The aim of this leaflet

This leaflet is designed to help you understand more about pressure ulcers, treatment, and their prevention. It tells you what this condition is, what causes it, what can be done, and practical advice for managing this condition.
**What are pressure ulcers?**

A pressure ulcer is an area of localized damage to the skin and underlying tissue caused by a physical force such as pressure, shear (from gravity), or friction (from rubbing), or by a combination of these.

**What are the classifications of pressure ulcers?**

- **Stage 1:** an area of skin with too much redness that does not turn white when pressure is applied (called a *non-blanchable hyperemia* of intact skin).
- **Stage 2:** a *partial-thickness skin loss* involving the outer and underlying layers of skin (the *epidermis* and *papillary dermis*) and may be seen as an abrasion or blister.
- **Stage 3:** a *full-thickness skin loss* involving the outer and underlying layers of skin through the fat layer (subcutaneous tissue).
- **Stage 4:** skin damage with deep involvement of tissues such as skin, muscle, tendons, and bone.
- **Unstageable lesion:** any dead black tissue (*necrosis*) stuck to the underlying tissues, where it is impossible to determine the level of skin involvement.
- **Deep tissue injury:** any localized area of discolouration of the skin, which appears intact and with a purplish colour.

Who is affected by pressure ulcers and can they be prevented?

Pressure ulcers, also known as pressure injuries or sores, are common in many healthcare settings across Europe and affect different ages in the population. The problem is expected to increase because of the ageing population and related health problems.

The majority of pressure ulcers could be prevented if proper educational activities to family caregivers were done by wound care practitioners.
What are the goals of care for patients who are at risk for pressure ulcers?

1) To identify “at risk” individuals needing prevention and what places them at risk

Risk assessment should be used by clinicians to help their clinical judgement and not by itself. The full risk assessment in patients should include:

- general medical condition
- skin assessment
- mobility
- moistness
- inability to control bowel or bladder functions (incontinence)
- nutrition
- pain

Whilst risk assessment should be performed immediately on entry into an episode of care, this assessment should also be ongoing and frequency of re-assessment should be dependent on change in the patient’s condition with the environment.

2) To maintain and improve tissue tolerance to pressure in order to prevent injury

The skin condition should be inspected regularly by a clinician and documented daily (depending on the clinical/hospital setting) and any changes should be recorded as soon as they are observed. You can also evaluate your own skin or ask a friend or family member to check at-risk areas that may be difficult to see. Initial skin assessment should include the following:

- a) skin over bony prominences (sacrum, heels, hips, ankles, elbows, back of the head) to identify early signs of pressure damage.
- b) identify the condition of skin: dryness, cracking, erythema, crusting, fragility, heat, or induration.

Every effort should be made to optimize the condition of your skin. Avoid excessive rubbing over bony prominences as this does not prevent pressure damage and may cause additional damage.

If there is excess moisture due to incontinence, perspiration, or wound drainage, the source should be eliminated where possible. When moisture cannot be controlled, interventions that can assist in preventing skin damage should be used.

Skin injuries due to friction and shear forces should be minimized through correct positioning and repositioning techniques.

An improved skin condition can help to improve the level of physical activity, and rehabilitation efforts may be started. Maintaining activities, mobility, and range of movement is an appropriate goal for most individuals.

3) To protect against the adverse effects of external physical forces: pressure, friction and shear

Any individual who is assessed to be at risk of developing pressure ulcers should be repositioned, or reposition themselves, if it is medically safe to do so. Frequency of repositioning should be consistent with overall goals. Documentation to record repositioning should be completed. Correct positioning is important to minimize friction and shear in both the bed and chair.

Correct positioning or devices such as pillows or foam wedges should be used to keep bony prominences (for example knees, heels or ankles) from direct contact with one another.

Care should be taken to ensure that these do not interfere with the action of any other pressure relieving support surfaces in use.

When repositioning patients do so in such a way as to minimize the impact on bony prominences.

Devices to assist manual handling should be used during transfer and positioning of patients to minimize shear forces for those patients who require assistance in movement in accordance with EU manual handling regulations.
What is practical advice for preventing or taking care of pressure ulcers?

- If you are at-risk for developing a pressure ulcer because of extended time spent sitting in a chair or wheelchair, you should avoid uninterrupted sitting out of bed and should generally be provided with a pressure redistributing device.

- The period of time in the same position should be defined with your clinician in an individualized care plan but generally will not be over two hours. If possible, you should reposition yourself.

- Depending on your condition, an appropriate dietary program should be started to prevent malnutrition. If you are already malnourished, support and/or supplementation to meet your needs should be started.

- If you have a pressure ulcer, it is very painful so your pain level should be assessed carefully. The source of pain must be investigated and controlled by using appropriate care and devices. However, it may be difficult for you to evaluate your level of pain and it may be something that your caregiver can help with.

- Wound treatment can be approached using the following “TIME” principles:
  - **T**issue that is dead should be removed so that new tissue can form.
  - **I**nfected and **I**nflammatory should be recognized and when appropriate, the clinician should start topical or oral antimicrobials as soon as possible.
  - **M**oisture balance is essential in stage 3 and 4 pressure ulcers particularly, and should be optimized by using absorbent dressings or negative pressure wound therapy.

  - Epidermal (the outer layer of skin) control and support are essential to promote final tissue repair.

- Wound cleansing is an essential aspect of the care of pressure ulcers. Normal saline solution should be used if there are no signs of infection, and specific wound cleansers may be considered if bacteria are causing a delay in healing. Minimal force should be used when cleansing or irrigating a pressure ulcer.