training framework in countries where diabetes foot care infrastructures currently exist
- In relation to the above, provide a standardised staged competency based framework for podiatry training on a regional/international levels
- Utilise the D-Foot-initiated foot care as an access point for development of podiatry in countries where podiatry does not formerly exist
- To explore definitions regarding differing levels of podiatry/diabetic foot care and to align the skill levels associated with each level.

The presence of diabetes continues to increase globally with an estimated 629 million people living with the condition worldwide by 2045 (International Diabetes Federation, 2017). Even



GENERIC

This section includes knowledge, skills and behaviours common to all practitioners in the arena of the management of diabetes as a chronic condition.

LEVEL ONE

KNOWLEDGE

- A rudimentary knowledge of the nature of diabetes as a chronic life limiting disease, including its signs and symptoms and complications

SKILLS AND BEHAVIOURS

- Applies information to clinical context within agreed boundaries and protocols
- Refers to, and seeks guidance from, appropriately skilled colleagues when necessary
- Able to reflect on and improve their own practice with support from senior colleagues
- Updates medical histories appropriately
- Uses relevant patient record systems and decision support tools
- Uses up-to-date information and terminology to communicate with patients and colleagues
- Undertakes protocol-led clinical examinations within the scope of their practice
- Communicates to patient, using up-to-date information and appropriate terminology the benefits of good glycaemic control, self-care and monitoring to prevent diabetic complications
- Uses available professional networks for support, reflection and learning.

LEVEL TWO

KNOWLEDGE

- Generic knowledge, skills and behaviours as for Level 1.

SKILLS AND BEHAVIOURS

- Constructively challenges inappropriate practices.

LEVEL THREE

KNOWLEDGE

- A general knowledge of the aetiology of diabetes and the impact of disease progression.
- Aware of the WHO criteria for diabetes diagnosis.
- A basic understanding of pharmacological and non-pharmacological approaches to the management of diabetes
- Can recognise normal and abnormal blood glucose ranges and how to monitor them
- In-depth knowledge of complications secondary to diabetes
- Familiar with diabetes-related national guidance.

SKILLS AND BEHAVIOURS

- Undertakes an examination and assessment to form a diagnosis
- Takes and/or reviews medical and medication histories
- Assesses the patient's understanding, and reinforce the benefits, of good glycaemic control, self-care and monitoring to prevent complications; including the provision of lifestyle advice (i.e. smoking cessation, taking exercise, healthy diet)
- Able to accurately discuss diabetes management with the patient based on available information

The graphic features a large white arrow pointing right, with a circular arrow looping around it. The word "POINT" is written in large white capital letters. Below it, the text "Podiatric Skills for International Diabetic Foot Teams" is written in white. At the bottom, there are four logos: BSN medical, Mölnlycke, TURGO MEDICAL, and JWC journal of wound care.

POINT

Podiatric Skills for International Diabetic Foot Teams

BSN medical
an Essity company

Mölnlycke

TURGO MEDICAL

JWC
journal of wound care

The POINT project

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POPOLAZIONE DIABETICA E PIEDE DIABETICO DUE MODALITA' ASSISTENZIALI

Popolazione Diabetica

Implementare:

- Educazione Terapeutica
- Formazione sulla Patologia e le sue complicanze.
- Target Glicemici
- Approccio Globale

Diabetici a rischio.

- Controllo in base alle classi di rischio.
- Da modificare (deformità nei diabetici senza Complicanze).
- Vere e propri obiettivi da monitorare come facciamo HBA1c.
- Autocontrollo «PIEDE»



Pathway oriented

- Primary prevention education everywhere.
- Early diagnosis and care
- Prevention recurrence
- To improve remission
- Team and patient all together with the same aim

- Intervention on risk class.
- keeping a fast track.
- following the pathway
- In the hospital as in the
- HC district with multidisciplinary and multiprofessional approaches

Nurses, podologist
podiatrists, GPs, Educators.
Surgeons and medical
doctors
Physiatrists, tec physical
activity, orthotist ecc

PUBBLICAZIONI dei gruppi nazionali che si occupano di Piede Diabetico

RICERCA SCIENTIFICA



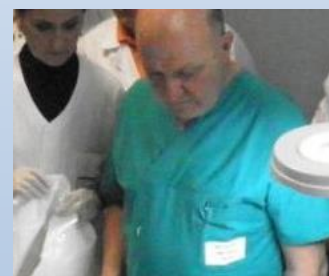


**«CARE OF FOOT NEEDS TO
METAMORPHOSE FROM A
SUBSPECIALITY TO A IPERSPECIALITY
OF DIABETES»**

Patients' Centered approach



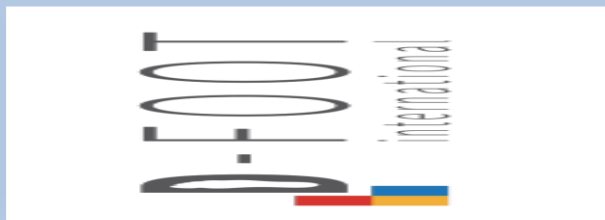
Ringraziamenti: IL GRUPPO DI STUDIO



Ringraziamenti Al «mio» TEAM
LIMB SALVAGE TEAM PISTOIA



I colleghi del DFSG e D-Foot International



La mia Famiglia



Non possiamo pretendere che le cose cambino,
Se continuiamo a fare le stesse cose.

(A. Einstein)

Comincia col fare ciò che
È necessario,
Poi ciò che è possibile
e all' improvviso vi sorprenderete a fare
l'impossibile.

Francesco d'Assisi





diabetic Foot Italy
Gruppo interassociativo AMD - SID
podopatia diabetica



6° Congresso Nazionale del Gruppo di Studio della Podopatia Diabetica

Il Piede Diabetico in Italia nel terzo millennio: discipline diverse,
professionalità integrate in un percorso unitario con il paziente diabetico al centro

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Responsabile Scientifico: Dr. Roberto Da Ros



Starhotel Sarcia Excelsior Palace
Trieste, 21 gennaio / 2 febbraio 2019

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GRAZIE PER L'ATTENZIONE