During the life course skin and subcutaneous tissues grow, mature, and age. Besides the ‘natural’ course of intrinsic skin ageing there is also an influence of exposures to environmental factors (e.g., ultraviolet radiation, air pollution, smoking) leading to extrinsic skin ageing. The heralding sign of skin and tissue ageing is the loss of functional capacity. This gradual decline is not pathological per se, but it places ageing individuals at higher risk to develop a wide range of cutaneous problems. Reduced water and altered lipid content and a decrease of natural moisturizing factors of the stratum corneum may cause dry skin and itch, which are highly prevalent in aged populations. An impaired acidification of the skin surface leads to decreased stratum corneum cohesion and to increased susceptibility to pathologic colonization and infection. Fungal infection is one of the most frequent skin diseases in aged populations. Due to diminished immune responses aged skin reacts more slowly to irritants and allergens. A flattening of the dermal-epidermal-junction increases the risk for shear type injuries (e.g., skin tears) and bullae formation. Due to a loss of collagen and extracellular matrix proteins the dermis becomes thinner. Aged skin is less elastic and less deformable increasing the susceptibility to deformation injuries (e.g., pressure ulcers). Decreases of dermal vessels and capillary loops lead to impaired thermoregulation. Skin ageing is a normal biological process and it should not be considered as a disease that must be treated. However, compared to the skin of youth aged skin is compromised in many ways.
Among skin multiple functions, its protection barrier and aesthetics' roles are well known.

The aging process of the skin can be seen as the potentiation of two phenomenons. The first one being the physiological, intrinsic or chronological process and the second linked to the impact of extrinsic factors (physical or chemical) on cell activity and skin structures. As usual, things are much more complicated than we would wish them to be.

The intrinsic aging includes decreased replication of cells, augmented degradation of cellular matrix by increased metalloproteinase (MMP) expression and excess reactive oxygen species (ROS).

The extrinsic aging is caused by environmental oxidative factors. The best known being solar irradiation. Both UVB and UVA are involved and their action is linked both to the total cumulative dose received and the subject’s natural pigmentation. UVB will be mostly absorbed by the epidermis and considered responsible for carcinogenesis. UVA goes to the dermis and interacts, at cellular level, with the extracellular matrix production and degradation.

Aggressions by tobacco, air pollutants, alcohol are also known for their negative effects.

As a result, aging skin will become, thinner, weaker and have a lesser defense role and capacity to rejuvenate.

One also as to consider the potential repercussions of aging processes on other body functions that can have impacts on skin health. Among them: sensitivity losses which will make the skin at risk, falls in which skin will tear and/or bleed easily, under nutrition which is high in the elderly.

Of course the number of diagnoses will increase which can impact negatively on skin integrity and/or repair capacity such as: diabetes, need for anticoagulation...

In conclusion, our fragile and vital skin will age and its protective role diminishes. Prevention of extrinsic factors should be addressed as early as possible.
This presentation will address the evidence of the impact of wounds on the elderly. Over the last several decades numerous research studies have shown the impact that acute and chronic wounds have on many aspects of quality of life. Many different methodologies have been used to explore this area and the evidence concludes that the presence of a wound reduces quality of life in all age groups, but is more severe with increasing age. Most studies show that achieving wound healing is the single most important factor that improves quality of life status and this is indirectly influenced by the control of symptoms such as pain and lack of sleep. Very few studies have examined patients over a longer period of time to determine if the changes that occur at the time of wound healing are maintained over time, or are a temporary effect associated with the relief of healing.

Studying quality of life impact in the elderly has many challenges. It is often difficult to unravel the role that the wound may play in patients with complex co-morbidities. In addition social issues such as lack of social support and attitudes to adherence to treatment make understanding the quality of life issues more problematic. This presentation will use a number of clinical cases to highlight these issues as well as some of the methodological challenges.
The management of wound care in the frail confused older patient poses a number of challenges for patient, carer and healthcare professional. Chronic Pain, infection and mobility issues arising either as a result of wounds themselves or their treatment can worsen underlying cognitive impairment due to delirium. Increasing cognitive and physical frailty therefore and the implications for evidence-based wound care management will therefore be addressed; specific reference will be made to best practice approaches and case studies from the Irish long-term care setting and the development of an inter-professional education collaborative which seeks to address the management of common condition in frail older persons in the long-term care setting.