



**National Diabetic Foot Health Nursing Framework:
Scope of Practice, Standards and Competencies**

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The Jordanian Nursing Council

The Jordanian Nursing Council (JNC) is a national governmental regulatory institution for nursing and midwifery in Jordan. The JNC is governed by a board headed by Her Royal Highness Princess Muna Al Hussein as president of the council. The board is comprised of 14 key representatives of the health care institutions and through regulating and governing the nursing profession in education, practice and research.

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Acronyms

ADF-NS: Advance Diabetic Foot Nurse Specialist

DF-NS: Diabetic Foot Nurse Specialist

DPN: Diabetic Peripheral Neuropathy

JNC: Jordanian Nursing Council

JNMC: Jordan Nurse and Midwives Council

MOH: Ministry Of Health

NCDEG: National Center for Diabetes, Endocrine and Genetics

RMS: Royal Medical Services

Introduction

This document presents the scope of practice, professional standards and essential competencies for diabetic foot nurse practice in Jordan. This was developed by the Jordanian Nursing Council (JNC) and partners as part of the JNC mission to promote the health status of communities through a sound regulatory system that assures quality services and safe practice to protect the public and the profession. JNC recognizes the importance of the role of diabetic foot specialized nurses and is committed to strengthening their practice to support the quality of foot care services and ultimately protect the public. It can be used as a framework for self-assessment, development, and maintenance of a nurse's knowledge, skills, and attitudes required for improving diabetic foot nurse quality of care. This framework also provides guidance for nursing education by including diabetic foot care competencies in the post-graduate education programs of diabetic foot care and influence curriculum development. In addition, this document will provide an assessment tool that will help in professional development, assess professional performance to ensure delivery of high quality service to clients and their families.

The current framework defines who is a Diabetic Foot Nurse Specialist, Advanced Diabetic Foot Nurse Specialist, scope of practice, standards, and competencies.

Methodology

Diabetic foot nursing is a dynamic and specialized nursing practice profession aims to promote and provide foot care for people with diabetes or people at risk for diabetes in a variety of healthcare practice settings and that requires constant updating and strengthening its practices to meet emerging population and health system challenges.

Jordanian Nursing Council consolidated a national team to develop standards and competencies in collaboration with Ministry of Health (MOH), Royal Medical Services (RMS), and the National Centre for Diabetes, Endocrinology and Genetics (NCDEG) to develop a framework that is consistent with national regulatory mechanisms in Jordan.

The development of the scope of practice, standards and competencies was based on international and regional regulatory frameworks, JNC framework of registered nurse, and consultations with national diabetic foot nursing experts from various settings.

Advanced Practice in Diabetic foot Nursing

Diabetic Foot Nurse Specialist (DF-NS):

Qualifications

- Obtain the first university degree (Bachelor's degree) in nursing or its equivalent from an accredited university or educational institution.
- Registered with the Jordan Nurses and Midwives Council (JNMC) and is licensed to practice under the public health law.
- Obtain a Diploma degree or equivalent in diabetic foot care specialty from an accredited university or educational institution.
- Pass the certification exam mandated by the JNC.

Advance Diabetic Foot Nurse Specialist (ADF-NS)

Qualifications

- Obtain the first university degree (Bachelor's degree) in nursing or its equivalent from an accredited university or educational institution.
- Registered with the JNMC and is licensed to practice under the public health law.
- Obtain Master's degree or equivalent in diabetic foot care specialty from an accredited university or educational institution.
- Pass the certification exam mandated by the JNC.

Scope of practice:

Diabetic foot nurses provide care for diabetic patients with regards to health promotion and prevention, screening, diagnosis, and active treatment of foot problems in conjunction with the healthcare team.

Diabetic foot nurses are accountable for their own practice; they have a responsibility to collaborate and to coordinate care with other disciplines involved in the client's care. This coordination of care enhances the quality of care and improves short-term and long-term outcomes through research and evidenced based practices use critical thinking skills to identify and respond in a timely manner to rapidly changing client, family and environmental situations in order to ensure client safety in all aspects of diabetic foot care.

Diabetic foot nurses have a direct role in developing system and staff guidelines for diabetic foot care that offer a holistic approach to foot care management.

Who will benefit from JNC diabetic foot care standards?

1. Persons with or at risk for diabetes and person with diabetic foot ulcer:

The Professional Standards provide a basis for forming expectations of the practice and will provide a means to assess the quality of the services provided.

2-Educators and academic institutions:

Educators and academic institutions need to use the professional standards as a framework for the development of diabetic foot care education curricula, and to assess performance of student and new graduate.

3. The Advance Diabetic Foot Nurse Specialist and Diabetic Foot Nurse Specialist:

The **ADF-NS** and **DF-NS** use JNC professional and practice standards to illuminate what they do, understand their professional responsibilities, maintain their own professional development, enhance policies and practices, resolve problems and use in continuing education programs. Provide a framework for professional practice and Guidelines that assess the quality of their practice and provide direction for improving practice.

4- Healthcare professionals who are not specialize in diabetic foot:

Healthcare professionals who are not specialize in diabetic foot participate in sharing information about the role of the ADF-NS / DF-NS, appreciation of the importance of the ADF-NS / DF-NS as an integral component of the clinical care of the person with or at risk for diabetic foot, and help to assess the quality of the ADF-NS / DF-NS services provided.

5-Policy makers' employers and government agencies:

Involved in the provision of diabetic foot care as a description of the specialized services provided by the ADF-NS / DF-NS and understanding of the importance of their services to improve quality of life and healthcare outcomes for persons with or at risk for diabetic foot.

6-Managers:

The managers develop systems that adopt JNC professional and Practice standards for job description that identify expectations for practice and performance evaluation tools.

Domains of the standards

The JNC Professional Standards are consistent with the framework used to develop the JNC Professional Standards of a Registered Nurse, 2016. Standards of diabetic foot nurse are divided into two domains: professional standards and practice standards (Figure 1)

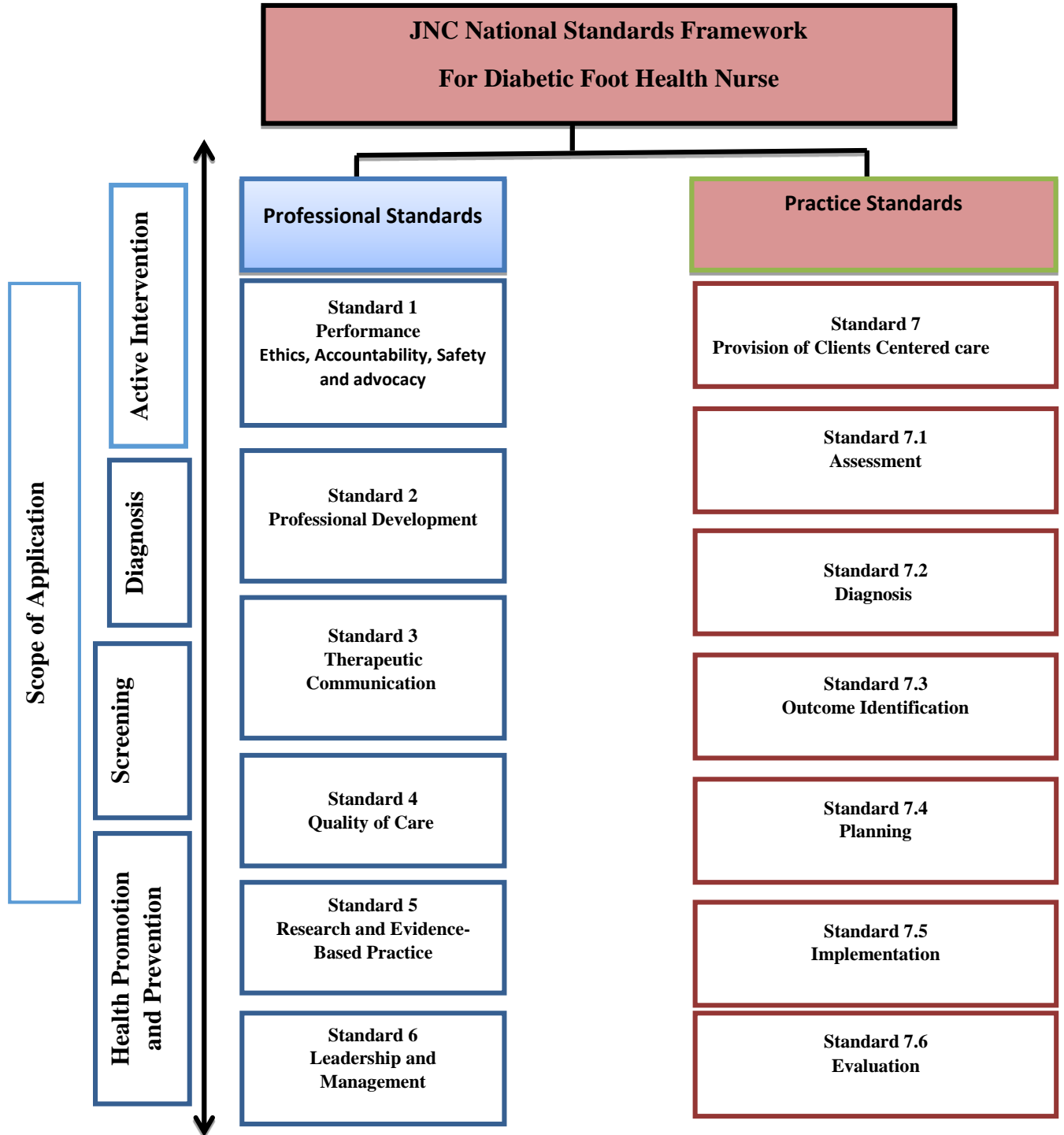


Figure 1: JNC national standards framework for diabetic foot health nurse.

Professional standards

Professional standards are statements about levels of performance against which diabetic foot care practices are assessed to obtain and retain registration.

Standard 1: Performance

This standard relates to the professional and ethical responsibilities, safety, accountability, and the advocacy of individual and group rights in clinical practice. The diabetic foot nurse demonstrate ethical decision making skills and meet safety standards in all scope of applications.

1.1 The diabetic foot nurse practices within professional, legal and ethical nursing context.

Core Competency 1:

Fulfils the responsibility and accountability of diabetic foot nursing professional activities within all relevant national legislation.

Measurement Criteria:

- Identifies and adheres to legislation governing nursing profession.
- Identifies and adheres to the legal and regulatory framework governing diabetic foot health for client of all ages, including laws, policies, protocols and professional guidelines.
- Identifies and adheres to JNC diabetic foot standards and competencies.
- Demonstrates actions show legal implications awareness of diabetic foot nursing practices.
- Recognizes their roles and responsibilities.
- Understands human rights and its effects on health of individuals. Practice in a manner that conforms to the Jordan Nursing and Midwives Council Code of Ethics.

Core competency 2:

Practices in a way that acknowledges the dignity, culture, values, and beliefs within national nursing code of ethics.

Measurement criteria:

- Assesses patients and their families regardless of race, culture, religion, age, gender, physical, or mental state.
- Protects client's privacy and confidentiality.

- Demonstrates respect and promotes the client's right to health, self-determination, being informed and making informed choices, beneficence, and equity.
- Maintains effective process of care when challenged by differing values, beliefs, and risks.
- Understands local culture and beliefs including religious beliefs and gender roles.

Additional Competencies for ADF-NS

The advanced diabetic foot nurse specialist practices accountability and responsibility may be expanded beyond the JNC core competencies to incorporate new procedures and treatments that improve client's care.

Measurement criteria:

- Enforce the integration of national and international regulations, standards, and protocols.
- Enforce guidelines and policies in diabetic foot practice.
- Identify the need for new procedures taking into consideration consumer demands, standards of safe practice and availability of qualified personnel.
- Ensure there are no regulations or bylaws that would constrain the diabetic foot nurse from incorporating new procedures into practice.
- Identify mechanisms for obtaining medical consultation, collaboration and referral related to a procedure.
- Maintain documentation of the process used to achieve the necessary knowledge, skills and ongoing competency of an expanded or new procedure.
- Coach client and significant others into making choice of treatment by providing accurate clear information and considers benefits, risks and outcomes.
- Evaluate the effectiveness of policies and strategies for managing ethical dilemmas inherent in client care, healthcare organization and research.

Core competency 3:

Diabetic foot nurse advocates for the rights of health of clients, individuals, groups, and colleagues within the institutional structures.

Measurement criteria:

- Protects the rights of individuals, clients, and groups.
- Identifies insufficient resources to meet the needs of clients and groups.

- Identifies procedures and practices that infringe the rights of clients.
- Illuminates and recommend policies and guidelines when rights of clients compromised.
- Understands advocacy and empowerment strategies for client.

Additional Competencies for ADF-NS

- Illuminate and recommend policies and guidelines when rights of clients are compromised.
- Advocate for a working culture that promotes motivation and enthusiasm towards professional development of knowledge and competencies as a requirement to achieve excellence in practice.
- Advocate for resources to improve the quality and access to advanced nursing foot care.

1.2 Diabetic foot nurse undertakes safe responses and facilitates a physical, psychosocial, cultural, and spiritual environment that promotes client, individual, and group safety.

Core Competency 1:

Diabetic foot nurse ensures practices that meet organizational safety and quality standards.

Measurement criteria:

- Participates in regulation and evaluation processes of individuals through privileging, credentialing, certification, and accreditation.
- Adheres to national safety guidelines for clients.
- Ensures that organizational policies and guidelines are using current best evidence.
- Ensures the presence of effective mechanisms and programs for implementing and evaluating professional standards.
- Maintains continuing education programs based on JNC continuing education framework.
- Seeks evidence from a wide range of credible or reliable sources to maintain a high quality and safety of diabetic foot care.
- Promotes strategies and techniques for learning and research environment.

Core Competency 2:

Ensure diabetic foot nurse practices maintain safe physical, psychosocial, cultural and spiritual environment.

Measurement Criteria:

- Articulates appropriate emotional and psychological responses with clients in a professional manner.
- Provides a responsive environment by using effective interpersonal skills, psycho-behavioural counselling and social workers.
- Identify opportunities for continuous learning and improvement for client safety.
- Identify existing procedures or policies that may be unsafe or are inconsistent with best practices and take action to address those concerns.
- Assess the immediate safety and care needs for the physical and emotional well-being of clients and their families, and provide interventions as appropriate.
- Reduce or manage the risk of further harm to clients affected some procedures.
- Uses incident reports to report unsafe health practices.

Standard 2: Professional development

The diabetic footnurse is committed to continuous development of knowledge and competencies through systematic effective mechanisms for professional development programs.

Ensures and promotes presence of systematic effective mechanisms for diabetic foot nurse professional development programs.

Core competency 1:

Drives quality improvement programs and activities.

Measurement criteria:

- Ensures the presence of effective mechanism and programs for implementing and evaluating professional diabetic foot standards.
- Maintains continuing education programs based on the Jordanian continuing education framework.
- Promotes strategies and techniques for learning and research culture.

- Participates in regulation and evaluation processes of individuals through privileging, credentialing, certification and accreditation.
- Incorporates organizational policies and guidelines uses current best evidences.

Core competency 2:

Participates in ongoing professional development.

Measurement criteria:

- Acquires knowledge and skills appropriate to specialty area, practice setting, role or situation.
- Obtains or maintains professional certification.
- Participates in educational activities related to appropriate knowledge bases and professional issues for self and others.
- Uses creativity and innovation in activities to improve care delivery and population outcomes.
- Demonstrate commitment to lifelong learning through self-reflection and inquiry to identify learning needs using professional portfolio that provides of individual competence and lifelong learning.

Core competency 3:

Uses appropriate strategies to evaluate professional work environment.

Measurement criteria:

- Recognizes work-related symptoms or stressors, e.g., fatigue and moral distress.
- Undertakes regular self-evaluation of professional activities and practices.
- Considers feedback from colleagues and critically reflects on personal professional performance.
- Uses evaluation and monitoring processes to identify areas of strength and areas of weaknesses to determine which areas would be beneficial.

Additional Competencies for ADF-NS

- Advocate for working environment that promote motivation and enthusiasm towards professional development of knowledge and competences as a requirement to achieve excellence in practice.

- Coach DF-NS and multidisciplinary team members to improve client centered competences.
- Design, implement and evaluate continuing education programs to meet professional advancement needs.
- Ensure the presence of effective mechanism and programs for implementing and evaluating professional diabetic foot care standards.
- Promotes strategies and techniques for learning and research.
- Educate other staff members and colleagues in the conduct of quality and performance improvement projects.
- Pinpoint opportunities for using data generated from evidence-based practice and research.

Standard 3: Therapeutic Communication

The diabetic foot nurse uses therapeutic communication, collaboration, consultation and coordination with clients and families and keeps open communication with multidisciplinary team to provide optimum care.

Core Competency 1:

The diabetic foot nurse communicates effectively in all professional interactions and establishes therapeutic relationships that are goal directed and recognizes professional boundaries.

Measurement Criteria:

- Assesses communication ability, health literacy, resources and preferences of healthcare consumers to inform the inter-professional team and others.
- Uses appropriate communication skills and strategies when communicating with patients and their families.
- Encourages patients and families to clarify and communicate their values.
- Recognizes common barriers, facilitators, and challenges when communicating with patients

- Exhibits knowledge and understanding of human behavior underlying the variety of responses to different life situations.
- Acceptance in communication, unconditional respect, listening, empathy, genuineness, warmth and caring in interacting with patients, significant others, and health care team members.
- Conveys information to patients, significant others, and health care provider in an accurate, clear and simple language
- Recognizes the different styles of communication exhibited by patients, significant others, and health care providers.

Core Competency 2:

Collaborates with the interdisciplinary healthcare team to provide comprehensive care.

Measurement Criteria:

- Builds relationships with other health care providers for the purpose of collaboration and coordination in the provision of lower limb health.
- Collaborates, coordinates and liaises with other health care professionals to provide comprehensive lower limb health services to clients.
- Applies professional judgment to the delegation of care to other health care professionals.
- Addresses potential or actual conflict between health care team members through the use of professional respect, conflict resolution approaches and techniques, and by participating in joint decision-making
- Keeps open and facilitative communication with inter-professional members to prevent error or risk associated with provision, transfer or transition of care.

Core Competency 3:

Coordinates patient care, educational activities, strategies, and other associated processes to achieve agreed professional outcomes.

Measurement Criteria:

- Organizes interventions with other healthcare team members.
 - Maintains information necessary for continuity of care
 - Directs and refers patient to appropriate government, agency, and community resources to ensure continuity of care.
 - Coordinates learning activities that reflect current evidence to improve skills, competencies and professional development
 - Coordinates humans, clinical settings, and community resources and strategies including policies, services, and environmental modifications for developed professional care.

Additional Competencies for ADF-NS

- Performs as model expert practice to healthcare team members and patients and their families.
- Leads in establishing, improving, and sustaining collaborative relationships to achieve safe, quality consumer care
- Provides constructive feedback to interdisciplinary team members.
- Analyses role conflicts or confusion and seeks information that leads to resolution

Standard 4: Quality of care

Develops criteria to evaluate the quality of care and effectiveness of diabetic foot practice and to ensure quality of diabetic foot care activities to the nurse position, education, and practice environment.

Core competency:

Ensures quality of diabetic foot nursing care activities to the nurse position, education, and practice environment in all scope of applications.

Measurement criteria:

- Identifies aspects of care improvement for quality monitoring.
- Identifies indicators used to monitor the quality of effectiveness of diabetic foot nursing care.
- Collects data to assess the quality of effectiveness of diabetic foot nursing care.
- Analyses data to identify opportunities for improving diabetic foot nursing care.
- Formulates recommendations to improve diabetic foot nursing practice and patients care outcomes.
- Implements recommended activities to enhance the quality of diabetic foot nursing practice.
- Participates in interdisciplinary teams to evaluate diabetic foot clinical practices and health services.

Additional competencies for ADF-NS

- Assumes a leadership role in benchmarking and monitoring standards of practice to improve patient care.
- Promotes the use of data collection and analysis to identify opportunities for improvement, development, and initiation of changes throughout the healthcare system as appropriate.
- Participates in efforts to minimize costs and unnecessary duplication of testing or other diagnostic activities and to facilitate timely treatment of the patient.
- Analyzes with the patient and other providers as appropriate factors related to functional status, health behaviors, satisfaction with care and quality of life, symptom management, safety, effectiveness, and cost benefit options.
- Analyzes organizational systems for barriers and promotes enhancements to affect patient healthcare status.
- Bases evaluation on current knowledge, practice, and existing evidence based knowledge and research.
- Uses the results of quality of care activities to initiates changes in practice and throughout the health care delivery system.
- Develops policies and procedures to support and improve the quality of care.

Standard 5: Research and Evidence-Based Practice

Conduct research and critically evaluates and integrates research findings to enhance practice and uses valid research and evidence to reach a clinical judgment.

Core competency:

Integrates research findings to enhance practice and uses valid research and evidence to reach a clinical judgment in all scope of applications.

Measurement criteria:

- Discusses the importance of adopting evidence-based practices in the clinical setting.
- Demonstrates understanding of the different research designs and audit methods.
- Demonstrates ability to undertake literature searches to answer clinical questions and improve patients' outcomes and to answer clinical and non-clinical questions.
- Demonstrates knowledge of current research in diabetes and diabetic foot.
- Uses evidence-based knowledge from research in clinical decision making.
- Participates with the interdisciplinary team members in evaluating quality of patient's care compatible with the new evidence found in research studies.
- Adheres to regulatory requirements related to the research protocol, infection control, safety, and training.

Additional competencies for ADF-NS

- Demonstrates knowledge in Evidence-based practice (e.g., principles, models, levels of evidence, practice questions).
- Interprets and utilize evidence-based practice to develop policies for patient's care.
- Disseminates evidence-based practice through continuing education activities, research committee, consultation and journal clubs.
- Builds a work environment that inspires clinical inquiry and creativity in utilizing evidence based practice and research.
- Demonstrates ability to critically appraise research studies, validity of information and disseminates the findings to colleagues as appropriate to facilitate the integration of evidence-based practices in the clinical setting (e.g., policies and procedures, guidelines, pathways, order sets)

- Demonstrates presentation skills (oral and written) of research and audit results to at local and national levels and is influential in the implementation of findings.
- Identify the current trends and standards (e.g., research, technology, legislative policy).
- Leads the design and implementation of research and audit activities in compliance with human subject protection and reports research findings.
- Creates opportunities for colleagues to participate in research and audit activities.
- Collaborates with higher educational institutions, research funding bodies, health boards and other stakeholders to develop innovative research and audit activities.

Standard 6: Leadership and management

Demonstrates leadership and management skills to carry out the responsibility of nursing services in scope of applications.

Core competency 1:

Promotes self-awareness of values and beliefs, self-development and personal resilience.

Measurement criteria:

- Exhibits knowledge of establishing and leading team, and exhibits creativity and flexibility and the ability to change.
- Guides team members to combine their efforts, skills, talents, insights, passion, enthusiasm and commitment to work together for the greater good.
- Creates and promotes practice culture of positive criticism to self and others.
- Inspires loyalty and equity in valuing clients and colleagues.

Core competency 2:

Provides nursing professional leadership and management skills.

Measurement criteria:

- Acts as a key role player in work setting by participating on committees, councils, and administrative roles.
- Promotes communication of information through writing, publishing, and presentation for professional and lay audiences.
- Influences the decision making process and policy change to improve client care and health services.
- Provides direction to enhance effectiveness of interdisciplinary team.

- Accepts changes based on evidence and addresses emerging situations.
- Develops innovative solutions and take actions to resolve conflict.
- Participates in the management plan of the institutions including disaster management.

Additional competencies for ADF-NS.

- Acts as a professional model for inter-professional team members and healthcare consumers.
- Mentors colleagues in acquiring clinical knowledge, skills, abilities, and judgment.
- Influence decision-making bodies to improve the professional practice environment and healthcare consumer outcomes.
- Use the mechanism of emotion work and learn self-protective coping strategies to manage feelings of distress and grief using a task-oriented approach to care with patients, colleagues and organization.
- Delegates professional practices and aspects of care to others according to their competence and scope of practice.
- Supervise aspects of care delegated to others and give support as needed.
- Uphold accountability and responsibility when delegating aspects of care to others.
- Influence decision-making agencies to improve healthcare

Standard 7: Provision of client centered care

The standards of practice for DF-NS/ADF-NS are guidelines for healthcare professionals and others involved in healthcare for persons with or at risk of diabetic foot and provide a framework for professional practice, guidelines to assess the quality of their practice, and direction for improving practice. The care provided is based on scientific approaches of assessment, diagnosis, outcomes identification, planning, implementation, and evaluation of care.

Standard 7.1: Assessment

Diabetic foot nurse collect comprehensive health data that is pertinent to the patient's foot situation.

Core competency:

Conduct a thorough assessment of the person with or at risk for diabetic foot.

Measurement criteria:

- Collaborates with the patient and/or family to gather holistic assessments through observation, examination, and interview, while being attentive to issues of confidentiality and pertinent legal statutes.
- Uses assessment techniques based on research and knowledge to form a pertinent database which is synthesized, prioritized and documented in a retrievable form.
- Shares the needs assessment with other health professional teams.
- Demonstrates the ability to collect a comprehensive objective and subjective data for the individual, and their healing environment which includes, but not limited, demographics, social determinants of health, health disparities, and physical, functional, biological, psychosocial, emotional, spiritual, cognitive, cultural, age-related, environmental, and economic assessments in a systematic, ongoing process with compassion and respect for the inherent dignity, worth focusing on the uniqueness of the person.
- Orders or performs diagnostic tests and procedures relevant to the client's current status and initiates or interprets such as indicated.
- Prioritizes data collection activities which are founded on the person's immediate condition, anticipated needs or situation.
- Aware of local and national guidance and policies regarding diabetic foot screening and assessment.
- Initiates and interprets necessary investigations in a variety of care settings and within his/her scope of practice.

Additional competencies for the ADF-NS

- Adopts evidence-based clinical practice guidelines to guide screening and diagnostic activities related to diabetic foot.
- Provides expert opinion on screening and assessment programs.
- Where possible, participates in the development of local, evidence-based screening and assessment programs.
- Facilitates colleagues learning of screening and assessment techniques to support service needs.

Standard 7.2: Diagnosis

Diabetic foot nurse identify issues, problems or trends then analyses assessment data to determine the problem, and the needs or areas of need for diabetic foot care, in collaboration with the individual, family and health professional team.

Core competency:

The diabetic foot nurse analyses the assessment data to define the issues and problems.

Measurement criteria:

- Makes diagnoses by using a synthesis of complex information obtained during the interview, physical examination and diagnostic tests or diagnostic procedures.
- Formulates a differential diagnosis based on the assessment, history, physical examination, and diagnostic test result.
- Bases the diagnosis on an accepted theoretical framework that reflects the knowledge and judgment of the diabetic foot nurse.
- Validates diagnoses and risk factors with the clients, group, significant others and health care providers.
- Derives and priorities diagnoses from the assessment data using appropriate complex clinical care.
- Documents diagnosis and clinical impressions in a manner that facilitates identification of client outcomes and their use in plan of care.

Additional competencies for ADF-NS

- Assists the DF-NS and other staff in developing and maintaining competency in problem identification and the diagnostic process.

Standard 7.3: Outcomes Identification

Identifies expected outcomes and their measurement criteria, individualized to the clients, and derived from the assessment data and diagnoses

Core competency:

Diabetic foot nurse identifies expected outcomes according to patient's needs.

Measurement criteria:

- Collaborates with the client, family, significant others and multidisciplinary health team members to develop outcome criteria and goals that are derived from the nursing diagnosis.
- Identifies outcomes that address the client's health status, risk factors, problems and responses to illness and daily life events.
- Determines that outcomes are client-centered, attainable and cost-effective, and must be realistic in relation to client's current and optional capabilities.
- Formulates culturally expected client's health outcomes that are measurable with individualized timeline of accomplishment.
- Weighs the benefits, risks, costs, clinical expertise and evidence based knowledge when formulating achievable outcome criteria.
- Generates a time frame for the attainment of expected outcomes.
- Modifies expected outcomes in collaboration with the client, family, significant others and the multidisciplinary team as a response to changes in health status or situation.
- Evaluates the actual outcomes in relation to expected outcomes, safety, and quality standards.
- Uses outcomes to provide direction for continuity of care.
- Documents expected outcomes in a client-focused format, using simple and clear language, that is understandable to the client, family, and significant others.
- Recognizes that outcomes serve as a record of change in clients' health status.

Additional competencies for ADF-NS

- Assists the DF-NS and multidisciplinary team members in identifying expected outcomes that integrates scientific evidence to enhance the implementation of evidence-based practices.
- Where possible, develops, revises, implements and upgrades regularly clinical policies, pathways, guidelines, and procedures to promote positive outcomes.
- Develops expected outcomes that ensure cost effectiveness, continuity, consistency, and quality of care among the interdisciplinary team members.

Standard 7.4: Planning

Diabetic foot nurse develops diabetic foot care plan to attain the mutually defined goals to achieve desired outcomes.

Core competency:

Diabetic foot nurse develops - in coordination with multidisciplinary team - an individualized care plan based on their assessment to achieve the expected outcomes.

Measurement criteria:

- Develops a plan of care that is based on strategies and alternatives to assist the client, family and community in the achievement of expected outcomes.
- Develops a client-centered plan by collaboration with the client, family and significant others, community and multidisciplinary team members to facilitate optimal compliance and involvement.
- Considers the different variable's that will enhance the plan of care such as client's strengths, developmental level, cultural background, preferences, coping abilities, presence of support system, resources, feasibility of services and technology.
- Plans care within a therapeutic environment that is least restrictive.
- Includes an individualized unique clinical pathway that identifies the timeline and continuity of care.
- Ensures that the client, family and/or significant other received and understood information before signing the consent for care.
- Modifies the plan depending on ongoing assessment of client's responsiveness to interventions and progress towards recovery.
- Incorporates the client's expectations, attitudes, values and beliefs related to the choice of planned therapeutic modalities.
- Documents the plan of action to facilitate communication with other healthcare providers for continuity of care.

Additional competencies for ADF-NS

- Identifies cost and economic implications of the plan.
- Monitors and evaluates the flow of care according to the plan and client's status to ensure consistency in applying the plan.

- Designs new approaches and strategies that are evidence based that are geared towards the changing needs of the client.
- Actively participates in the development and continuous improvement of systems that support the planning process.

Standard 7.5: Implementation

Diabetic foot nurse implements plan in comprehensive, safe, realistic, effective, evidence-based, and timely manner to achieve client's identified health outcomes.

Core competency:

Implement the pre-determined plan of care.

Measurement criteria:

- Coordinates with the client, family, significant others, and multidisciplinary team members to implement the different parts of the plan in a safe, realistic, and timely manner.
- Implements the plan by facilitating the use of different available resources.
- Maintains a therapeutic relationship with the client and significant others to facilitate recovery.
- Applies quality principles while articulating methods, tools, performance measures, and standards as they relate to the implementation of the plan.
- Implements interventions and treatments on the basis of diabetic foot research findings that reflect a scientific basis and theory.
- Performs interventions and treatments within the institutional policies and guidelines.
- Refers directly to specific providers, such as physicians, counsellors or other medical specialists based on client needs.
- Documents interventions and any modifications during the implementation of the plan.

Additional competencies for ADF-NS

- Considers the costs and benefits of the treatment and interventions.

- Integrates team partners in implementation of the plan through collaboration, communication and consultation across of the continuum of care.
- Serves as consultant to provide additional insight and potential solutions including complex clinical cases to improve patient care and outcomes.

Standard 7.6: Evaluation

Diabetic foot nurse evaluates progress in attaining the identified goals of the client and the expected outcomes of the nursing care plan in collaboration with the client, the family and the multidisciplinary team.

Core competency:

Diabetic foot nurse evaluates client's progress toward attainment of outcomes.

Measurement criteria:

1. Conducts a holistic, systematic, ongoing, and criterion based evaluation of the goals and outcomes in relation to the structure, processes, and timeline prescribed in the plan.
2. Involves the client, family, significant others and health care providers in the evaluation processes.
3. Revises diagnosis, expected outcomes, and plan of care in an evaluation process based on advanced knowledge, evidence-based practice and research.
4. Includes in the evaluation analysis the financial impact of specific interventions on individuals, families, communities and populations.
5. Shares evaluation data and conclusion with client and other health care providers.
6. Evaluates the accuracy of diagnosis and effectiveness of interventions in relation to the client's attainment of the expected outcomes.
7. Documents the revision in the plan of care.

Additional competencies for ADF-NS

- Utilizes the results from evaluation data in order to propose new changes, including policies, procedures, documentation forms or other changes according to findings.

- Assists the DF-NS in the evaluating and re-framing complex care plans.
- Analyses evaluation data which collected from client, community, population and / or institution to determine the effectiveness of the plan.

List of Competencies for Diabetic foot Care

1. A. Demonstrates understanding of pathophysiology, epidemiology, and screening of diabetes.

Competencies:

- Describes the basic pathophysiology of diabetes including characteristic signs and symptoms.
- Distinguishes between the major types of diabetes (type 1 diabetes, type 2 diabetes, and gestational diabetes) in terms of etiology, defining characteristics, and incidence and prevalence.
- Identifies normal blood glucose ranges.
- Describes the effects of nutrition and exercise on blood glucose.
- Identifies common risk factors for the development of the acute and chronic complications of diabetes.
- Demonstrates comprehensive understanding of the role of insulin in glucose, lipid and protein metabolism.
- Identifies the appropriate responses to a client's questions concerning diabetes.
- Describe the links between diabetes and other medical conditions (e.g. cardiovascular disease)

Additional competencies for ADF-NS

- Demonstrates an understanding of epidemiological data at a provincial, national and global level related to incidence and prevalence of diabetes, mortality and survival.
- Relates particular signs and symptoms to specific long-term complications of uncontrolled diabetes.

2.B. Demonstrates understanding of anatomy, physiology, pathophysiology, epidemiology, and screening of the foot.

Competencies

- Describes the anatomy and physiology of the foot.

- Carries out thorough assessment of the diabetic foot, include but not limited to vascular, neurological, and musculoskeletal assessment.
- A general knowledge of the biomechanical factors that lead to friction, shear and increased pressure.
- Aware of international guidelines and policies regarding diabetic foot screening and assessment.
- Carries out diabetic foot screening in line with local protocols.

Additional competencies of ADF-NS

- Demonstrates an understanding of epidemiological data at a provincial, national and global level related to incidence and prevalence of diabetic foot complications.
- Facilitates the training of colleagues in screening and assessment.
- Participates in the development of local guidelines and programmes for the screening and early detection of foot problem.

1. Foot care education and promoting diabetic foot self-care

A. Foot care education

Competencies

- Bases diabetic foot education on principles of teaching and learning.
- Assess patient's current knowledge, practice and educational needs and meet these needs.
- Provides education that is pertinent to the client's assessed needs and health values.
- Uses teaching methods appropriate to client's age, developmental level, gender, culture background, language and education.
- Provides education about foot that includes but not limited hygiene, nail care and foot wear.
- Provides education for the patient aimed to prevent recurrent ulceration.
- Documents diabetic foot self-management education.
- Systematically evaluates diabetic foot self-management education.

Additional competencies for ADF-NS:

- Participate in the development of local and national diabetic foot education programs.
- Provide education for other health care providers about diabetic foot self-care skills.

B. Promoting diabetic foot self-care

Competencies

- Understands the importance and effects of patient education and self-management.
- Understands the need for detailed personal action plans to achieve and maintain health-related goals for patients at risk of diabetic foot complication.
- Demonstrates knowledge to support foot self-management skills in diabetic patients.
- Assesses self-care ability and work with the patient to optimise self-care skills related to their feet.
- Includes, diabetic foot self-management education, information about pathophysiology of diabetes, skills necessary to achieve diabetic foot ulcer prevention goals, and benefits of treatment options strategies for coping interpersonal relations and behavior changes.
- Identifies and document potential barriers to adherence to self-care and possible strategies to overcome.

Additional competencies of ADF-NS

- Demonstrates knowledge of theoretical frameworks and educational philosophies underpinning behaviour change.
- Demonstrate knowledge and skills to facilitate behaviour modification.

2. Offloading

Competencies

- Demonstrates knowledge of load redistribution and offloading devices in the management of diabetic foot complications and associated benefits and risks.
- Able to choose the appropriate load redistribution and offloading devices based on a patient's needs, site and severity of foot disease and mobility status.
- Able to apply, modify and provide different types of load redistribution devices according to the recommendations.
- Knowledge of the contraindications for load redistribution and offloading devices.
- Describes and identifies foot deformities and offload at-risk areas of the foot in order to redistribute pressures.

- Develops individualized and mutually agreed load redistribution and offloading management plans with the patient.
- Discusses with senior colleagues the use of load redistribution and offloading devices in patients who have infection and non-critical ischemia.
- Encourages the patient to comply with instructions on the use of load redistribution and offloading devices for the treatment and prevention of ulceration.
- Clearly communicates to the patient about the need for load redistribution and offloading devices for the treatment and prevention of ulceration.
- Clearly communicates to the patient treated with load redistribution and offloading devices about the signs and symptoms that would warrant an emergency assessment.
- An awareness of emergency situations where load redistribution and offloading devices requires quick removal.
- Assesses for and educate patients on the use of additional aids, such as crutches, walking sticks.
- Monitors the effectiveness of load redistribution and offloading devices provided.

Additional competencies for ADF-NS

- Demonstrates a practical understanding of load redistribution and offloading devices for prevention and treatment of ulceration.
- Understand the implications of biomechanics as it relates to mobility and health of the lower limb.
- An awareness of the different load redistribution and offloading options available and accurately assesses the patient for their suitability for different options.
- Discusses the different treatment options available for load redistribution and offloading devices with the patient and gives evidence-based advice on the rationale for choice.
- Identifies when to begin weaning patients out of non-removable load redistribution and offloading devices, and organize temporary removable devices.

3. Skin and toenail care

Competencies

- Understand the appearance of healthy skin and recognizes different skin conditions, such as calluses.
- Describes strategies to prevent skin problems which include but not limited, cleansing, moisturizing and proper foot wear.
- Identifies common conditions of the feet such as corns, calluses, warts, ulcers, tissue changes, fungal infections and nail changes.
- Identifies techniques for proper use of nail nippers, curettes, stainless steel rasp or file, manual sanding files, powered rotary tool (sanders).
- Identifies common skin and nail disorders of the diabetic foot.
- Recognizes changes in aging skin and how this increases the risk of developing skin problems.

Additional competencies for ADF-NS

- Promotes continuing professional development from other experts, educational institutes and evidence-based research about the skin and nail disorders.

4. Wound management

Competencies

- Demonstrates ability, knowledge and understanding of wound healing process and to identify different wound etiologies.
- Demonstrates ability, knowledge and understanding different wound treatments.
- Performs a comprehensive assessment of the risk factors that may lead to diabetic foot ulcers.
- Demonstrates principles of wound bed preparation.
- Identifies management strategies (e.g., dressing selection, offloading, debridement, infection control ...).
- Performs accurate documentation of wound assessment and management strategies.
- Assists individuals and caregivers to make informed health care decisions related to wound care.

Additional competencies for ADF-NS

- Uses current evidence-based research as the basis for wound care.
- Participates in developing patient focused interdisciplinary plans of wound care.

5. Wound debridement

Competencies

- Understands the importance of debridement in preventing foot complications (e.g. removal of callus to reduce plantar pressures and reduce likelihood of tissue damage).
- Understands the principles of debridement and wound bed management to optimize the process of healing.
- Assesses the wound which include but not limited, underlying cause, site, size, devitalized tissue, and condition of wound bed.
- Identifies the indication, contraindications and potential complications of wound debridement.
- Distinguishes between different types of debridement.
- Carries out advanced debridement (with a range of debridement tools) of wounds, within the scope of their practice.
- Recognizes the need, and refers the patient, for surgical debridement appropriately.
- Carries out advanced wound management techniques (e.g. negative pressure wound therapy).

Additional competencies for ADF-NS

- Able to make decisions regarding choice of appropriate debridement method while considering complicated patient circumstances.
- Supports less-experienced colleagues in developing advanced debridement skills.

8. Infection control

Competencies

- Demonstrates a working knowledge of basic infection control procedures (e.g. hand hygiene) and techniques for minimizing cross infection.
- Identifies the safe use of protective equipment when providing foot care treatment including; goggles, face masks, gloves, barrier towels, dust evacuators.

- Describes techniques and protocols which will prevent cross contamination of instruments, equipment, environment, patient exposure.
- Demonstrates ability to distinguish between aseptic and clean technique
- Recognizes the clinical signs and symptoms of wound infection and refers quickly and appropriately.
- Demonstrates knowledge, understanding and ability to take microbiological sampling and reporting.
- Recognizes the signs and symptoms of local wound infection and manages them effectively.
- Collaborates with local infection control, microbiology and multidisciplinary teams to minimize patient risk associated with infection.

Additional competencies for ADF-NS

- Recognizes the need for inpatient treatment of diabetic foot ulceration, and facilitates the process of the patient's admission to hospital using local pathways.

9. Peripheral arterial disease

Competencies

- Carries out a peripheral arterial assessment, including clinical history, palpation of foot pulses and Doppler u/s of posterior tibial, anterior tibial, peroneal and popliteal pulses and record the information on the relevant system.
- Identifies acute/critical limb ischemia and facilitate emergency (acute ischemia) or urgent (critical ischemia) referral to a vascular multidisciplinary team.
- Identifies and recognizes symptoms likely to be due to intermittent claudication, embolic disease or ischemic rest pain and differentiates from other non-arterial foot and leg conditions.
- Adheres to local policies and services available regarding to this conditions.
- Makes appropriate, specific referrals for vascular assessment and interventions.

Additional competencies for ADF-NS:

- Provides the training of colleagues in lower limb peripheral vascular assessment and decision-making.

10. Diabetic peripheral neuropathy and Charcot neuro-osteoarthropathy

Competencies

- Recognize of the causes of Diabetic Peripheral Neuropathy (DPN)
- Recognizes the common signs and symptoms of DPN when reported by patient and refer appropriately.
- Apply evidence-based treatment modalities available for the relief of the symptoms of DPN.
- Provides the patient and/or caregivers with information about DPN in a suitable format.

11. Post-ulcer care

Competencies

- Discusses the concept of ulcer being in ‘remission’ with patient.
- An increased understanding of the natural history of diabetes and its complications, and how to assess severity of complications in relation to preventing foot ulcer recurrence.
- Provides education for the patient and/or caregivers aimed at the prevention of re-ulceration and encourages him/her to comply with advises.
- Maintains up-to-date knowledge of the available topical products (e.g. urea- or paraffin-based emollients), and their role in reducing the prevention of re-ulceration.
- Maintains up-to-date knowledge of biomechanical load redistribution strategies and their implementation.
- Recognizes when standard footwear is appropriate, and when referral for specialist footwear is needed, depending on the patient’s needs.
- Recognize the materials used in the manufacture of foot orthoses for the prevention of re-ulceration.
- Apply technology skills used in foot and plantar pressure measurement.
- Works collaboratively with all other colleagues to optimize patient compliance with footwear or orthotic devices.
- **Additional competencies for ADF-NS:**
- Establishes the cause of previous ulceration in order to develop and implement an appropriate ulcer prevention care plan.

- Develops footwear and orthotic ulcer prevention care plans in collaboration with an orthotist.
- Monitors the effectiveness of load redistribution devices, and recognizes when modification or replacement of such devices is required, and ensures the necessary changes are undertaken appropriately

12. Pharmacotherapy

Competencies

- Recognize the modes of action and effects of relevant medicines, including pharmacokinetics and pharmacodynamics.
- Recognize the potential for unwanted effects (e.g. allergic reactions, drug interactions, precautions and contraindications)
- Identify the potential misuses of relevant medicines.
- Identify patient-specific factors (e.g. age, renal impairment) impact the pharmacokinetics and pharmacodynamics of relevant medicines and that regimen may need to be adjusted based on these factors.

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