

CASE DESCRIPTION: Diabetic Foot Valley- Tuscany

Diabetic foot syndrome (DFS) has a mortality rate of 60 per cent within five years, comparable to the most aggressive forms of cancer. In the Tuscany region of Italy, 24,000 of a total 250,000 diabetic patients are estimated to be affected by DFS. Although Tuscany released guidelines for the management of DFS in 2003, their implementation has not been successful, and disparities in treatment and outcomes between different treatment centres remained significant.

This was further exacerbated by the Covid-19 pandemic, where other pathologies were left largely under-resourced. For DFS, comparing 2021 to 2019 this meant an excess of lower limb amputations of +47 per cent and deaths +62 per cent. To react to the situation and implement the Regional Guidelines into clinical practice, the “Diabetic Foot Valley Project” was launched in July 2022.

The project aims to create a community of healthcare units offering diabetic foot ulcer (DFU) management. A community should include three diabetic foot (DF) centres of excellence, each with sufficient capacity and all necessary competencies, and should be surrounded by a network of inter-related centres. *Diabetic Foot Valley - Tuscany* is a bottom-up initiative with participation from all healthcare professionals working in the public diabetic services. The base strategy, applied at various levels of patient care, is to improve patient outcomes by:

- Implementing the International Guidelines for DF Management into clinical practice.
- Implementing the existing Tuscany organisational guideline for DF management into clinical practice.
- Establishing a regional network for DF, involving all the professionals engaged in the management of DF, in hospitals and in the community.
- Homogenising the approach to the cases by sharing diagnosis, treatments, and management in a three-level model of care.
- Collecting data in relation to the pathology, both with regards to clinical, organisational, and economical aspects, to improve the knowledge base and evidence supporting optimal management of DF.
- Promoting the quality of DF management by organising courses, workshops, audits, and scientific meetings for the members of the community of care established in connection with the *Diabetic Foot Valley (DFV) – Tuscany*.

The initiative is intended to be model for improvement of DF management and is currently being spread to other regions of Europe, supported by the European Wound Management Association (EWMA) Diabetic Foot Committee, established by EWMA. Access to key opinion leaders in the various EU regions is crucial to move the initiative forward, which is ensured via the EWMA network.

Evidence of the Tuscany project’s success:

- 14 regional clinics have joined.
- Three regional funded sub-projects target disparities in regional DF care and work towards improving the integrated DF patient’s pathway.
- A regional patient data registry is under preparation funded by the regional authorities.
- A one-stop-entry for industry to facilitate clinical trials has been established, assisted by a regional regulatory expert.
- Regional investment agencies have expressed interest.
- Three industrial clinical trials are being initiated.
- Visibility is quickly rising regionally, nationally and at an EU-level including presentations at the EWMA conference 3-5 May 2023 in Milan, Italy.
- Diabetic Foot Valley Tuscany is trademark protected in Europe.