

EPUAP Pressure Ulcer Curriculum

Preface

Implementing strategic approaches to preventing and treating pressure ulcer/pressure injury (PU/PI) plays an important role in achieving positive outcomes concerning the quality and safety of healthcare for service receivers. To achieve these goals, health professionals must have sufficient knowledge, skills, capabilities and support in PU/PI prevention and treatment. However, concerning the quality and safety of PUs management, having sufficiently trained and qualified staff in multidisciplinary teams at the managerial level is also essential.

The EPUAP Pressure Ulcer Curriculum was developed to guide the education of health professionals involved in quality improvement and safety strategies implementation in managing PUs/PIs. The curriculum should serve as a framework and consists of seven modules covering topics focused on important strategies and activities for professionals at the managerial level responsible for quality and safety of care. Curriculum development respected the didactic requirements for andragogical practices in health professional education. The content of the modules follows Bloom's taxonomy^{1,2} and includes learning outcomes leading to optimising PU/PI management protocols in clinical practice. The author's group of the EPUAP Education Committee developed the EPUAP Pressure Ulcer Curriculum in line with the requirements for evidence-based healthcare within the EPUAP/NPIAP/PPPIA 2019 International Guideline³ and other relevant professional and scientific works.

Introduction

Health professionals are at the forefront of PU/PI prevention and treatment, on a daily basis, and are challenged to do this in a knowledgeable and effective way. It is imperative, therefore, that health professionals have sufficient knowledge, training and support to successfully prevent and treat PU/PIs. While PU/PI education can be found in all health professionals' curricula, it is taught as part of a wider programme. Health professionals who find themselves charged with PU/PI quality improvement, PU/PI monitoring and recording, and PU/PI support and education roles for other colleagues, require more in-depth education. The role, position and competencies of these specialists may vary internationally.

In May 2020, the EPUAP Education Committee started a discussion regarding the possibility of developing educational materials for health professionals who conduct these roles related to comprehensive and systematic PU/PI prevention, treatment, monitoring and quality improvement. The creation of guidebooks or specific manuals per profession were considered but were deemed to be unfit for purpose. Core curricula for health professionals developed by the European Wound Management Association (EWMA)⁴ for wound care and PU/PI care curriculum by the National Health Service (NHS)⁵ inspired the educational committee to develop a curriculum for these health professionals who hold unique roles in relation the PU/PI care, quality improvement and research. A working group of EPUAP trustees with expertise in clinical practice, education and research, initiated and worked on the development of this curriculum. Following the drafting, editing and consultations through 2020 and 2021, final review and approval was conducted by the EPUAP executive committee in October 2022.

The curriculum presented serves as a framework and structure for educational development to identify and prioritise topics that should be taught to achieve a sufficient level of knowledge and expertise to modify and optimise PU/PI prevention and treatment protocols in clinical practice, considering relevant quality indicators. The specialists will have the necessary skills to transfer their knowledge and experience to the rest of the multidisciplinary teams in different clinical settings.

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Aims and objectives

The purpose of this curriculum is to guide health professionals in the creation and implementation of protocols/guidelines/instructions for the prevention and treatment of PU/PI. This curriculum is designed to:

- Improve knowledge of pathophysiology, biomechanics and risk factors of PU/PI
- Facilitate the development of risk assessment protocols
- Define PU/PI prevention and treatment interventions
- Apply strategies to measure performance and apply systemic interventions (based on prevalence and incidence data)
- Provide the skills to implement quality improvement frameworks and protocols
- Provide the skills to engage in the education of other health professionals.

The aim of the curriculum is to help standardise PU/PI care, implement existing tools (for risk identification and PU/PI grading) and clinical guidelines, support the development of high-level, evidence-based implementation strategies, and promote the use of effective tools in the prevention and treatment of PU/PI.

Format and framework

The curriculum is structured in modules, with each module representing a particular topic or subject area. There are seven modules in total (Box 1). The learning objectives are defined using Bloom's taxonomy and state the expected learning outcomes within the domains:

- Knowledge/cognitive/theoretical skills (K)
- Pragmatic, psychomotor skills/application of knowledge (P)

- Awareness/behaviours/attitude (A).

Modules are further presented based on the format of the European Framework of Qualifications (<https://europa.eu/europass/en/european-qualifications-framework-efq>) where module aim, learning outcomes and indicative content are described.

We do not, however, aim to prescribe how this curriculum will be used (or to a particular regulatory/accreditation framework) and are cognisant that the process of implementation of this curriculum could vary according to the national need (legislation, system of professional education, etc.)

Therefore, we are making proposals that allow the content of the study to be expressed in terms of credit value (based on the European Credit Transfer System (ECTS))⁶ and Continuing Professional Development (CPD) hours.⁷

Target group

Although the educational, regulatory and professional context may vary in different countries, this curriculum is intended for health professionals who coordinate specific or 'specialised' PU/PI prevention, treatment and monitoring roles.

Core content

While the curriculum was developed by a group of EPUAP trustees, drawing on their own experience and research, the core material forming the basis of the modules, learning outcomes and indicative content stems from the EPUAP/NPIAP/PPPIA agreed document.⁵

Box 1: Curriculum modules

Module 1: Biomechanics of PU/PI and risk assessment
Module 2: Strategies and interventions for PU/PI prevention
Module 3: Measuring incidence and prevalence of PUs/Pis
Module 4: Treatment of PUs/Pis
Module 5: Implementing best practice in PU/PI prevention and care
Module 6: Health professional education for PU/PI prevention and treatment
Module 7: Quality improvement management in PU/PI care
PU/PI—pressure ulcer/pressure injury

References

1 Bloom BS, Engelhart MD.; Furst EJ et al. Taxonomy of educational objectives: The classification of educational goals. 1956; Vol. Handbook I: Cognitive domain. New York: David McKay Company

2 Krathwohl DR. A revision of Bloom's taxonomy: An overview. *Theory into Practice*. 2002; 41(4): 212–218. https://doi.org/10.1207/s15430421tip4104_2

3 European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019. <https://tinyurl.com/3xxevsyb> (accessed 22 August 2023)

4 Holloway S, Pokorná A, Janssen A et al. Wound curriculum for nurses: Postregistration qualification wound management – European Qualification Framework level 7. *J Wound Care* 2020; 29(Sup7a):S1–S39. <https://doi.org/10.12968/jowc.2020.29.Sup7a.S1>

5 NHS Improvement. Pressure ulcer core curriculum. 2018. <https://tinyurl.com/dnuhx4ze> (accessed 22 August 2023)

6 European Commission. European Education Area. European Credit Transfer and Accumulation System (ECTS). <https://tinyurl.com/c2fvb8as> (accessed 21 August 2023)

7 The CPD Standards Office. <https://tinyurl.com/5n7wk4pm> (accessed 21 August 2023)

Module 1: Biomechanics of PU/PI and risk assessment

Module title	Biomechanics of PU/PI and risk assessment
Level of learning	Specialist knowledge EQF 6/EQF 7
ECTS equivalence	5
Suggested CPD hours	24
Module aim	The module aims to increase the knowledge of biomechanics of PU/PI development and risk assessment, its promotion, implementation and individualised approach
Learning outcomes	At the end of this module the learner practitioner will be able to:
Knowledge/cognitive/theoretical skills (K)	<ul style="list-style-type: none"> ● Explain the biomechanical principles of PU/PI ● Explain the process of PU/PI development from the microcellular cascade to visual identification ● Outline how risk factors relate to the development of PU/PI and indicate how to assess the risk of each individual ● Define and explain the risk factors in relation to specific patient groups (e.g., neonates, children, elderly/older people, malnourished, polymorbid patients) and/or specific environments (e.g., intensive care units, neonatal units, operating theatres, medical-device related PUs/PIs (MDRPU/MDRPIs))
Pragmatic, psychomotor skills/application of knowledge (P)	<ul style="list-style-type: none"> ● Evaluate PU/PI risk assessment tools in relation to their content, validity, reliability and applicability ● Establish risk assessment protocols to include early PU/PI identification and assessment with periodic reassessment as appropriate to the situation ● Conduct a comprehensive risk assessment considering predisposing factors to PU/PI development and environmental considerations ● Analyse and interpret the results of risk assessment and adjust the strategy of implementing preventive measures accordingly ● Provide leadership to the interdisciplinary/multidisciplinary team in relation to PU/PI risk assessment ● Continuously evaluate and adjust risk assessment protocol based on individual status and clinical setting. Educate colleagues, patients and their relatives in relation to PU/PI risk assessment ● Identify the role of technology in the identification of early PU/PI damage
Awareness/attitudes/behaviour (A)	<ul style="list-style-type: none"> ● Articulate the importance of a systematic approach to PU/PI risk assessment including appropriate tools and technology ● Promote the value and benefit of risk assessment and PU/PI prevention as opposed to PU/PI treatment ● Articulate the importance of individual risk assessment leading to individualised interventions ● Promote patient and family active involvement in the risk assessment processes in the context of self-care and self-management
Indicative content	<ul style="list-style-type: none"> ● Biomechanics (mechanobiology) of PU/PI development and the impact of risk assessment ● Risk assessment (risk factors, risk assessment tools) and development of protocols ● Identification of patient risk factors including: age, limited mobility, poor nutrition, hydration, cognitive impairment, sensory impairment, pain, compromised circulation, oxygenation, skin conditions, increased body temperature, differences in related laboratory results, comorbidities, attached devices, long stay on hard surfaces, related, medication, patient with PU/PI currently and/or in the past ● Inter- and multidisciplinary collaboration in risk assessment procedures ● Patient and relatives' education and involvement in risk assessment
Workload	120 student effort hours
Reading	<ul style="list-style-type: none"> ● The etiology of pressure injuries. In: EPUAP/NPIAP/PPPIA. Prevention and treatment of pressure ulcers/injuries: clinical practice guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019. https://tinyurl.com/2p998vmz ● Prevention of pressure injuries. In: EPUAP/NPIAP/PPPIA. Prevention and treatment of pressure ulcers/injuries: clinical practice guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019. https://tinyurl.com/2p998vmz ● Moore ZE, Cowman S. Risk assessment tools for the prevention of pressure ulcers. Cochrane Database Syst Rev 2014; (2):CD006471. https://doi.org/10.1002/14651858.CD006471.pub3 ● Gefen A, Brienza DM, Cuddigan J et al. Our contemporary understanding of the aetiology of pressure ulcers/pressure injuries. Int Wound J 2022; 19(3):692–704. https://doi.org/10.1111/iwj.13667 ● Lustig A, Margi R, Orlov A et al. The mechanobiology theory of the development of medical device-related pressure ulcers revealed through a cell-scale computational modeling framework. Biomech Model Mechanobiol 2021; 20:851–860. https://doi.org/10.1007/s10237-021-01432-w ● Alderden J, Rondinelli J, Pepper G et al. Risk factors for pressure injuries among critical care patients: a systematic review. Int J Nurs Stud 2017; 71:97–114. https://doi.org/10.1016/j.ijnurstu.2017.03.012 ● Lovegrove J, Miles S, Fulbrook P. The relationship between pressure ulcer risk assessment and preventative interventions: a systematic review. J Wound Care 2018; 27(12):862–875. https://doi.org/10.12968/jowc.2018.27.12.862 ● Cox J. Pressure injury risk factors in adult critical care patients: a review of the literature. Ostomy Wound Manage 2017; 63(11):30–43 ● Hultin L, Gunningberg L, Coleman S, Karlsson AC. Pressure ulcer risk assessment-registered nurses' experiences of using PURPOSE T: A focus group study. J Clin Nurs 2022; 31(1–2):231–239. https://doi.org/10.1111/jocn.15901 ● Razmus I, Bergquist-Beringer S. Pressure ulcer risk and prevention practices in pediatric patients: a secondary analysis of data from the national database of nursing quality indicators. Ostomy Wound Manage 2017; 63(2):28–32

Module 2: Strategies and interventions for PU/PI prevention

Module title	Strategies and interventions for PU/PI prevention
Level of learning	Specialist knowledge EQF 6/EQF 7
ECTS equivalence	5
Suggested CPD hours	24
Module aim	This module aims to increase knowledge of PU/PI prevention and how to avoid the deterioration of an existing PU/PI using individualised holistic care approaches
Learning outcomes	At the end of this module the learner practitioner will be able to:
Knowledge/cognitive/theoretical skills (K)	<ul style="list-style-type: none"> ● Understand the impact of preventive measures ● Understand the importance of implementing individualised preventative measures ● Identify appropriate strategies for preventive care plans ● Clarify the effect of prevention strategies in relation to the aetiology of PU/PI development and the intended outcome of the strategy used
Pragmatic, psychomotor skills/application of knowledge (P)	<ul style="list-style-type: none"> ● Implement a comprehensive individualised risk-based PU/PI prevention plan which is modified in response to changes in risk status ● Educate and involve patients and relatives in the process of PU/PI prevention ● Implement individualised preventive skin care regimens ● Implement individualised preventive nutritional support regimens ● Implement individualised preventive repositioning and early mobilisation regimens ● Implement individualised preventive regime for use of support surfaces ● Implement individualised preventive regime for medical-device related PU/PI prevention and treatment ● Identify issues and challenges in clinical practice and modify the care plan accordingly
Awareness/attitudes/behaviour (A)	<ul style="list-style-type: none"> ● Value the prevention of PU/PI as a priority ● Comply with the preventive regimes, care plans, protocols and changes/modifications as required ● Understand the need for the patient and relatives to be actively involved in the development of care plans and interventions in the context of self-care and self-management
Indicative content	<ul style="list-style-type: none"> ● Preventive strategies for PU/PI development (preventive skin care, nutritional support, repositioning and early mobilisation, support surfaces, medical-devices related PUs/Pis) ● How to involve and educate patients and relatives to prevent PUs/Pis ● Skin care regimens: skin care plan, clean hydrated skin, skin protection using barrier products, skin protection using and appropriate textile materials, skin-rubbing avoidance, appropriate incontinence management ● Nutritional support: optimisation of the nutrition and fluid intake and use of nutritional supplements ● Repositioning and early mobilisation: use of correct positioning and reposition techniques, implementation of activities ● Support surfaces: use of pressure relief and/or pressure redistribution materials, devices, equipments, prophylaxis ● Medical-device related PU/PI prevention: pressure reduction and redistribution modalities
Workload	120 student effort hours
Reading	<ul style="list-style-type: none"> ● Interventions for prevention and treatment of pressure injuries. In EPUAP/NPIAP/PPPIA. Prevention and treatment of pressure ulcers/injuries: clinical practice guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019 https://tinyurl.com/2p998vmz ● Moore ZE, Webster J. Dressings and topical agents for preventing pressure ulcers. Cochrane Database Syst Rev 2018; 12(12):CD009362. https://doi.org/10.1002/14651858.CD009362.pub3 ● Gillespie BM, Walker RM, Latimer SL et al. Repositioning for pressure injury prevention in adults. Cochrane Database Syst Rev 2020; 6(6). https://doi.org/10.1002/14651858.CD009958.pub3 ● McInnes E, Jammali-Blasi A, Bell-Syer SE et al. Support surfaces for pressure ulcer prevention. Cochrane Database Syst Rev 2015; (9). https://doi.org/10.1002/14651858.CD001735.pub5 ● Shi C, Dumville JC, Cullum N et al. Reactive air surfaces for preventing pressure ulcers. Cochrane Database Syst Rev 2021; 5(5). https://doi.org/10.1002/14651858.CD013622.pub2 ● Langer G, Fink A. Nutritional interventions for preventing and treating pressure ulcers. Cochrane Database Syst Rev 2014; (6). https://doi.org/10.1002/14651858.CD003216.pub2

Module 3: Measuring incidence and prevalence of PUs/PIs

Module title	Measuring incidence and prevalence
Level of learning	Specialist knowledge EQF 6/EQF 7
Suggested ECTS equivalence	2.5
Suggested CPD hours	12
Module aim	This module aims to increase knowledge of methodologies for monitoring the epidemiology of PUs/PIs and to enhance data use and interpretation, as a basis for evidence-based quality care
Learning outcomes	At the end of this module the learner practitioner will be able to:
Knowledge/cognitive/theoretical skills (K)	<ul style="list-style-type: none"> ● Identify international and national strategies/registries for collecting and processing PU/PI prevalence and incidence data in all healthcare settings ● Identify relevant research in relation to PU/PI prevalence and incidence studies in all healthcare settings ● Outline methodologies for the collection, calculation and processes of prevalence and incidence data ● Explain the relationship between epidemiological data and quality of care, cost effectiveness and the avoidance of adverse events ● Identify issues and challenges in collecting, calculating, processing PU/PI prevalence and incidence data
Pragmatic, psychomotor skills/application of knowledge (P)	<ul style="list-style-type: none"> ● Implement international and national strategies for PU/PI epidemiological data collection and usage ● Analyse and compare the prevalence and incidence data on PUs/PIs as indicators of quality of care and present/publish these results ● Provide education to health professionals with regard to the collection and interpretation of incidence and prevalence data
Awareness/attitudes/behaviour (A)	<ul style="list-style-type: none"> ● Be aware of the importance of a regular and consistent processing of the epidemiological data and the possible impact on pressure ulcer reduction, cost-savings, avoidance of adverse events and increase of patients' quality of life ● Advocate for the use of epidemiological data in planning new strategies to reduce PU/PI prevalence and incidence rates and improve the quality of care
Indicative content	<ul style="list-style-type: none"> ● Terminology: epidemiology, epidemiologic data, definition of prevalence and incidence ● International and national strategies for epidemiological data collection and analysis of PUs/PIs ● Development of a prevalence and incidence studies in different types of settings ● The use of prevalence and incidence data in PUs/PIs analyses as an indicator of quality of care ● Multidisciplinary approach in processing and using epidemiological data ● Impact of the results of prevalence and incidence studies on new strategies to reduce PU development, cost savings, avoidance of adverse events (length of stay, morbidity, mortality), and to increase the quality of life of patients
Workload	60 student effort hours
Reading	<ul style="list-style-type: none"> ● Barakat-Johnson M, Lai M, Wand T et al. Systemwide practice change program to combat hospital-acquired pressure injuries: Translating knowledge into practice. <i>J Nurs Care Qual</i> 2020; 35(1):51–57. https://doi.org/10.1097/NCQ.0000000000000395 ● Barakat-Johnson M, Lai M, Wand T et al. Costs and consequences of an intervention-based program to reduce hospital-acquired pressure injuries in one health district in Australia. <i>Australian Health Review</i> 2019; 43(5):516–525. https://doi.org/10.1071/AH18131 ● Implementing the Guideline. In: EPUAP/NPIAP/PPPIA. Prevention and treatment of pressure ulcers/injuries: clinical practice guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019 https://tinyurl.com/2p998vmz ● EWMA/EPUAP. Pressure ulcer monitoring: a process of evidence-based practice, data sharing and joint efforts. 2018. https://tinyurl.com/dsxxcyn (accessed 21 August 2023) ● Pokorná A, Benešová K, Jarkovský J et al. Pressure injuries in inpatient care facilities in the Czech Republic: analysis of a national electronic database. <i>J Wound Ostomy Continence Nurs</i> 2017; 44(4):331–335. https://doi.org/10.1097/WON.0000000000000344 ● Pokorná A, Dolanová D, Benešová K et al. How the COVID-19 pandemic influences the prevalence of pressure injuries in the Czech Republic: a nationwide analysis of a health registry in 2020. <i>J Tissue Viability</i> 2022; 31(3):424–430. https://doi.org/10.1016/j.jtv.2022.06.003

Module 4: Treatment of PUs/PIs

Module title	Treatment of PUs/PIs
Level of learning	Specialist knowledge EQF 6/EQF 7
Suggested ECTS equivalence	5
Suggested CPD hours	24
Module aim	This module aims to advance knowledge and understanding of PU/PI treatment and facilitate the creation of an individualised PU/PI treatment plans
Learning outcomes	At the end of this modules the learner practitioner will be able to:
Knowledge/cognitive/theoretical skills (K)	<ul style="list-style-type: none"> ● Articulate the connection between wound healing and systemic (intrinsic), extrinsic and local influencing factors ● Know how to use a PU/PI classification system to classify and document the level of tissue loss and tailor the treatment plan ● Understand the difference in treatment options for PUs/PIs from other types of wounds (e.g., incontinence-associated dermatitis (IAD), skin tears) ● Articulate the importance of observing a PU/PI in a systematic, consistent way using a validated wound assessment tool to monitor healing ● Describe the importance of nutrition and hydration for a patient with a PU/PI ● Outline a phase-appropriate wound treatment plan with respect to local therapies ● Describe the role and appropriateness of local antiseptics and systemic antibiotics in the treatment of PUs/PIs ● Describe the role and appropriateness of PU/PI surgery and its indications and contraindications
Pragmatic, psychomotor skills/application of knowledge (P)	<ul style="list-style-type: none"> ● Identify the different types of skin damage in order to differentiate damage due to pressure or other causes (e.g., moisture-associated skin damage or mechanical device-related damage) ● Perform a comprehensive wound assessment ● Consider the healing state of the wound (healable or hard-to-heal/non-healable) before creating a treatment plan ● Demonstrate the use of different methods of wound cleansing including the use of antimicrobials and debridement where appropriate and within scope of practice ● Use systemic antibiotics to control and eradicate infection in individuals with PUs/PIs and clinical evidence of systemic infection related to the competencies of the multidisciplinary team members ● Evaluate and review the effectiveness of treatment as part of the treatment plan and change as needed ● Integrate a treatment protocol for PUs/PIs with general procedures or protocols regarding hard-to-heal (chronic) wound healing in the respective healthcare setting
Awareness/attitudes/behaviour (A)	<ul style="list-style-type: none"> ● Be aware of the need to balance local wound therapy and with holistic general treatment and patients' quality of life (QoL) ● Argue the need for accurate, systematic and consistent assessment of wound healing (normal and pathophysiological) as an essential requirement for management
Indicative content	<ul style="list-style-type: none"> ● Diagnosis and classification of PUs/PIs ● Differential diagnosis of PUs/PIs, moisture-associated skin disease and skin tears ● Assessment of hard-to-heal wounds including PUs/PIs ● Treatment options for hard-to-heal wounds, including PUs/PIs ● Case studies of PU/PI treatment options ● Evaluation of effectiveness of treatment measures ● Tools to guide assessment and treatment of PUs/PIs
Workload	120 student effort hours
Reading	<ul style="list-style-type: none"> ● Holloway S, Pokorná A, Janssen A et al. Wound Curriculum for Nurses: post-registration qualification wound management—European qualification framework level 7. <i>J Wound Care</i> 2020; 29(Sup7a):S1–S39. https://doi.org/10.12968/jowc.2020.29.Sup7a.S1 ● Treatment of pressure injuries. In: EPUAP/NPIAP/PPPIA. Prevention and treatment of pressure ulcers/injuries: clinical practice guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019. https://tinyurl.com/2p998vmz ● McInnes E, Jammali-Blasi A, Bell-Syer SE, Leung V. Support surfaces for treating pressure ulcers. <i>Cochrane Database Syst Rev</i> 2018; 10(10). https://doi.org/10.1002/14651858.CD009490.pub2 ● Westby MJ, Dumville JC, Soares MO et al. Dressings and topical agents for treating pressure ulcers. <i>Cochrane Database Syst Rev</i> 2017; 6(6). https://doi.org/10.1002/14651858.CD011947.pub2

Module 5: Implementing best practice in PU/PI prevention and care

Module title	Implementing best practice in PU/PI prevention and care
Level of learning	Specialist knowledge EQF 6/EQF 7
Suggested ECTS equivalence	5
Suggested CPD hours	24
Module aim	This module aims to advance understanding of the link between the provision of high-quality, evidence-based care and best practice in PU/PI prevention and treatment
Learning outcomes	At the end of this module the learner practitioner will be able to:
Knowledge/cognitive/theoretical skills (K)	<ul style="list-style-type: none"> ● Articulate the importance of evidence-based approaches to PU/PI treatment and prevention ● Identify how and when to develop and update local PU/PI prevention and management protocols ● Know how to implement evidence-based protocols in PU/PI prevention and management to optimise quality of patient care ● Articulate the importance of economic analysis and QoL consideration in PU/PI prevention and treatment
Pragmatic, psychomotor skills/application of knowledge (P)	<ul style="list-style-type: none"> ● Prepare, implement, manage, and update organisational strategies to prevent and manage PUs/Pis with reference to evidence-based practice ● Recognise and address facilitators and barriers to implementation of evidence-based PU/PI care ● Define, monitor and evaluate key performance outcomes following implementation of evidence-based PU/PI prevention and management protocols
Awareness/attitudes/behaviour (A)	<ul style="list-style-type: none"> ● Advocate for the implementation of evidence-based practice in PU/PI prevention and management in clinical settings ● Be aware of the impact of implementing evidence-based protocols for PU/PI prevention and management on the patient, individual staff and organisational levels ● Value the importance of including the multidisciplinary team in preparing, implementing and updating evidence-based protocols in PU/PI prevention and management
Indicative Content	<ul style="list-style-type: none"> ● Evidence-based protocol development and maintenance ● Facilitators and barriers to implementation of evidence-based protocols ● Workforce and skill-mix identification ● Implementation strategies ● Outcome assessment and monitoring ● Quality of life considerations in PU/PI care ● The economics of PU/PI prevention and treatment
Workload	120 student effort hours
Reading	<ul style="list-style-type: none"> ● Implementing the guideline. In: EPUAP/NPIAP/PPPIA. Prevention and treatment of pressure ulcers/injuries: clinical practice guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019. https://tinyurl.com/2p998vmz ● Gillespie BM, Latimer S, Walker RM et al. The quality and clinical applicability of recommendations in pressure injury guidelines: a systematic review of clinical practice guidelines. <i>Int J Nurs Stud</i> 2021; 115. https://doi.org/10.1016/j.ijnurstu.2020.103857 ● Holloway S, Pokorná A, Janssen A et al. Wound curriculum for nurses: post-registration qualification wound management—European qualification framework level 7. <i>J Wound Care</i> 2020; 29(Sup7a):S1–S39. https://doi.org/10.12968/jowc.2020.29.Sup7a.S1 ● Institute for Health Care Improvement. How to Improve. https://tinyurl.com/4kphwbsy (accessed 21 August 2023) ● Niederhauser A, VanDeusen Lukas C, Parker V et al. Comprehensive programs for preventing pressure ulcers: a review of the literature. <i>Adv Skin Wound Care</i> 2012; 25(4):167–190. https://doi.org/10.1097/01.ASW.0000413598.97566.d7 ● Zamboni K, Baker U, Tyagi M et al. How and under what circumstances do quality improvement collaboratives lead to better outcomes? A systematic review. <i>Implementation science: IS</i> 2020; 15(1):27. https://doi.org/10.1186/s13012-020-0978-z

Module 6: Health professional education for PU/PI prevention and treatment

Module title	Health professional education for PU/PI prevention and treatment
Level of learning	Specialist knowledge EQF 6/EQS 7
Suggested ECTS equivalence	5
Suggested CPD hours	24
Module aim	This module aims to increase knowledge and understanding of educational strategies in evidence-based PU/PI prevention and treatment, and how these can be disseminated to other health professionals
Learning outcomes	At the end of this module the learner practitioner will be able to:
Knowledge/cognitive/theoretical skills (K)	<ul style="list-style-type: none"> ● Articulate the importance of assessing knowledge, behaviours and attitudes of health professionals in relation to PU/PI care ● Identify the local, national and international frameworks and curricula for PU/PI education ● Demonstrate an understanding of research addressing PU/PI education strategies and outcomes ● Outline key strategies in the continuing evaluation of knowledge skills and attitudes in relation to PU/PI care ● Understand how to prepare and develop an educational programme for PU/PI prevention and care for health professionals
Pragmatic, psychomotor skills/application of knowledge (P)	<ul style="list-style-type: none"> ● Assess and analyse health professionals' knowledge, skills and attitudes towards PU/PI care with valid and reliable tools ● Implement international and national strategies for educational programmes for health professionals in relation to PU/PI prevention and treatment ● Develop targeted education initiatives to meet the knowledge needs of health professionals in varying contexts taking account of learner levels and local needs ● Use local, national and international education accreditation processes (as appropriate) for the recognition of learning of PU/PI
Awareness/attitudes/behaviour (A)	<ul style="list-style-type: none"> ● Be aware of the need for PU/PI education to be targeted at the appropriate level and context ● Promote continuous updating of PU/PI education and assessment of outcomes and link to continuing professional development ● Be aware of the importance of education within an evidence-based care model of PU/PI care ● Promote and support local, national and international collaboration in relation to PU/PI education
Indicative content	<ul style="list-style-type: none"> ● Education theory and principles for PU/PI care ● Curriculum development and use from local, national and international contexts ● Education credentialing in local, national and international contexts ● The use of assessment of PU/PI education ● Continuing professional development and monitoring of knowledge, skills and attributes ● Educational programme development, preparation of the content, and defining the expected outcomes ● Evaluation and quality assurance of PU/PI educations programmes
Workload	120 student effort hours
Reading	<ul style="list-style-type: none"> ● Health professional education. In: EPUAP/NPIAP/PPPIA. Prevention and treatment of pressure ulcers/ injuries: clinical practice guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019. https://tinyurl.com/2p998vmz ● Manderlier B, Van Damme N, Vanderwee K et al. Development and psychometric validation of PUKAT 2-0, a knowledge assessment tool for pressure ulcer prevention. <i>Int Wound J</i> 2017; 14(6):1041–1051. https://doi.org/10.1111/iwj.12758 ● Beeckman D, Defloor T, Demarré L et al. Pressure ulcers: development and psychometric evaluation of the attitude towards pressure ulcer prevention instrument (APuP). <i>Int J Nurs Stud</i> 2010; 47(11):1432–1441. https://doi.org/10.1016/j.ijnurstu.2010.04.004 ● Demarré L, Vanderwee K, Defloor T et al. Pressure ulcers: knowledge and attitude of nurses and nursing assistants in Belgian nursing homes. <i>J Clin Nurs</i> 2012; 21(9–10):1425–1434. https://doi.org/10.1111/j.1365-2702.2011.03878.x ● Beeckman D, Defloor T, Schoonhoven L, Vanderwee K. Knowledge and attitudes of nurses on pressure ulcer prevention: a cross-sectional multicenter study in Belgian hospitals. <i>Worldviews Evid Based Nurs</i> 2011; 8(3):166–176. https://doi.org/10.1111/j.1741-6787.2011.00217.x ● Aydin AK, Karadağ A. Assessment of nurses' knowledge and practice in prevention and management of deep tissue injury and stage I pressure ulcer. <i>J Wound Ostomy Cont Nurs</i> 2010; 37(5):487–494. https://doi.org/10.1097/WON.0b013e3181edec0b ● Zulkowski K, Ayello EA, Wexler S. Certification and education: do they affect pressure ulcer knowledge in nursing? <i>J Nurs Adm</i> 2010; 40(10 Suppl):S28–S32. https://doi.org/10.1097/NNA.0b013e3181f37e56 ● Kambová V, Pokorná A, Saibertová S. The knowledge and practises of nurses in the prevention of medical devices related injuries in intensive care-questionnaire survey. <i>Cesk Slov Neuroi N</i> 2019; 82(Suppl 1)19–22. https://doi.org/10.14735/amcsnn2019S19

Module 7: Quality improvement management in PU/PI care

Module title	Quality improvement management in PU/PI care
Level of learning	Specialist knowledge EQF 6/EQF 7
Suggested ECTS equivalence	2.5
Suggested CPD hours	12
Module aim	This module aims to advance knowledge and understanding of quality improvement frameworks and processes to advance PU/PI prevention and treatment
Learning outcomes	At the end of this module the learner practitioner will be able to:
Knowledge/cognitive/theoretical skills (K)	<ul style="list-style-type: none"> ● Understand the importance of the implementation of quality improvement process in PU/PI care ● Understand quality indicators in PU/PI prevention and treatment ● Identify the drivers for quality improvement in health organisations in relation to PU/PI care ● Identify quality management tools for use in PU/PI care ● Interpret quality management standards for PU/PIs and how they relate to other management systems ● Recognise the principles of quality audits and participate in internal quality audits in PU/PI prevention and treatment ● Identify research relating to quality improvement in PU/PI care
Pragmatic, psychomotor skills/application of knowledge (P)	<ul style="list-style-type: none"> ● Apply models and techniques to manage and improve quality in organisations in relation to PU/PI care ● Develop the use of lean systems in implementing quality programmes for PU/PI care ● Develop and implement documentation/digital records in PU/PI quality improvement processes ● Support organisations in the development of quality improvement projects and implementation ● Support the organisation and development of impact assessment processes and associated costs
Awareness/attitudes/behaviour (A)	<ul style="list-style-type: none"> ● Promote PU/PI quality improvement programmes in different contexts across organisations ● Understand the importance quality improvement frameworks and models in the prevention and treatment of PU/PIs ● Appreciate the effects of quality improvement processes in an evidence-based care model for PU/PI care
Indicative Content	<ul style="list-style-type: none"> ● Quality improvement/management theory and principles for PU/PI care ● Quality improvements models and frameworks ● Quality improvement frameworks for PU/PI care in local, national and international context ● Implementation theory
Workload	60 student effort hours
Reading	<ul style="list-style-type: none"> ● Health professional education. In: EPUAP/NPIAP/PPPIA. Prevention and treatment of pressure ulcers/injuries: clinical practice guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA. 2019. https://tinyurl.com/2p998vmz ● Soban LM, Hempel S, Munjas BA et al. Preventing pressure ulcers in hospitals: A systematic review of nurse-focused quality improvement interventions. <i>Jt Comm J Qual Patient Saf</i> 2011; 37(6):245–252. https://doi.org/10.1016/s1553-7250(11)37032-8 ● Elliott R, McKinley S, Fox V. Quality improvement program to reduce the prevalence of pressure ulcers in an intensive care unit. <i>Am J Crit</i> 2008; 17(4):328–334 ● Stadnyk B, Mordoch E, Martin D. Factors in facilitating an organisational culture to prevent pressure ulcers among older adults in health-care facilities. <i>J Wound Care</i> 2018; 27(Sup7):S4–S10. https://doi.org/10.12968/jowc.2018.27.Sup7.S4 ● Kottner J, Hahnel E, Lichterfeld-Kottner A et al. Measuring the quality of pressure ulcer prevention: a systematic mapping review of quality indicators. <i>Int Wound J</i> 2018; 15(2):218–224. https://doi.org/10.1111/iwj.12854