

Key Performance Indicators

A Guide to Choosing, Developing and Using KPIs for Clinical Nurse/Midwife Specialists and Advanced Nurse/Midwife Practitioners

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*National Council for the
Professional Development
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*An Chomhairle Náisiúnta d'Fhorbairt
Ghairmiúil an Altranais agus
an Chnáimhseachais*

Introduction

Development of healthcare in Ireland, including its structures and delivery of care, is driven by the safety and quality agenda that has become increasingly explicit in the last ten years (Department of Health and Children 2008). Nurses and midwives have contributed and continue to contribute to the enhancement of patient care and this contribution can be captured and articulated by focusing on their clinical outcomes. The National Council for the Professional Development of Nursing and Midwifery has provided focused guidance on measuring clinical outcomes in its discussion paper *Clinical Outcomes* (National Council 2010a). Building on that guidance, the present discussion paper has been developed as a resource for clinical nurse/midwife specialists (CNSs/CMSs) and advanced nurse/midwife practitioners (ANPs/AMPs) wishing to articulate and clarify their contribution to patient care. The need for this specialised guidance emerged from a recent evaluation of CNSs'/CMSs' and ANPs'/AMPs' clinical outcomes, and the final report on the evaluation contains a recommendation concerning the development of key performance indicators relevant to the roles of these nurses and midwives.

The Evaluation of Clinical Nurse/Midwife Specialists and Advanced Nurse/Midwife Practitioners in Ireland

Known as the *SCAPE Project*, the examination of CNSs'/CMSs' and ANPs'/AMPs' clinical outcomes involved the use of an extensive variety of research methods and data collection tools (Begley *et al* 2010). The study demonstrated that patient care provided by CNSs/CMSs and ANPs/AMPs improved patient outcomes, as well as being safe and cost-neutral. Nursing and midwifery care is provided in a complex and constantly changing environment and it is critically important that resources are utilised in a cost-effective and strategic manner. The *SCAPE Project* has demonstrated the potential that exists within CNSs/CMSs and ANPs/AMPs to support the implementation of health policy, meet the changing health needs of the population, address patients' needs and contribute to service reconfiguration. In their own professional spheres, they have displayed the nursing and midwifery leadership capacity required for the introduction of care models and care programmes within the Health Service Executive (HSE) and, potentially, within other health services. This leadership translates to more everyday and commonplace steps, such as using and disseminating evidence-based clinical guidelines that support a safe environment for patients. Tables 1 and 2 show the main findings of the evaluation in relation to CNSs'/CMSs' and ANPs'/AMPs' roles respectively. (Details of the differences between the outcomes of CNSs' and CMSs' roles can be found in the full evaluation report (Begley *et al* 2010).)

TABLE 1. The Evaluation of CNSs'/CMSs' Roles: Main Findings from the *SCAPE Project* (Begley *et al* 2010)

The CNSs'/CMSs' caseload involves working with the multidisciplinary team to provide specialised assessment, planning, delivery and evaluation of care utilising protocol-driven guidelines. The CNSs'/CMSs' role maximises the team's impact on patient outcomes.

Care and caseload management are provided in line with the core concepts of their role: *clinical focus, patient/client advocacy, education and training, audit and research, and consultancy.*

The main outcomes of the role are:

- Reduced morbidity
- Decreased waiting times
- Earlier access to care
- Decreased re-admission rates
- Increased evidence-based practice
- Increased use of clinical guidelines by the multidisciplinary team
- Increased continuity of care
- Increased patient/client satisfaction
- Increased communication with patients/clients and families
- Promotion of self-management among patients/clients
- Working to expand and develop practice (many CNSs/CMSs are working towards ANP/AMP roles)
- Significant multidisciplinary team support for role
- Provision of clinical leadership
- Clinical audit conducted (research conducted by 53%)
- Overall, no additional cost for CNS/CMS services (staff costs and activity levels for CNS/CMS and non-CNS/-CMS services were matched. CNS/CMS services had decreased costs for colposcopy and challenging behaviour).

TABLE 2. The Evaluation of ANPs' Roles': Main Findings from the SCAPE Project (Strong and Very Strong Evidence) (Begley *et al* 2010)

The ANP's caseload involves holistic assessment, diagnosis, autonomous decision-making regarding treatment, provision of interventions and discharge from a full episode of care. Care delivery and caseload management are provided by ANPs in line with the core concepts of their role: *autonomy in clinical practice, expert practice, professional and clinical leadership, and research.*

The main outcomes of the role are:

- Reduced morbidity
- Decreased waiting times
- Earlier access to care
- Decreased re-admission rates
- Increased patient/client throughput
- Increased evidence-based practice
- Increased use of clinical guidelines by the multidisciplinary team
- Development of guidelines for local, regional and national distribution
- Increased continuity of care
- Increased patient/client satisfaction
- Increased communication with patients/clients and families
- Promotion of self-management among patients/clients
- Working to expand and develop scope of practice to include more complex care provision
- High levels of job satisfaction
- Significant multidisciplinary support for role
- Provision of clinical and professional leadership
- Audit and research conducted
- Overall, no additional cost for ANP service (staff costs and activity levels were matched for ANP and non-ANP services. ANP services had decreased costs for emergency department minor injuries and sexual health).

Key Performance Indicators – Their Relevance to Clinical Nurse/Midwife Specialists and Advanced Nurse/Midwife Practitioners

The evaluation of CNSs/CMSs and ANPs/AMPs in Ireland (Begley *et al* 2010) was concerned with the clinical outcomes and economic implications of CNS/CMS and ANP/AMP roles. Among the findings were data relating to CNSs'/CMSs' and ANPs'/AMPs' needs for clear guidance in the formulation of key performance indicators (KPIs). In this document the National Council provides some preliminary guidance on how CNSs/CMSs and ANPs/AMPs might select and prioritise KPIs appropriate to their individual scope of practice, individual level of autonomy, specific area of specialist or advanced practice, and to their respective organisations' key result areas or service goals.

Monitoring healthcare is not a new concept, but it is only in recent years that it has received extensive attention in the published healthcare literature. In order to monitor the quality of the healthcare system it is essential to determine what aspects need to be measured and to ensure that good quality information is available both within and across organisations (HIQA 2010). To be effective, a measurement system used by a health service will comprise indicators that can:

- quantify trends and characteristics;
- describe performance in achieving health service goals (in this case, elements to which nursing and midwife make a definitive contribution); and
- provide information to improve nursing and midwifery care.

According to the National Nursing Research Unit (NNRU) at King's College, London, indicators serve to foster understanding of a system and how it can be improved, and to monitor performance against agreed standards or benchmarks (Griffiths *et al* 2008). Nurses and midwives perform innumerable roles and tasks in the course of their work, each of which will have explicit and/or implicit standards of performance or

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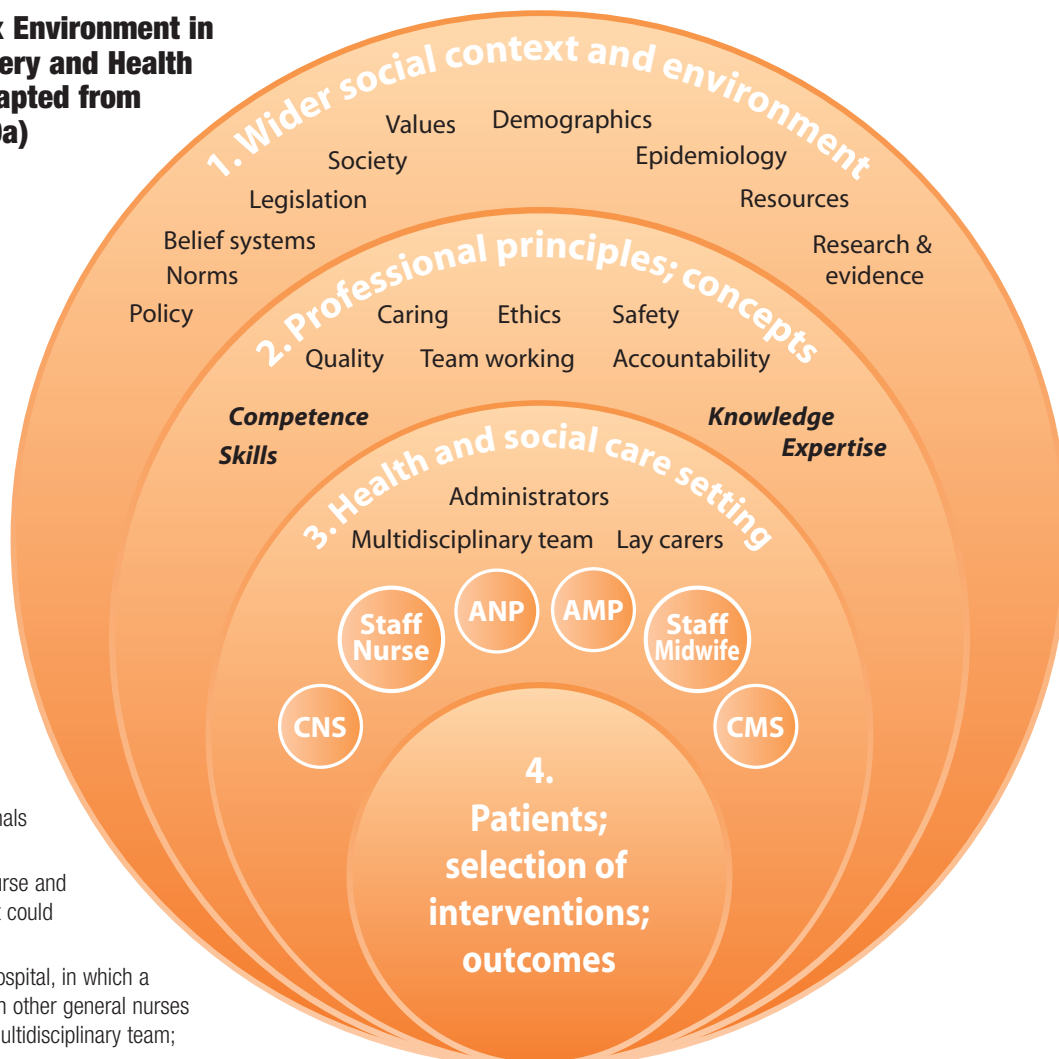
indicators. For the purposes of this document, those performance indicators that are most closely linked to the key result areas (KRAs) determined by the health service provider will be the focus for measuring CNSs'/CMSs' and ANPs'/AMPs' performance. For example, the HSE's *National Service Plan, 2010* states that the Executive's KRAs include development and implementation of programmes in respiratory disease, cardiovascular disease, diabetes, emergency department functionality, etc (HSE 2010). Therefore, KPIs are those quantifiable measurements that reflect the critical success factors of an organisation. Ideally based on agreed measures, KPIs reveal a high-level snapshot of the organisation. Thus when nurses and midwives prepare to select KPIs relevant to their individual area of practice, they must identify the organisation's goals, which are in turn dependent upon the organisation's mission and its stakeholders. Consequently, KPIs act as a measure of progress towards these goals. Whatever form they take, they must be critical to the success of the organisation.

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FIGURE 1. The Complex Environment in which Nursing, Midwifery and Health Care Are Delivered. Adapted from National Council (2010a) Clinical Outcomes.

KEY:

- The wider social context and environment of health care and the various factors that constrain or influence nursing and midwifery practice. These factors are subject to change: for example, the Irish census has shown changes in demographics in the last decade, such as higher levels of inward migration.
- The professional principles and concepts that affect how nurses and midwives are expected to deliver care by their peers, other health and social care professionals and the public, *inter alia*.
- The environment in which the nurse and midwife works. This environment could consist of:
 - one ward in a public acute hospital, in which a general nurse works only with other general nurses as well as members of the multidisciplinary team;
 - one ward and a specialised clinic in a voluntary mental health clinic, in which a psychiatric nurse works with other psychiatric nurses and other members of the multidisciplinary team; or
 - several clinics, two of which might be located in community-based settings and one in a small county hospital, in which general nurses, community midwives and public health nurses work together.
- The individual nurse and midwife or groups of nurses and/or midwives working with and providing care to individual patients or groups of patients.



As discussed previously by the National Council (National Council 2010a), nursing, midwifery and health care are all delivered in a complex environment. Figure 1 attempts to illustrate this complex environment, albeit in an oversimplified way. The National Council's article *Developing and Revising Clinical Outcomes for Pre-Conceptual Care of Women with Diabetes: A Midwife's Experience* illustrates the complex environment in which interventions relating to the pre-conceptual care with Type 1 or Type 2 diabetes are made and clinical outcomes are determined (National Council 2010b, p3).

There are many resources available which can assist in understanding what KPIs are, what their function is and how to develop them (see *References and Bibliography*). The Health Information and Quality Authority (HIQA) has recently published guidance on developing KPIs that is relevant to nurses and midwives working in Ireland (HIQA 2010). (Key points from HIQA's information about KPIs are contained in Box 1.) Figure 2 (overleaf) is taken from that guidance document and illustrates KPIs classified according to the function of care, which could be screening, diagnosis, treatment and follow-up (HIQA 2010, p17).

BOX 1. Key Performance Indicators: Key Points

Types of indicators: generic or specific

Classification of indicators: according to (i) type of care for which the measurement process was developed (e.g., preventive, acute or chronic care); (ii) function of care (e.g., screening, diagnosis, treatment and follow-up)

Use of KPIs: to facilitate improvement of performance through benchmarking against similar organisations and within a single organisation; to identify improvements in safety and quality over time and opportunities for improvement; to promote accountability; to support service-users' choice; to facilitate publication of performance results; to identify areas for further investigation

Considerations:

- KPIs must provide a comprehensive view of the service without placing an excessive burden on organisations to collect data.
- KPIs must be explicitly defined and be interpreted on the basis of high-quality accurate data.
- KPIs must measure outcomes attributable to the performance of the healthcare system in which they are being used.
- Caution should be taken in basing KPIs solely on available data.
- National KPIs need to be supported by local operational KPIs in order to provide information that can enhance and inform practice at a local level.

Source: HIQA (2010) *Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality*.

HIQA also provides guidance for developing and evaluating KPIs. This guidance can be summarised as follows:

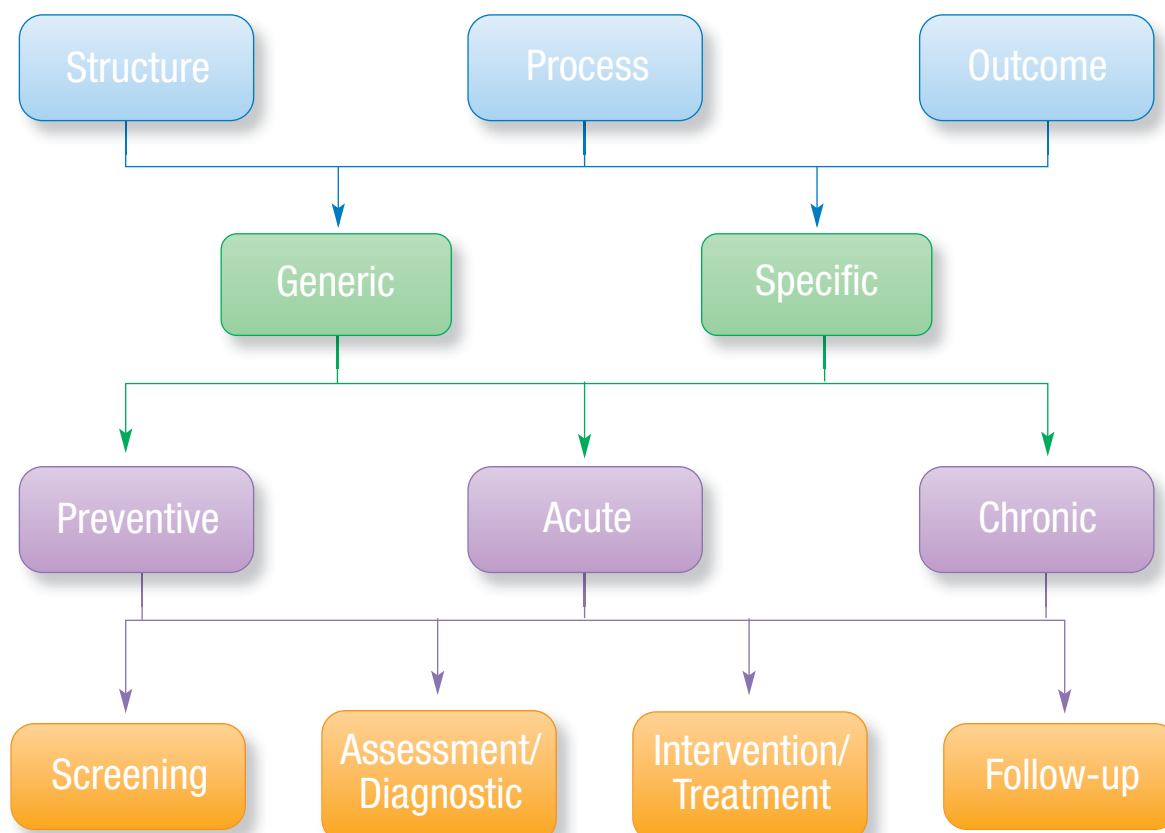
- Define the audience and use for measurement
- Consult with stakeholders and/or advisory group
- Choose the area to measure
- Achieve a balance in measurement
- Determine selection criteria
- Define the indicator (HIQA 2010, pp24-35).

Figure 3 illustrates how CNSs/CMSs might use HIQA's KPI development guidelines to determine KPIs applicable to the context of their work and to demonstrate their contribution to local, regional and national goals. CNSs/CMSs might use information and activities in the *Clinical Nurse/Midwife Specialist Role Resource Pack* (National Council and NMPDU, HSE (South) 2008) to determine and prioritise their KPIs: for example, Activity 2 (*Key Performance Areas*) and Activity 6 (*Identifying and Prioritising Competencies Required for your Role*).

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FIGURE 2. Types of Key Performance Indicators.

Source: HIQA (2010) *Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality.*



Measuring Performance in the Health Service Executive

The system of measurement used by the HSE is *HealthStat*, which is a comprehensive databank of performance information from Irish public health services. It currently provides detailed monthly results from 29 teaching, regional and general hospitals and 32 Local Health Offices (LHOs) responsible for providing health and social care services in the community. *HealthStat* uses a range of measures to provide an overview of how services are being delivered and is used to improve the performance of everyone involved in providing hospital and community-based services. Each month, the information generated through *HealthStat* is discussed at a *HealthStat* Forum meeting, led by the CEO of the HSE and attended by the Regional Director of Integrated Services, the hospital CEOs and Clinical Directors and the Local Health Office managers. The measures are grouped into three areas - *Access*, *Integration* and *Resources*. It should be noted that the *HealthStat* system is not designed to measure clinical outcomes of standards of care – this is the focus of the HSE's Clinical Care and Quality Directorate and of the Health Information and Quality Authority. Nevertheless, reference to the system will help CNSs/CMSs and ANPs/AMPs to focus the scope and wording of their own KPIs.

Source: *HealthStat – Supporting High Performance.* HSE website (<http://www.hse.ie/eng/staff/Healthstat/about/#target>)

FIGURE 3. Developing Key Performance Indicators: A Guide for Clinical Nurse/Midwife Specialists.

Adapted from HIQA (2010) *Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality*, p25.

Sample factors influencing the CNS's/CMS's choice of KPIs

Framework for the Establishment of Clinical Nurse/Midwife Specialist Posts (National Council 2008)

Scope of Nursing and Midwifery Practice Framework (An Bord Altranais 2000)

Job description

Role in multidisciplinary team

International and national evidence relating to health status and health care of specific patient/client groups

International and national policy relating to specific patient/client groups

An Evaluation of Clinical Nurse/Midwife Specialists and Advanced Nurse/Midwife Practitioners in Ireland (Begley et al 2010)

- Selection criteria**
- Validity
 - Reliability
 - Explicit evidence base
 - Acceptability
 - Feasibility
 - Sensitivity
 - Specificity
 - Relevance
 - Balance
 - Tested
 - Safe
 - Avoid duplication
 - Timeliness

Use these criteria

Refer to Appendix 1 for detailed examples

Refer to Appendix 2

Refer to Appendix 1 for detailed examples

Step 1. Define the patient/client group and the goal of CNS-/CMS-provided care

Step 2. Choose the area of care to measure

Step 3. Define selection criteria

Step 4. Define indicator

KPI 1 metadata*

KPI 2 metadata

KPI 3 metadata

Minimum data set†

Minimum data set

Minimum data set

Step 5. Data reporting

Step 6. Pilot test

Review indicators

Step 7. Commence use of KPIs

*Metadata – literally data about data; a description of the data that go into the indicator and how and why the indicator is constructed (Pencheon 2008)

†Minimum data set – a minimum set of elements of information with uniform definitions and categories concerning the specific dimensions of nursing/midwifery (Delaney et al 2003)

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Appendix 1 provides guidance to CNSs/CMSs and ANPs/AMPs on how they might structure KPIs that are relevant to their specific area of practice and help to demonstrate their contribution to national and organisational goals. The areas of practice chosen for these examples are emergency, diabetes and oncology nursing, but resources and documentation appropriate to other specialised areas could be substituted. In Part 1 of Appendix 1, the CNS/CMS or ANP/AMP identifies: (1) relevant national and organisational policies and guidelines and (2) relevant nursing and/or midwifery documentation and evidence. Part 2 of Appendix 1 draws upon HIQA's guidance (HIQA 2010) in order to assist CNSs/CMSs and ANPs/AMPs to formulate KPIs that reflect:

- the *specificity* of care to be measured (i.e. care given to all service users or to clearly identified subgroups of service users),
- the *type* of care to be measured (i.e., preventive, acute or chronic), and
- the *function* of care to be measured (e.g., screening, diagnosis, treatment or follow-up).

Box 2 below illustrates how an ANP working in an emergency department (ED) might display a KPI on an Excel spreadsheet. The contents of the fields in the right-hand column are indicated by the titles in the left-hand column. In this illustration, the suggested category of KPI is *patient care*, but there are many ways of categorising KPIs. In its discussion paper on clinical outcomes (National Council 2010a), the National Council cited Kleinpell's outcomes categories (i.e., care-, patient- and performance-related outcomes) which the author uses to assess outcomes of advanced practice nursing (Kleinpell 2009). Appendix 2 contains more examples of KPIs based on data from the *SCAPE Project* (Begley *et al* 2010).

BOX 2. A Key Performance Indicator for an ANP in a Emergency Department: A Simple Display Format²

Category of Key Performance Indicator	Patient Care
Nurse/Midwife Title and/or Clinical Speciality	ANP (Emergency) ANP working in a emergency department
Key Result Area or Intended Outcome	Decrease in Morbidity
Sample indicator(s)	Symptom management Management of physical discomfort/pain
Target	10% increased improvement in symptom management of pain over 3 months
Sample indicators relating to target	(a) Physical assessment of patient (b) Pain assessment using validated tool (c) Appropriate intervention (according to local policy) (d) Re-assessment of pain within timescale stated in local policy
Metric	Monthly audit 10% of patient charts – evidence of (a), (b), (c) and (d) above documented in patients' charts
Status	
<i>Start date</i>	1 Jan 2011
<i>Follow-up date</i>	1 April 2011
<i>Action(s) to be taken</i>	Target met. Continue audit as above. Target not met. Examine reasons and address as required.
Service Performance Measure (e.g., HealthStat)	Access <input checked="" type="checkbox"/> Integration <input type="checkbox"/> Resources <input type="checkbox"/> Tick appropriate box(es)

Other Considerations for Developing Key Performance Indicators

When developing KPIs, it is likely that CNSs/CMSs and ANPs/AMPs will be using paper-based documentation systems (see National Council 2006). They should bear in mind that these systems may have to be integrated within electronic systems at a later date, so they may need to consult ICT (information and communications technology) experts for advice and guidance on how best to facilitate any future development.

While there is a limited number of references cited in the main body of this discussion paper, its development was informed by a wide range of sources and resources. These are listed in the bibliography.

Notes:

¹No AMPs were available for inclusion in the research.

²Box 2 is intended as an illustration only and is not intended as a template for nursing care in any healthcare setting.

Acknowledgements

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This discussion paper was compiled by Christine Hughes, Professional Development Officer, National Council for the Professional Development of Nursing and Midwifery.

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Appendix 1: Guidance for Clinical Nurse/Midwife Specialists and Advanced Nurse/Midwife Practitioners on Structuring Key Performance Indicators Relevant to Specific Areas of Practice and to National and Organisational Goals

Appendix 1 provides guidance to clinical nurse/midwife specialists and advanced nurse/midwife practitioners on how to structure key performance indicators (KPIs) that are relevant to their specific area of practice and help to demonstrate their contribution to national and organisational goals. The areas of practice chosen for these examples are emergency, diabetes and oncology nursing, but resources and documentation appropriate to other specialised areas could be substituted.

Using Part 1 of the form below, the CNS/CMS or ANP/AMP identifies: (1) relevant national and organisational policies and guidelines and (2) relevant nursing and/or midwifery documentation and evidence. Part 2 of the form draws upon the Health Information and Quality Authority's (HIQA) *Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality* (HIQA 2010) in order to assist CNSs/CMSs and ANPs/AMPs to formulate KPIs that reflect:

- the *specificity* of care to be measured (i.e., care given to all service users or to clearly identified subgroups of service users),
- the *type* of care to be measured (i.e., preventive, acute or chronic), and
- the *function* of care to be measured (e.g., screening, diagnosis, treatment or follow-up).

PART 1. IDENTIFYING SOURCES FOR KEY PERFORMANCE INDICATORS FOR CLINICAL NURSE/MIDWIFE SPECIALISTS AND/OR ADVANCED NURSE/MIDWIFE PRACTITIONERS	
Source	Factors to be considered in the development of the key performance indicator(s)
National Health Policy/Mission Statement	
Mission Statement of Health Service Provider	
Area of Concern to Individual CNS/CMS or ANP/AMP	
Relevant National Policy/Policies and other Guidance	
Health Service Provider's Relevant Policy/Policies and Guidelines	
Relevant Nursing/Midwifery Document(s)	
National	
Organisational	
Local	
Other	
Health Service Provider's Relevant Key Result Area	
Health service provider's relevant performance indicator(s)	

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PART 2. FRAMING THE KEY PERFORMANCE INDICATOR				
Type of KPI	Example			
Specialised area of practice				
Level of autonomy/scope of practice <i>State whether KPI is for CNS, CMS, ANP or AMP</i>	Key Performance Indicator	Structure	Process	Outcome
Generic				
<i>Preventive</i>				
Screening				
Assessment/Diagnostic				
Intervention/Treatment				
Follow-up				
<i>Acute</i>				
Screening				
Assessment/Diagnostic				
Intervention/Treatment				
Follow-up				
<i>Chronic</i>				
Screening				
Assessment/Diagnostic				
Intervention/Treatment				
Follow-up				
Specific				
<i>Preventive</i>				
Screening				
Assessment/Diagnostic				
Intervention/Treatment				
Follow-up				
<i>Acute</i>				
Screening				
Assessment/Diagnostic				
Intervention/Treatment				
Follow-up				
<i>Chronic</i>				
Screening				
Assessment/Diagnostic				
Intervention/Treatment				
Follow-up				

Example 1: The Advanced Nurse Practitioner in Emergency Nursing

EXAMPLE 1. IDENTIFYING SOURCES FOR KEY PERFORMANCE INDICATORS FOR AN ADVANCED NURSE PRACTITIONER IN AN EMERGENCY DEPARTMENT	
Source	Factors to be considered in the development of the key performance indicator(s)
National Health Policy/Mission Statement	To improve the health and well-being of people in Ireland in a manner that promotes better health for everyone, fair access, responsive and appropriate care delivery, and high performance (DoHC (2008) <i>Statement of Strategy, 2008-2010</i>)
Mission Statement of Health Service Provider	To enable people to lead healthier and more fulfilled lives (HSE (2008) <i>HSE Corporate Plan, 2008-2011</i>)
Area of Concern to Individual CNS/CMS or ANP/AMP	Emergency
Relevant National Policy/Policies and other Guidance	<ul style="list-style-type: none"> DoHC (2005) <i>The Prevention of Transmission of Blood-Borne Diseases in the Health-Care Setting</i> DoHC (2009) <i>Slán 2007. Injuries in Ireland: Findings from National Population Surveys</i> DoHC (2010) <i>Changing Cardiovascular Health. National Cardiovascular Policy, 2010-2019</i> HIQA (2010) <i>Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality</i> Office of the Minister for Children and Youth Affairs (2009) <i>Children First. National Guidelines for the Protection and Welfare of Children</i> (2nd edn) Pre-Hospital Emergency Care Council (2010?) <i>Clinical Practice Guidelines</i> (3rd edn) Women's Health Council (2009) <i>Fourteen Principles of Best Practice for Service Delivery. An Interculturally Competent Approach to Meeting the Needs of Victims/Survivors of Gender-Based Violence</i>
Health Service Provider's Relevant Policy/Policies and Guidelines	<ul style="list-style-type: none"> HSE (2009) <i>HSE Procedure for Developing Policies, Procedures, Protocols and Guidelines</i> HSE (2010) <i>HSE National Service Plan, 2010</i> HSE (2010) <i>Achieving Excellence in Clinical Governance. Towards a Culture of Accountability</i> National Children's Hospital (AMNCH), Our Lady's Children's Hospital, and the Children's University Hospital (2008) <i>Child Protection Guidelines for the Children's Hospitals</i>
Relevant Nursing/Midwifery Document(s)	<ul style="list-style-type: none"> ANP (Emergency) job description Other evidence-based guidelines Relevant international and national research and other evidence
National	National policy (see above) An Bord Altranais (2010) <i>Practice Standards and Guidelines for Nurses and Midwives with Prescriptive Authority</i> (2 nd edn) An Bord Altranais (2007) <i>Collaborative Practice Agreement for Nurses and Midwives with Prescriptive Authority</i> (2 nd edn)
Organisational	See health service provider's policies and guidelines above <ul style="list-style-type: none"> HSE (2010) <i>HSE National Service Plan, 2010</i>. Key result area – Programmatic approach to optimise emergency department functionality (p10). CP 7 (Emergency management) (p12).

Continued overleaf

KEY PERFORMANCE INDICATORS

Example 1 continued

	Emergency department waiting times (p52). Reconfigure emergency services (p55).
Local	ANP (Emergency) job description Collaborative practice agreement in relation to nurse prescribing
Other	<ul style="list-style-type: none"> International and national research Office for Health Management (2004) <i>Management Competency User Pack for Nurse and Midwife Managers</i>
Health Service Provider's Relevant Key Result Area	<ul style="list-style-type: none"> HSE (2010) <i>HSE National Service Plan, 2010</i>. Key result area – Programmatic approach to optimise emergency department functionality (p10). CP 7 (Emergency management) (p12). Emergency department waiting times (p52). Reconfigure emergency services (p55).
Health service provider's relevant performance indicator(s)	<ul style="list-style-type: none"> HSE (2010) <i>HSE National Service Plan, 2010</i>. Key result area – Programmatic approach to optimise emergency department functionality (p10). CP 7 (Emergency management) (p12). Emergency department waiting times (p52). Reconfigure emergency services (p55).

Example 2: The Clinical Nurse Specialist in Diabetes Nursing

EXAMPLE 2. IDENTIFYING SOURCES FOR KEY PERFORMANCE INDICATORS FOR A CLINICAL NURSE SPECIALIST IN DIABETES	
Source	Factors to be considered in the development of the key performance indicator(s)
National Health Policy/Mission Statement	To improve the health and well-being of people in Ireland in a manner that promotes better health for everyone, fair access, responsive and appropriate care delivery, and high performance (DoHC (2008) <i>Statement of Strategy, 2008-2010</i>)
Mission Statement of Health Service Provider	To enable people to lead healthier and more fulfilled lives (HSE (2008) <i>HSE Corporate Plan, 2008-2011</i>)
Area of Concern to Individual CNS/CMS or ANP/AMP	Diabetes
Relevant National Policy/Policies and other Guidance	<ul style="list-style-type: none"> DoHC (2006) <i>Diabetes: Prevention and Model for Patient Care</i> DoHC (2008) <i>Tackling Chronic Disease</i> DoHC (2009) <i>Health in Ireland: Key Trends, 2009</i> DoHC (2010) <i>Changing Cardiovascular Health: National Cardiovascular Health Policy, 2010-2019</i> HIQA (2010) <i>Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality</i>
Health Service Provider's Relevant Policy/Policies and Guidelines	<ul style="list-style-type: none"> HSE (2008) <i>Diabetes Expert Advisory Group. First Report: April 2008</i> HSE (2008) <i>A Practical Guide to Integrated Type 2 Diabetes Care</i>
Relevant Nursing/Midwifery Document(s)	<ul style="list-style-type: none"> CNS/CMS (Diabetes) job description HSE (2010) <i>Guidelines for the Management of Pre-Gestational and Gestational Diabetes from Pre-Conception to the Postnatal Period, etc</i> Other evidence-based guidelines Relevant international and national research and other evidence
National	National policy (see above)
Organisational	HSE (2010) <i>Guidelines for the Management of Pre-Gestational and Gestational Diabetes from Pre-Conception to the Postnatal Period, etc</i>
Local	CNS/CMS (Diabetes) job description
Other	<ul style="list-style-type: none"> International and national research Office for Health Management (2004) <i>Management Competency User Pack for Nurse and Midwife Managers</i>
Health Service Provider's Relevant Key Result Area	HSE programmatic approach: Develop and implement a programme for diabetes (<i>HSE National Service Plan, 2010</i>)
Health service provider's relevant performance indicator(s)	Primary care teams (PCTs): % of PCTs that are implementing structured integrated diabetes care (as defined by the diabetes policy 2006 and the HSE's EAG (expert advisory group) 2008); number of patients/clients formally participating in structured integrated diabetes care (as defined by the diabetes policy 2006 and the HSE's EAG 2008)

Example 3: The Advanced Nurse Practitioner in Oncology Nursing

EXAMPLE 3. IDENTIFYING SOURCES FOR KEY PERFORMANCE INDICATORS FOR AN ADVANCED NURSE PRACTITIONER IN ONCOLOGY	
Source	Factors to be considered in the development of the key performance indicator(s)
National Health Policy/Mission Statement	To improve the health and well-being of people in Ireland in a manner that promotes better health for everyone, fair access, responsive and appropriate care delivery, and high performance (DoHC (2008) <i>Statement of Strategy, 2008-2010</i>)
Mission Statement of Health Service Provider	To enable people to lead healthier and more fulfilled lives (HSE (2008) <i>HSE Corporate Plan, 2008-2011</i>)
Area of Concern to Individual CNS/CMS or ANP/AMP	Oncology
Relevant National Policy/Policies and other Guidance	<ul style="list-style-type: none"> DoHC (2006) <i>A Strategy for Cancer Control in Ireland</i> DoHC (2008) <i>Tackling Chronic Disease</i> DoHC (2008) <i>Building a Culture of Patient Safety</i> DoHC (2009) <i>Health in Ireland: Key Trends, 2009</i> DoHC (2009) <i>National Men's Health Policy, 2008-2013</i> DoHC (2010) <i>Palliative Care for Children with Life-Limiting Conditions – A National Policy</i> HIQA (2006) <i>National Quality Assurance Standards for Symptomatic Breast Disease Services</i> HIQA (2009) <i>Report of the Evaluation of the Use of Resources in the National Population-Based Cancer Screening Programmes and Associated Services</i> HIQA (2010) <i>Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality</i> HIQA (2010) <i>Report of the National Quality Review of Symptomatic Breast Disease Services in Ireland</i> National Cancer Screening Service publications on breast, cervical and colorectal cancer screening Women's Health Council (2008) <i>A Review of the Bio-Medical Evidence on Breast, Ovarian and Cervical Cancer</i>
Health Service Provider's Relevant Policy/Policies and Guidelines	<ul style="list-style-type: none"> HSE (2006) <i>Transformation Programme, 2007-2010</i> HSE (2009) <i>Palliative Care Services – Five Year/Medium Term Development Framework (2009-2013)</i>
Relevant Nursing/Midwifery Document(s)	<ul style="list-style-type: none"> ANP (Oncology) job description NCNM (2008) <i>Framework for the Establishment of Advanced Nurse Practitioner and Advanced Midwife Practitioner Posts</i> Other evidence-based guidelines Relevant international and national research and other evidence
National	National policy (see above)
Organisational	
Local	ANP (Oncology) job description
Other	<ul style="list-style-type: none"> International and national research Office for Health Management (2004) <i>Management Competency User Pack for Nurse and Midwife Managers</i>

Health Service Provider's Relevant Key Result Area	HSE programmatic approach: (<i>HSE National Service Plan, 2010</i>) See <i>Palliative Care</i> in <i>HSE National Service Plan, 2010</i> , pp41-2, 68. See <i>National Cancer Control Programme</i> in <i>HSE National Service Plan, 2010</i> , pp59-62, 71-2.
Health service provider's relevant performance indicator(s)	Development of metrics to support programmes for patient and quality initiatives (<i>HSE National Service Plan, 2010</i> , p11) See <i>Palliative Care</i> in <i>HSE National Service Plan, 2010</i> , pp41-2, 68. See <i>National Cancer Control Programme</i> in <i>HSE National Service Plan, 2010</i> , pp59-62, 71-2.

Appendix 2: Examples of Key Performance Indicators Based on Data from the SCAPE Project

The SCAPE Project (Begley *et al* 2010) was a two-year study commissioned by the National Council for the Professional Development of Nursing and Midwifery. Its purpose was to examine the clinical outcomes of clinical nurse/midwife specialists (CNSs/CMSs) and advanced nurse/midwife practitioners (ANPs/AMPs) in Ireland. A recommendation emerging from the study concerned the use of key performance indicators (KPIs) by these nurses and midwives. The following tables illustrate how KPIs might be displayed on an Excel spreadsheet. The KPIs themselves might be used by an ANP working in a emergency department (ED), a CNS in diabetes working in an acute general hospital and an ANP in oncology.

N.B., the following three examples are not intended as templates for nursing or midwifery care.

Example 1: The Advanced Nurse Practitioner in Emergency Nursing

Category of KPI	Patient Care	Effect on Team	Health Service
Nurse/Midwife Title and/or Clinical Speciality	Advanced Nurse Practitioner (Emergency)		
Key Result Area or Intended Outcome	Decrease in Morbidity	Increase in Use of Evidence-Based Practice	Increase Collaboration among Care Providers
Sample indicator(s)	<ul style="list-style-type: none"> Symptom management Management of physical discomfort/pain 	Utilisation of evidence-based clinical guidelines, e.g., clinical decision rules to justify exposure of patients to ionising radiation	<ul style="list-style-type: none"> Enhance collaboration with all members of multidisciplinary team Enhance patient referrals between members of multidisciplinary team
Target	10% increased improvement in symptom management of pain over 3 months	10% increased use of guideline for decision-making in 3 months	20% increase in consultations with members of multidisciplinary team on complex cases
Sample indicators relating to target	(a) Physical assessment of patient (b) Pain assessment using validated tool (c) Appropriate intervention (according to local policy) (d) Re-assessment of pain within timescale stated in local policy	(a) Refer to clinical decision rules (b) Justify X-ray according to decision rules (c) Document outcome in patients' charts	(a) Attend 8 case reviews monthly with emergency consultant (b) Refer patients to multidisciplinary team for ongoing care (c) Document outcome in patients' charts
Metric	Monthly audit 10% of patient charts – evidence of (a), (b), (c) and (d) above documented in patients' charts	Monthly audit 10% of patient charts – evidence of (a), (b) and (c) above documented in patients' charts	Monthly review of patient charts – evidence of (a), (b) and (c) above documented in patients' charts; log of clinical issues discussed at case reviews; feedback from specialist clinics
Status			
Start date	01-Jan-11	01-Jan-11	01-Jan-11
Follow-up date	01-Apr-11	01-Apr-11	01-Apr-11
Action(s) to be taken	Target met. Continue audit as above. Target not met. Examine reasons and address as required.	Target met. Continue audit as above. Target not met. Examine reasons and address as required.	Target met. Continue audit as above. Target not met. Examine reasons and address as required.
Service Performance Measure (e.g., HealthStat)	Tick appropriate box(es) Access <input checked="" type="checkbox"/> Integration Resources	Tick appropriate box(es) Access <input checked="" type="checkbox"/> Integration Resources	Tick appropriate box(es) Access <input checked="" type="checkbox"/> Integration Resources

Example 2: The Clinical Nurse Specialist in Diabetes Nursing

Category of KPI	Patient Care	Effect on Team	Health Service
Nurse/Midwife Title and/or Clinical Speciality	Clinical Nurse Specialist (Diabetes)		
Key Result Area or Intended Outcome	Increases Knowledge and Skill of Multidisciplinary Teams		
Sample indicator(s) Target(s)	<p>Adherence to Treatment Plan</p> <p>Compliance with medication regime and health promotion advice</p> <ul style="list-style-type: none"> 10% reduction in number of patients attending emergency department with diabetic ketoacidosis (DKA) in 6 months 50% reduction in number of patients admitted with DKA admissions over 6 months increase rate of patient knowledge of prevention of DKA by 20% 	<p>Education of nursing, midwifery and multidisciplinary teams</p> <ul style="list-style-type: none"> 60% of staff nurses on medical and surgical wards to have attended education sessions by CNS within 6 months staff knowledge increased by 20% 	<p>Continuity of Care</p> <p>Consistency of care provided to patients with diabetes</p> <p>(a) All patient advice (in-patient, OPD, telephone) to be recorded in a consistent manner and in an accessible format for all team members.</p> <p>(b) A protocol detailing expected education standard for patients newly diagnosed with type 2 diabetes is implemented.</p> <p>(c) All patients have access to telephone advice from a CNS within one day of contact with service.</p>
Sample indicators relating to target(s)	<p>(a) Educate patients on insulin injection technique</p> <p>(b) Educate patients on management of hypoglycaemia</p> <p>(c) Educate patients on prevention of diabetic ketoacidosis (DKA)</p>	<p>(a) Provide monthly 30-minute education sessions to staff nurses. All staff nurses on medical and surgical wards to attend one session every 6 months.</p> <p>(b) Present case review to multidisciplinary team every 3 months.</p>	<p>(a) 80% notes adhere to protocol</p> <p>(b) 70% patients referred to structured programme</p> <p>(c) 90% of patients have access to CNS telephone advice within one day</p>
Metric	Monthly audits of numbers of patients admitted with DKA	Record attendance at nurses' education sessions	<ul style="list-style-type: none"> Audit number of patients referred to structured education programme (e.g. DESMOND). Audit of 10% of patient notes regarding telephone advice checking against adherence to protocol and access times to CNS advice.
Status			
Start date	01-Jan-11	01-Jan-11	01-Jan-11
Follow-up date	01-Apr-11	1st July 2011	01-Apr-11
Action(s) to be taken	Target met. Continue audit as above. Target not met. Examine reasons and address as required.	Target met. Continue audit as above. Target not met. Examine reasons and address as required.	Target met. Continue audit as above. Target not met. Examine reasons and address as required.
Service Performance Measure (e.g., HealthStat)	Tick appropriate box(es)		
	<p>Access <input checked="" type="checkbox"/></p> <p>Integration <input type="checkbox"/></p> <p>Resources <input checked="" type="checkbox"/></p>	<p>Access <input type="checkbox"/></p> <p>Integration <input checked="" type="checkbox"/></p> <p>Resources <input checked="" type="checkbox"/></p>	<p>Access <input checked="" type="checkbox"/></p> <p>Integration <input checked="" type="checkbox"/></p> <p>Resources <input checked="" type="checkbox"/></p>

Example 3: The Advanced Nurse Practitioner in Oncology Nursing

Category of KPI	Patient Care	Effect on Team	Health Service
Advanced Nurse Practitioner (Oncology)			
Nurse/Midwife Title and/or Clinical Speciality			
Key Result Area or Intended Outcome	Provides More Timely Care/Improves Access to Services	Acts as Role Model and Motivates Staff	Patient-Centred Service Development
Sample indicator(s)	Improved access to care Reduced waiting lists for patients with a diagnosis of breast or colorectal cancer and requiring follow-up/surveillance	Clinical leadership Practice development	Openness to innovation Contribute to strategic policy development
Target	Full physical assessment of 100% of all patients with a diagnosis of breast or colorectal cancer and referred to ANP service following completion of therapeutic regime	Provide 20 hours of teaching on home-based cancer care to community nursing services	Full assessment of 100% of all patients with a diagnosis of breast cancer and receiving endocrine treatment in order to (1) assess adherence to medication regime and (2) advise on management/control of side-effects
Sample indicators relating to target	(a) Comprehensive physical assessment of patient (b) Comprehensive psycho-social assessment of patient (c) Prepare care plan (d) Initiate and provide access to ongoing psycho-social support	(a) Community nurses attend education sessions (b) Telephone support provided as required	(a) Comprehensive assessment of patient in relation to adherence to medication regime (b) Comprehensive assessment for side-effects of medications (c) Educate and/or advise patient on management of side-effects (d) Review and amend treatment regime as required
Metric	Monthly audit of 10% of patient charts	Log of teaching hours Log of telephone support hours	(a) Monthly audit of 10% of patient charts specific to individuals with a diagnosis of breast cancer and undergoing endocrine treatment
Status			
Start date	01-Jan-11	01-Jan-11	01-Jan-11
Follow-up date	01-Apr-11	01-Apr-11	01-July-11
Action(s) to be taken	Target met. Continue audit as above. Target not met. Examine reasons and address as required. <i>Tick appropriate box(es)</i>	Target met. Review ongoing need for teaching programme; evaluate service outcomes Target not met. Examine reasons and address as required. <i>Tick appropriate box(es)</i>	Target met. Develop evaluation of nurse-led PICC line service. Target not met. Examine reasons and address as required. <i>Tick appropriate box(es)</i>
Service Performance Measure (e.g., HealthStat)	<input checked="" type="checkbox"/> Access <input checked="" type="checkbox"/> Integration <input checked="" type="checkbox"/> Resources <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Access <input checked="" type="checkbox"/> Integration <input checked="" type="checkbox"/> Resources <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Access <input checked="" type="checkbox"/> Integration <input checked="" type="checkbox"/> Resources <input checked="" type="checkbox"/>



National Council for the
Professional Development
of Nursing and Midwifery

An Chomhairle Náisiúnta d'Fhorbairt
Ghairmiail an Altranais agus
an Chnámhseachais

NATIONAL COUNCIL FOR THE PROFESSIONAL DEVELOPMENT OF NURSING AND MIDWIFERY

6-7 Manor Street Business Park, Manor Street, Dublin 7, Ireland.

Telephone: 00 353 1 882 5300. Fax: 00 353 1 868 0366.

Email: admin@ncnm.ie Web: www.ncnm.ie