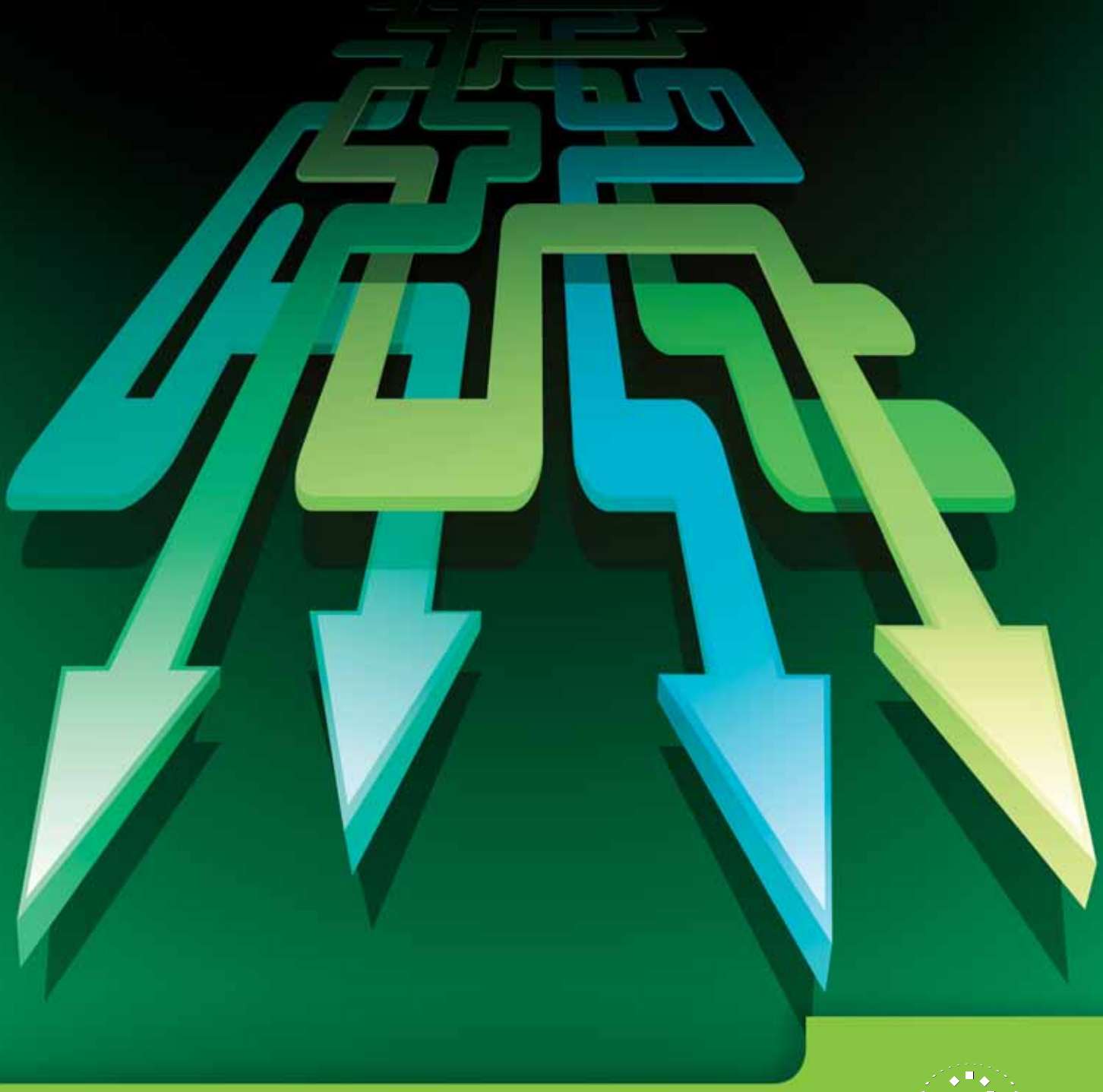
SERVICE NEEDS ANALYSIS: Informing Business and Service Plans



A guide to assist nurses and midwives on the process of undertaking a service needs analysis to inform the business plan within the overall context of the service planning process.

SEPTEMBER 2009

National Council for the Professional Development *of* Nursing *and* Midwifery

An Chomhairle Náisiúnta d'Fhorbairt Ghairmiúil an Altranais agus an Chnáimhseachais

Mission Statement of the National Council

The purpose of the Council is to promote and develop the professional roles of nurses and midwives in partnership with stakeholders in order to support the delivery of quality nursing and midwifery care to patients/clients in a changing healthcare environment.

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Introduction

This publication updates and develops further the National Council document *Service Needs Analysis for Clinical Nurse/Midwife Specialist and Advanced Nurse/Midwife Practitioner Posts* (2005). General guidance to nurse and midwife managers is provided in relation to key service needs analysis and business planning issues. Service needs analysis should provide informed data which in turn contributes to the service planning process which can occur at national, regional and local level.

Since 2005 many developments have occurred in the Irish Health Services and within the wider societal context, most notably the establishment of the Health Service Executive (HSE) and the changing function of the Department of Health and Children (DoHC). In essence the DoHC is responsible for policy direction for health service provision and the HSE responsible for policy implementation through health service delivery. The DoHC compiles and publishes strategies for specific targeted health priority areas such as the *Strategy for Cancer Control* (DoHC, 2006), *Mens Health Policy* (DoHC, 2008a), *National Therapy Research Strategy* (DoHC, 2008b), and *Tackling Chronic Disease: A Policy Framework for the Management of Chronic Diseases* (DoHC, 2008c).

As part of the Government's commitment to ensuring patient safety and quality in the delivery of health services the Minister for Health and Children established a Commission on Patient Safety and Quality Assurance in 2007. The subsequent report '*Building a Culture of Patient Safety*' (DoHC, 2008d), outlined a vision for the Irish Health system which is based on knowledgeable patients receiving safe and effective care from skilled professionals in appropriate environments with assessed outcomes. This report is a key driver for patient safety and will underpin all health care developments in the future in Ireland.

In order to progress the concepts of clinical governance the Board of the HSE has appointed a National Director of Quality and Clinical Care. The establishment of a Quality and Clinical Care Directorate and the appointment of a National Director of Quality and Clinical Care will develop clinical leadership and clinical governance across the HSE and will facilitate consolidation of the work carried out to date on the quality, safety and risk management agenda. The development of clinical directorates and the eventual appointment of over one hundred clinical directors is seen as a key development within the overall HSE *Transformation Programme* (HSE, 2006).

This paper outlines the key policy and service implementation issues of importance to Irish population health. Health challenges, epidemiology and demography are referred to. Critical resources for the analysis of service needs are identified. Essential components of clinical governance and developing new clinical directorate structures for service delivery are described. All of the above will challenge how nurses and midwives plan and deliver services. Critical success factors for service needs analysis are outlined and a template for writing a business plan is suggested. It is hoped that this paper will assist nurse and midwifery managers in contributing to the service planning process at each appropriate level within the Irish Health Services.

SECTION 1

HSE and DoHC Policy Guidance

Quality and Fairness: A Health System for You (DoHC, 2001) outlines a strategy which involved organising the future health system around a new vision. This vision described a health system that empowers people, their families and communities to achieve their full potential, a system that is fair and trustworthy and one that listens to the client and takes their views into account. Four principles were proposed to underpin the strategy: equity and fairness, a people-centred service, quality of care and clear accountability.

The HSE was established on January 1st 2005 on foot of the Health Act (2004). The HSE now has executive responsibility for the management and delivery of health and personal social services in the Republic of Ireland. As the HSE evolves, the manner in which health care is delivered will also continue to evolve. Service planning is now a key activity required of many managers and professionals. Service planning is a critical component of the accountability framework in terms of ensuring the provision of appropriate, effective and equitable services and for the effective control of resources (Butler and Boyle, 2000). Currently service planning within the HSE involves three levels of business planning.

1. Level 1 constitutes the regional plan. This is a business plan for a National Hospitals Office group or HSE region. This regional plan is written in response to the HSE's Corporate Plan (HSE 2008-2011) and National Service Plan (HSE 2009).
2. Level 2 is targeted at individual hospital or primary care area plan which is written in response to level 1.
3. Level 3 is written at service, unit or departmental level.

It is important to be aware that these business plans are not bids for additional resources but are a means of identifying targets and objectives for the year and for the service area. Previously within the HSE when services were seeking additional funding, each hospital developed what were known as 'service bids'. This is no longer the case. Service planning for service developments are now processed through the estimates process which takes place annually every September in time for the production of the Department of Finance Estimates, this is known as 'The Book of Estimates'. Service plans must be aligned with existing service or corporate, modernisation or reform strategies.

It is intended that this paper will assist nurses and midwives and other health care workers when identifying within each service area what factors should be considered when conducting a service needs analysis. The service needs analysis as outlined in this paper should contribute meaningfully to the business plan and become the building block for developing the business plan. The business plan should subsequently 'fit' with each level of service planning. Figure 1 outlines the HSE's Planning, Monitoring, Performance Measurement and Management Framework and is a useful pictorial representation of where business plans fit within the framework.

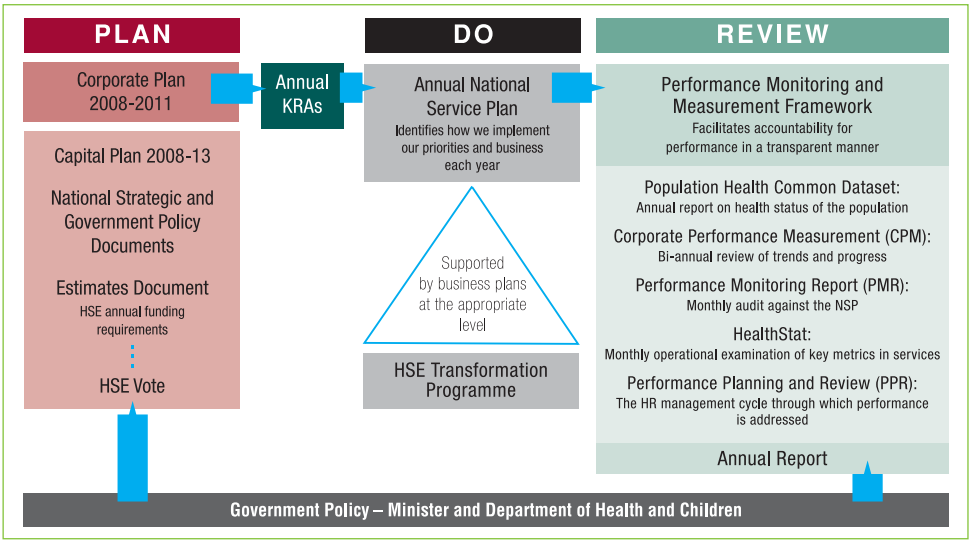


Figure 1: HSE Planning, Monitoring, Performance Measurement and Management Framework.

(Source HSE Corporate Plan 2008 - 2011 p.8)

HSE Corporate Plan (2008-2011)

As well as understanding the process for writing a business plan, it is crucial to align your service needs analysis to the HSE's Strategic Objectives. Box 1 outlines the HSE's Strategic Objectives.

Box 1: HSE Strategic Objectives.

Health and Wellbeing

We will invest in preventing illness; supporting, encouraging and empowering people to pursue independent, healthy and fulfilling lifestyles to reduce the likelihood of illness. We will ensure that early diagnosis, treatment and care options are available, if required.

Sustainable Services

We will reconfigure our services to develop sustainable hospital and community services that provide the care people need now, and in the future. By delivering the majority of care in the community, we will enable hospitals to focus on improving accessibility to deliver more efficient acute and planned care.

Operational Excellence

We will achieve operational excellence using processes and systems that are efficient, easy for service users to access and understand, evidence based and deliver value for money.

Unlocking Our Potential

We will actively support and encourage all staff to achieve their full potential and deliver quality care. In partnership, we will recognise and celebrate achievements and encourage staff to work responsibly, manage challenges and take pride in their contribution to the services they provide on behalf of the organisation.

Quality and Safety

We will ensure the quality and safety of our services. By developing a transparent quality and safety culture and adapting our work practices, we will ensure that continuous quality and safety improvement is integral to all that we do.

Trust and Confidence

We will build the public's trust and confidence in our health services through the provision of timely, well integrated, professional and accessible services. We will make it easier for people to access the right service, in the right place, at the right time.

(Source HSE Corporate Plan 2008 - 2011 p.3)

The HSE Corporate Plan also identifies what it terms 'Key Health Challenges'. The Corporate Plan stresses that while there are many challenges facing the health services, which have been prioritised over a 3 year period from 2008 to 2011. The Key Health Challenges are outlined in box 2 and should also be taken into consideration when developing your service needs analysis and building your business plan.

Box 2: HSE Key Health Challenges

- The integration of services across the service spectrum from disease prevention through primary and community care to hospital care, to allow the service user to be managed at the most appropriate level for their care needs.
- The prevention and management of chronic diseases.
- Cancer prevention and provision of quality assured treatment services.
- Promotion of mental health and provision of support and interventions for those with mental health problems.
- Promotion of patient self care and provision of information for service users.
- Control of health care acquired infections.
- Supporting people with disabilities to achieve their full potential, including living as independently as possible.
- Enhancing the quality of life of older persons, supporting them in their homes and communities and, where this is not possible, providing them with access to appropriate residential accommodation.
- Promoting and protecting the health and well being of children and families.

The Corporate Plan (2008 - 2011) has identified what it terms 'Key Result Areas', 'Key Outcomes' and 'Key Performance Indicators'. Key Result Areas (KRAs) are high level corporate objectives which are to be achieved over three years. Key Outcomes identify the impact the KRAs will have and Key Performance Indicators (KPIs) will measure the progress of the objectives. One KRA, for example is that the HSE will develop and implement a Population Health Strategy which will define how the HSE will take a population approach to the provision of health and health services, to maintain and improve the health of the entire population. To achieve this KRA, the HSE will develop a framework document. A Key Outcome for this KRA will be increased immunisation and vaccination coverage that will lead to improved health outcomes in the young and the elderly population.

HSE National Service Plan (2009)

The HSE *National Service Plan* (HSE, 2009) stresses the requirement placed on the HSE though the Health Act 2004 to maximise the return on health investment by using the resources available to it in the most beneficial, effective and efficient manner to improve, promote and protect the health and welfare of the public. To that end Value for Money (VFM) programmes contribute to the difference between the available budget and the cost of the planned service level. VFM is defined as:

'The correct balance between economy, efficiency and effectiveness - relatively low costs, high productivity and successful outcomes'

(HSE National Service Plan 2009 p.5).

The Service Plan goes on to state that obtaining VFM whilst good practice and common sense, assessing it in the public sector is complex, where delivery of value is more challenging to measure and report. The key learning for those preparing a business plan is therefore to ensure that the ability to measure KPIs and KRAs are built in at the outset.

The final important thing to note when preparing a business plan is that service providers are being asked to change their approach to service delivery and to ensure that additional capacity is created while using the resources already available. This may be particularly challenging but is the paramount guiding principle in the current climate of health service provision. In essence this means that when preparing a business plan, a review of skill mix available and of that required should be inherent in the plan. Ideally this should be done on a competencies required/competencies available approach. Staffing levels, workforce planning and identifying new ways of working are examined in more detail in section two.

HSE Transformation Programme (2006)

The HSE *Transformation Programme* (HSE, 2006) should also be consulted before undertaking the service needs analysis in order to ensure that your priorities for change and service improvement correspond with that of the six transformation priorities. See Box 3 for the priorities.

Box 3: HSE Six Transformation Priorities.

- Develop integrated services across all stages of the care journey.
- Configure Primary, Community and Continuing Care services so that they deliver optimal and cost effective results.
- Configure hospital services to deliver optimal and cost effective results.
- Implement a model for the prevention and management of chronic illness.
- Implement standards based performance measurement and management throughout the HSE.
- Ensure all staff engage in transforming health and social care in Ireland.

Clinical Governance

The *Report of the Commission on Patient Safety and Quality Assurance: Building a Culture of Patient Safety* (DoHC, 2008d) was published in response to multiple health system failures in the Republic of Ireland. The Commission's aim was to provide recommendations for a framework of patient safety and quality which will lead to effectively governed healthcare facilities, increased involvement of patients and service users in healthcare decision making at all levels of the system, and the development of local and national leadership with clear accountability and reporting relationships. The Commission outlines a framework which will include mechanisms and arrangements that will enable the verifiable implementation of nationally agreed managerial and clinical standards. According to the Commission a significant element of health service reform is the strengthening of governance and accountability arrangements across the health system. The *Audit of Structures and Functions in the Health System* report known as *Prospectus* (DoHC, 2003) observed that:

'To date in Ireland the mechanisms that are central to effective clinical governance have generally been patchy in their development.' (DoHC, 2003 p.62)

Internationally, a central finding of many of the health system reviews of safety and quality failures that have been undertaken is that of weak systems of leadership, governance and accountability in healthcare, i.e., the view that 'no-one was in charge', with confused lines of responsibility and accountability between professional and managerial staff and often with parallel lines of responsibility for different professional groups within the one organisation. The development of governance in healthcare has been a worldwide phenomenon and, although governance systems vary internationally, there are components of good governance that are common to many of the systems. The Commission has described governance under four broad headings:

1. Advocating for positive attitudes and values about safety and quality includes leadership, accountability, continuous improvement strategies to improve safety and quality, continuing education, and a focus on ethics.
2. Planning and organising governance structures for safety and quality includes performance management; managing risk; reporting and managing adverse events; credentialing of healthcare professionals; standards; accreditation.
3. Organising and using data and evidence includes clinical effectiveness; evidence based practice; clinical indicators; audit; managing knowledge effectively.
4. Patient focus includes service-user participation; focus on patient safety; open disclosure; informed patient consent; managing complaints effectively.

Continuous improvements are those clinical and organisational initiatives and strategies instituted by organisations to enhance the safety and quality of their services on an ongoing basis. Continuous audit informing the service needs analysis framework, which in turn informs the service planning process forms the bedrock of continuous quality improvement and patient safety. Figure 2 outlines the elements of governance:

Figure 2: Elements of Governance

(Source: Building a Culture of Patient Safety DoHC, 2008d p.65)

Clinical governance can be considered therefore to be part of an overall integrated healthcare governance and assurance framework. In order to progress the concepts of clinical governance the Board of the HSE has appointed a National Director of Quality and Clinical Care. The establishment of a Quality and Clinical Care Directorate and the appointment of a National Director Quality and Clinical Care will develop clinical leadership and clinical governance across the HSE and will facilitate consolidation of the work carried out to date on the quality, safety and risk management agenda. The Directorate will have responsibility for facilitating the Health Information and Quality Authority (HIQA) in the definition and interpretation of standards and the implementation of a licensing framework. The development of clinical directorates and the eventual appointment of over one hundred clinical directors are seen as a key development within the overall HSE *Transformation Programme* (HSE, 2006). The clinical directorates will evolve on a staged basis and the HSE sees the primary role of the clinical director as one of deploying and managing consultants and other resources, planning how service are delivered, contributing to the process of strategic planning, influencing and responding to organisational priorities. This will include responsibility for agreeing an annual directorate service plan, which will identify service development priorities and aligning directorate service plans with hospital or network plans.

The *Report of the Commission on Patient Safety and Quality Assurance: Building a Culture of Patient Safety* (DoHC, 2008d) also states that:

'Clinical audit should be considered within an integrated safety and quality governance framework and should be linked to service plans and to local, national and professional priorities. ...Every healthcare facility should develop and implement an Annual Clinical Audit Forward Plan as part of its annual planning and delivery cycle for clinical audit activities and the facility's safety and quality governance framework. This plan should reflect the national, organisational, team and individual audit requirements of the facility. It should be the responsibility of the Clinical Leader, with accountability for safety and quality at Board level to ensure that the plan is developed and implemented with effective clinical engagement and reported to the Board of the facility.' (p.161)

It is clear therefore that service needs analysis, must be supported by clinical audit and become part of the service planning process. The *Report of the Commission on Patient Safety and Quality Assurance: Building a Culture of Patient Safety* (DoHC, 2008d) recognises that clinical audit needs to be at the heart of clinical practice and is something that all health practitioners should be engaged in. The Commission goes on to state that clinical audit arguably constitutes the single most important method that any healthcare organisation can use to understand and assure the quality of the service that is provides.

The Commission however, identifies that there is no national coordinated effort to integrate clinical audit into quality improvement or governance. While clinical audit is being advanced in a number of organisations and there have been some initiatives in recent years by training bodies and professional regulators, the Commission comments that clinical audit is *not* generally linked to service improvements, planning or resource allocation.

The Commission also recommends that all clinicians, both as individuals and as members of teams or networks, must actively participate in clinical audit in compliance with national standards and priorities. The Commission took the view that as an endpoint the concept of 'licensing' should be introduced into the Irish Health Service. While licensing itself will be based on core standards, the licence process could be seen to be limited unless quality improvement is embedded in the form of achieving standards higher than the core licensing standards. To obtain a licence therefore a health facility will be required to show that it is engaged in a continuous quality improvement process such as accreditation. The regulations suggested by the Commission for determining the criteria to obtain a licence should include:

- Effective governance and management arrangements
- Protocols for the transfer of patients to and from other healthcare providers so as to ensure a safe and seamless patient journey
- Risk management systems in place
- Participation in audit and adverse event reporting systems
- Participation in recognised systems of continuous quality improvement e.g., accreditation
- Appropriately trained and competent staff
- Implementation of evidence-based practice
- Participation in continuing medical education (CME) and competency re-validation programmes
- Mechanisms for patient participation and feedback
- Information management
- Meeting health and safety standards
- Appropriate structure, equipment and service design.

An implementation steering group, which has a wide-ranging membership and who will report directly to the Minister of Health and Children has been established to progress the recommendations from the Commission. The implementation steering group is chaired by the Department of Health's Chief Medical Officer, Dr. Tony Holohan.

The Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is setting national standards for the provision of health and social care services, (except Mental Health Services; the Mental Health Commission has the statutory responsibility to promote, encourage and foster the establishment and maintenance of high standards in the delivery of mental

health services), in Ireland. These standards will incorporate minimum standards for quality and safety for a given service and also developmental standards to support moving towards excellence. They will developed based on evidence and best practice within Ireland and internationally.

HIQA will consult with a wide range of stakeholders - people using the service, health professionals and staff and the general public - to ensure that the standards developed are meaningful, measureable and will support the delivery of high quality and safe standards of care. HIQA will also eventually provide guidelines and support to staff and service providers to help them to achieve these standards and facilitate a continuous improvement in Ireland's health and social services. HIQA therefore will become a valuable source of information with regards to national standards. It is intended that HIQA standards and the licensing agenda to be undertaken by the new Quality and Clinical Care Directorate will dovetail and compliment each other.

Summary

This section has outlined the key strategies complied and published by the HSE, the DoHC and the HIQA. The clear policy direction given by the HSE, the DoHC and the HIQA have ensured that the priorities for delivering quality care with in the Irish health service is unambiguous and evidence based. The next section offers advice and direction for gathering accurate, robust and timely data which will add value and credibility to the business plan.

SECTION 2

Service Needs Analysis

The one constant in health care is change. The first nine years of the twenty-first century have witnessed enormous policy, legislative and structural changes for the nursing and midwifery professions in the Republic of Ireland. With the advent of the pre-registration nursing and midwifery degree, post-registration education, the clinical career pathway, the scope of practice, nurse and midwifery prescribing of medications and ionising radiation and the introduction of a training scheme for health care assistants, there is considerable scope for further harnessing the potential of experienced competent nurses and midwives to support the whole health care team in directing their efforts toward ensuring that patients/clients receive the highest standard of quality care.

This section is intended to help to nurses and midwives and other health care workers' to articulate the service need based on accurate and credible data. Many sources of information are outlined and guidance is given in relation to services that have successfully used a service needs analysis approach to enhance care pathways.

Population Health

A key factor in the demand for health and personal social services will be the structure of the population and how that is projected to change. Key demographic issues will include:

- The population is at an all time high since 1864. There are currently 4,339,000 people living in the Republic of Ireland, this represents a 10.8% increase over the last five years.
- The population is expected to grow in excess of 5,000,000 by 2025.
- Between 1996 and 2006 Ireland had the largest population growth rate in the European Union (EU) at 17%.
- Over the last ten years births have increased on average by over a thousand per year. There were over 70,000 babies born in 2007.
- Across the EU, Ireland continues to have the highest proportion of children in the population, this has implications for the provision of childcare services
- Older people account for 11% of the overall population. It is predicted that by 2011 the number of those aged over 65 years will have increased to 16%, rising to 40% by 2016.

(Source: HSE Corporate Plan 2008 - 2011 p.12)

This data is available from the HSE's *Corporate Plan* (2008 - 2011) and when used in conjunction with the HSE's *National Service Plan* (2009) is a primary source of national epidemiological and demographic health related data for nursing or midwifery managers. Due to the global economic situation migration trends will most likely change and this may have an impact on recruitment and retention of staff and also on the demographic profile of the whole population.

Other valid and reliable sources of data relating to population health include:

- National Cancer Registry
- Hospital In-Patient Enquiry (HIPE)
- Public Health Information's Systems
- Central Statistics Office
- National Disease Surveillance Centre
- Institute for Public Health
- National Cervical Screening Programme
- National Intellectual Disability Database

- World Health Organisation
- Organisation for Economic Co-operation and Development (OECD)
- Economic and Social Research Institute (ESRI)
- FÁS.

(See appendix A for more sources of data with web links.)

HealthStat

HealthStat 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, which are published online on the HSE website (See Appendix A for web links). Later in 2009, HealthStat will expand to cover additional general and specialty hospitals and in 2010, all health and social care services provided in the community by Local Health Offices will be included. HealthStat works on the basis of measures - how a hospital is delivering services, and targets. Hospitals are awarded marks for their performance based on three themes:

- Access - measures waiting times for hospital services
- Integration - checks whether the services received are patient-centred
- Resources - looks at how staff and financial resources are being used .

HealthStat will become an important source of data for Key Performance Indicators. The HealthStat system is not designed to measure clinical outcomes of standards of care - these will be the focus of the HSE's new Clinical Care and Quality Directorate, hospital clinical directors and the Health Information and Quality Authority. The table below gives some examples of measures within the three groups.

TABLE 1: HEALTHSTAT MEASUREMENTS

Access	Integration	Resources
Waiting times for: Planned procedures Emergency Dept Admissions Diagnostics Therapies Outpatient clinics	Day case rates Average lengths of stay Day-of-procedure admission rates Delayed discharges Use of inpatient beds	Staffing & Absenteeism Management of Social Work, Occupational Therapy, Physiotherapy, Radiology and Consultant Clinics Budget/spend Meeting activity targets

Data contributing to the Service Need

Writing a credible and accurate business plan will depend on the data collected and collated through the service needs analysis. The data available is a key factor when determining the scope of your service needs analysis. As the Information Technology (IT) infrastructure continues to evolve in Ireland, it may be necessary to liaise with your IT department to establish minimum data sets for data collection[1]. An example of this occurring in the Irish Health service is that described in the NCNM Review (2008, Issue 29). A project officer was appointed to examine the service need for an advanced nurse practitioner post in Kerry General Hospital. The author discusses the challenging task of identifying the healthcare need for such posts and how the challenge was overcome by utilising a survey approach to capturing the key aspects of the patient journey. A survey instrument was designed to capture data on the healthcare and service needs of patients. Appendix B further explains the processes involved and the outcomes for the service. The kind of data that you may need to build for your business plan might include the following:

[1]A Minimum Data Set can be a minimal, priority or comprehensive collection of items covering all areas in which one might expect to work when assessing the situation and needs of an individual or population. This data can then be used to inform research, policy development and practice development initiatives.

EPIDEMIOLOGY

- A breakdown, nationally, regionally and locally of patient numbers by disease or condition
- Mortality or morbidity rates, nationally, regionally and locally
- The incidence and/or prevalence of the disease, nationally, regionally and locally
- The rates of increase or decrease of patterns of disease, for example obesity rates and sexually transmitted infection rates are rising
- Epidemics e.g., measles,
- Pandemics, Swine influenza (H1N1), Severe Acute Respiratory Syndrome (SARs) or Avian influenza
- Epidemiological clusters

POPULATION HEALTH STATISTICS

- Local health statistics
- Migration trends and globalisation
- Population age
- Life expectancy rates
- Birth rate
- Health economics
- Women's health
- Genetics
- Environmental health
- Socioeconomic status
- Drug misuse
- Population distribution
- Biostatistics

HOSPITAL DATA

- Numbers of in-patient admissions
- Re-admission rates following discharge from hospital within unacceptable timeframe parameters
- Numbers of re-admission rates following discharge from Intensive Care
- Length of average stay of patients
- Routes of admission, e.g., GP referral, elective, Emergency Department
- Numbers and presenting complaint of Emergency Department attendees
- Bed occupancy rates
- Waiting times
- Number of patients seen per year, per service
- Skill mix of available staff with corresponding competencies

Staffing Levels and Workforce Planning

The World Health Report (WHO, 2000) noted that determining and achieving the "right" mix of health personnel are major challenges for most health care organizations and health systems. Workforce planning helps to ensure that there will be sufficient staff available at the right time, with the right skills, diversity and flexibility to deliver high quality care. A systematic assessment of workforce needs is required to determine the correct staffing levels. This

assessment should include the required competencies, the competencies available, and any deficit in between. However, determining the minimum staffing levels can be a complex process as numerous factors influence the ability of nurses and midwives and health care assistants to care for their patients.

A report commissioned by the Alberta Health Services in Canada called *'Enhancing Nursing Role Effectiveness Through Job Redesign'* (2009) stresses that the use of a population needs based approach to examine nursing providers roles helps to validate the gap that exits between optimal and actual nursing practice and enables staff to better understand how optimal enactment of their respective roles could positively influence patient and family outcomes. The report states that understanding the characteristics and health needs of the patient population will lead to, what they term 'optimal nursing role enactment'. The authors recommend that key areas need to be examined in order to achieve this understanding, these key areas include:

- Nursing providers' roles in preventing illness and injury and promoting health and well-being requires elaboration of the profile of patients being served on the patient care unit or in other health care settings. Preventing avoidable complications or injuries requires an understanding of real or potential risk factors associated with particular population groups such as the elderly.
- Provider knowledge, skills and abilities must be 'matched' to the health needs of the population served in order to mitigate real or potential risk factors and prevent avoidable complications and injuries.
- Staffing decisions (i.e., determining the right number and mix of personnel) must be based on an understanding of population health needs.
- An understanding of the health needs of the patient population enables providers to make care decisions that are focused on meeting patient health needs rather than on 'simply doing the tasks'.
- A collaborative practice approach requires that providers have knowledge and skills related to shared decision-making (e.g., providers and patients are involved in decisions about the plan of care), communication, conflict, resolution and negotiation skills.

Workforce planning data is available from organisations in Ireland such as the HSE and Ireland's National Training and Employment Authority (FÁS). FÁS has developed a National Skills Database. The Database has been designed to collate all available information about the supply and demand of skills in Ireland. As such, it provides a platform for analysis and forecasting of the labour market at a skills level. FÁS has also undertaken a research study which recommended the use of a tool which gives example simulations for workforce planning in healthcare, the tool is known as: *A Quantitative Tool for Workforce Planning in Healthcare: Example Simulations* (FÁS 2009). The research, conducted by the Skills and Labour Market Research Unit at FÁS, developed the quantitative tool which facilitates the assessment of how different policy scenarios and changes in the size and composition of the population - the main determinant of demand for health services - will affect the balance between the supply and demand of a range of healthcare occupations. The research has taken an economy-wide approach and includes the private healthcare sector. It shows that there are shortfalls facing some occupations, while others are in oversupply. For a breakdown of the projected workforce relating to all divisions of nursing and midwifery see **www.fás.ie**

Some Irish health care institutions have commissioned their own workforce planning projects. For example the National Maternity Hospital in Holles Street (2009) and the Adelaide and Meath Hospitals, incorporating the National Children's Hospital and Beaumont Hospital (2007) have both published nursing and midwifery workforce planning projects. Both reports make useful recommendations for better use of the nursing workforce, such as twice daily recordings of patient dependency and reducing the time spent on the handover. The conclusion drawn by the Holles Street Hospital report is worth noting:

'the optimum method of workforce planning is that which combines the determination of the dependency of those requiring care, the quality of the care currently being delivered by the current staffing establishment and skill-mix in addition to examining the skills of those who are not only competent to deliver care but are the most appropriate.' (p.23)

Decisions about the size and mix of nursing teams are critical areas for health service managers generally and nursing workforce planners specifically. Five commonly used workforce planning methods are identified by Hurst (2002) following systematic review of over 500 articles related to estimating the size and mix of nursing teams. The author states that overstaffed, undermanned and imbalanced nursing teams have implications for the quality and cost of patient care. He stresses the importance of finding appropriate tools for workforce planning. It is evident that each method has strengths and weaknesses. The following is a brief overview of the five methods, which are evidence based following systematic review.

1. Professional Judgement (Telford) approach

This technique converts duty rota decisions into whole time equivalents (WTE's).

2. Nurses per occupied bed (also known as the top-down method)

Average number of nurses per occupied bed is calculated.

3. Acuity-quality (also known as the bottom-up method)

This is also known as the dependency-activity-quality method. Total number of nursing hours for the week can be converted into WTEs and grade mix can be included. Formulas are not only sensitive to the number of and mix of patients in the ward but also have a ceiling which nursing care standards should not fall. Formulas are, therefore, more complex to construct and operate. Analysis usually requires computer spreadsheets especially when 'what-if?' questions are asked such as what to do if the ward has a sudden influx of high-dependency patients. This staffing method overcomes most of the weaknesses highlighted in the professional judgement and nurses per occupied bed methods. It is especially useful in wards where patient numbers and mix fluctuate.

4. Timed-task/activity approaches

This method involves completing or updating patient's care plans each day, generating and aggregating total hours for all by all the care plans in the ward, collating all nursing hours per ward enabling the manager to distribute nursing staff equitably. Validity checks are then completed by experienced staff to ensure consistency in the selection and recording of nursing interventions. The validator also checks that the predicted nursing care is required by the patient over the ensuing 24 hours. This method will suit wards in which care plans are systematically constructed, and for wards where patients' nursing needs can be confidently predicted; notably wards that admit from waiting lists.

5. Regression-based system

Regression analysis showed that the number of nurses (dependent variable) increased as bed occupancy (independent variable) rose thus allowing staffing predictions. Regression methods predict the required number of nurses for a given level of activity. The regression method is useful for situations where predictions are possible, such as the number of planned admissions.

Hurst's workforce planning methods is an extremely useful tool for any organisation who intends to carry out a workforce analysis/skill-mix review of service need. However, it is worth noting that the Department of Health and Children published a report entitled *'Report of the Working Group to Examine the Development of Appropriate Systems to Determine Nursing and Midwifery Staffing Levels* (DoHC, 2005). The working group recognised that no one system could be adopted across the Irish healthcare setting due to its diversity and complexity. Instead the report offers guiding principles for determining nursing and midwifery staffing levels.

The Irish Nursing and Midwifery Minimum Data Sets

Improving our understanding of how to use nursing resources most effectively can be achieved through the identification of how nurses organise their role in terms of activities and interventions. This can also be achieved by analysing how nursing interventions relate to patient outcomes. The need to explicitly define the nursing role has been recognised in Ireland. This has led to the development of a nursing information system to assess nursing care across both general and mental health settings. Preliminary research relating to descriptions of the Irish general and mental health nursing roles was completed in the years 2003 to 2006 (Scott et al, 2006). This resulted in the development of the Irish Nursing Minimum Data Set (I-NMDS) for general nursing and the I-NMDS for mental health nursing. Several paper-based studies undertaken to date have established the validity and reliability of the I-NMDS tools (Morris et al, 2009 in press). Furthermore the I-NMDS can discriminate across care specialties and can distinguish between different patient groups such as acute inpatient and community-based mental health client groups, oncology and surgical ward-based groups. The I-NMDS can therefore be used with a good degree of confidence in research regarding descriptions and effectiveness of nursing care.

International research suggests that a nursing workforce educated to a higher level can reduce the requirement for greater volumes of nursing staff in the pursuit of improved client outcomes (Aiken et al, 2003). The I-NMDS could be used in Irish studies to examine whether better educated nurses operating in smaller teams, comprising appropriate skill mix and better nurse-to-patient ratios result in more effective patient care. The results of such a study could have serious implications for health service organisation and resource management in the future. Other potential uses of the I-NMDS are shown in Box 4.

Box 4: Potential Uses of the Irish Nursing Minimum Data Set

Data collected using the I-NMDS can:

- be easily analysed and graphed to provide information on nursing trends (e.g., client populations, nursing interventions and nursing practice across service and geographic boundaries)
- illustrate to service providers trends and patterns in nursing and client care
- inform hospital budgeting, nurse staffing levels and consequently patient safety
- inform developments in nursing education
- be used to forecast the supply and demand for nurses and midwives with specific knowledge, skills and competencies
- be integrated into the electronic patient record to facilitate access to nursing information and decision-making.

Finally, institutions such as the Organisation for Economic Co-Operation and Development (OECD) is a useful resource. For example the OECD points out in its publication: *The Looming Crisis in the Health Workforce: How can OECD Countries Respond?* (OECD, 2008) that the management of human resources cannot be considered in isolation due to the increasing interdependency between countries through international migration of highly skilled workers in general and health professionals in particular.

New Ways of Working

The delivery of health care is utilising an approach developed from international and national evidence. The standardisation of care pathways to assure consistency of care is now accepted as best practice. This means that clinical specialties or clinical grouping through clinical directorates have targeted strategies and evidence based guidance which require integration into any service needs analysis and subsequent service planning. For example the National Cancer Control Programme is based on a publication called *A Strategy for Cancer Control in Ireland* (DoHC, 2006). When developing a business plan in the oncology service area this strategy is crucial to the direction and focus of the service needs analysis. With regard to service areas the *Emergency Department Task Force Report* published in June (HSE, 2007) is a key strategy for those working in and planning service developments within the Emergency area. Table 2 outlines other examples of relevant key strategic and policy documents which relate to health.

TABLE 2: KEY STRATEGIC AND POLICY DOCUMENTS RELEVANT TO HEALTH:

Title	Web Address
National Development Plan 2007-2013 (Government Publications 2007) 'Transforming Ireland, A Better Quality of Life for All' This is the roadmap for sustainable economic expansion, social justice and a better quality of life for the people of Ireland.	www.irlgov.ie
Towards, 2016 - Ten year framework social partnership agreement 2006 to 2016. A strategic framework for economic and social development in Ireland, focusing on the needs of children, young adults, people of working age, older people and people with disabilities.	www.taoiseach.gov.ie
Primary Care Strategy, A New Direction, Quality and Fairness: *A Health System for You, (Health Strategy DoHC, 2001).* This comprehensive strategy provides a blueprint for the planning and development of primary care over a ten year period.	www.dohc.ie
A Strategy for Cancer Control in Ireland, Department of Health and Children, Dublin, (2006) A comprehensive cancer control policy that focuses substantially on reform and reorganisation of the way we deliver cancer services in Ireland to ensure future services are consistent and associated with a high-quality experience for patients and carers.	www.dohc.ie

Title	Web Address
A Vision for Change: Report of the Expert Group on Mental Health, (Government Publications 2006). This Report proposes a framework of mental health service delivery with the service user at its centre. The emphasis is firmly on recovery and on facilitating active partnerships between service users, carers and mental health professionals.	www.dohc.ie
Ireland: Take Heart (Cardiovascular Strategy), Audit of Progress on the Implementation of Building Healthier Hearts 1999-2005 (HSE, 2007).	www.hse.ie
The National Disability Strategy (Government Publications 2004) The NDA was launched in September 2004, aims to improve the lives of people with disabilities in Ireland.	www.irlgov.ie
Emergency Department Task Force Report (DoHC 2007) The Emergency Department (ED) Task Force Report recommends the introduction of further targets in relation to waiting times in ED, commencing with a 12 hour target (from decision to admit).	www.hse.ie

The National Council through its various frameworks and guidance documents has encouraged and ensured the use of clinical practice guidelines for the provision of care in the context of multidisciplinary service and patient care pathways (National Council 2006a, 2006b, 2008a, 2008b, 2008c). The National Council has published *Guidance on the Adaptation of Clinical Practice Guidelines: Getting Evidence into Practice* (NCNM, 2009). The Guidance document endorses the adaptation of existing guidelines in order to avoid unnecessary duplication of effort and valuable resources. *Guidance on the Adaptation of Clinical Practice Guidelines* should be used in conjunction with *Improving the Patient Journey: Understanding Integrated Care Pathways* (NCNM, 2006b). With the establishment and roll out of the new Quality and Clinical Care Directorate mentioned in Section One the adaptation of clinical practice guidelines is a timely publication. The National Council supports the use of clinical practice guidelines to assist clinicians in getting evidence into practice.

A recent systematic review of the contextual effectiveness of the integrated care pathways (ICPs) was undertaken by Allen et al (2009). These authors comment that ICPs are now being implemented across international health care arenas but that evidence to support their role is ambiguous. ICPs, they conclude are most effective in bringing about behavioural changes where there are identified needs for service improvement and where patient care trajectories are relatively predictable. The authors conclude that the improvement in health care delivery could be due to the ICP acting as a directing, coordinating, organising and a decision making device.

Evidence-based guidelines represent a combination of best evidence and judgement, designed to ensure that recommendations are valid and reliable. They are standardised specifications of care that apply to the general condition in an attempt to eliminate variations in the standard and availability of healthcare between regions (Mead, 2000, Hewitt-Taylor, 2003, Hurwitz, 2004). These concepts have been linked to the development of national recommendations and guidelines such as those developed by the National Institute for Health and Clinical Excellence (NICE) in the UK (set up in 1999 to appraise new technologies, including drugs) and the Scottish Intercollegiate Guidelines Network (SIGN).

International reports from bodies such as the World Health Organisation and the Organisation for Economic Co-operation and Development and other bodies like the Economic and Social Research Institute are also valuable sources of information. Evidence from peer reviewed literature should be identified, for example if there is a need to demonstrate the economic benefits and positive clinical outcomes of introducing a clinical nurse/midwife specialist or an advanced nurse/midwife practitioner post into a service.

Summary

This section has outlined the numerous and varied sources of data that is available at local, national and international level. The requirement to articulate a robust business plan is underpinned by a compelling, convincing and reasoned service needs analysis, which is in turn underpinned by accurate and valid data and demographics. The final section outlines the issues that should be taken into consideration once the service needs analysis has been completed and the business plan is being drawn up.

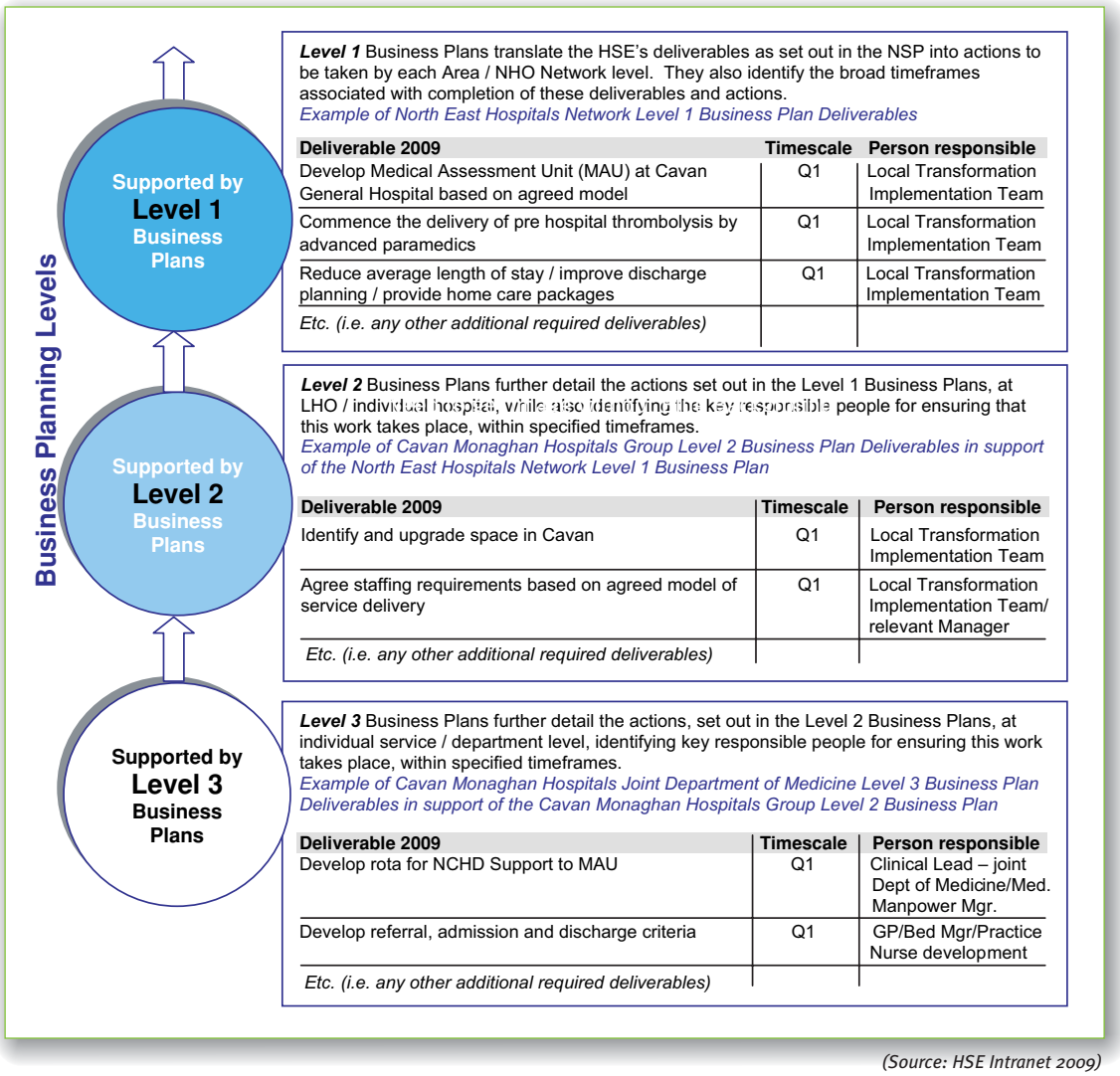
SECTION 3

The Business Plan

Writing the Business Plan

Once the service needs analysis has been undertaken a compelling business case now needs to be completed. Business plans are prepared at varying levels of an organisation, from high level business plans prepared at area or network level to more detailed operational plans at service or departmental level. Utilise the assistance of the finance department and the service planning department of your organisation as appropriate. Actions or deliverables which have been outlined in high level business plans (levels one and two, see section one), are monitored through the preparation of more detailed business plans specifying timeframes and assigning responsibility prepared at area or network level. The HSE Fact Sheet *'Planning in the HSE'* provides a very clear illustration of how this works. Figure 3 details how one of the *National Service Plan* (HSE, 2009) Key Result Areas is the reconfiguration of the Acute Hospital System. A key deliverable for the National Hospitals Office is that enabling measures for reconfigurations for Cavan and Monaghan Hospitals are completed.

Figure 3: Illustrative sample of levels of business planning within the HSE



Level 1 Business Plans translate the HSE's deliverables as set out in the NSP into actions to be taken by each Area / NHO Network level. They also identify the broad timeframes associated with completion of these deliverables and actions.

Example of North East Hospitals Network Level 1 Business Plan Deliverables

Deliverable 2009	Timescale	Person responsible
Develop Medical Assessment Unit (MAU) at Cavan General Hospital based on agreed model	Q1	Local Transformation Implementation Team
Commence the delivery of pre hospital thrombolysis by advanced paramedics	Q1	Local Transformation Implementation Team
Reduce average length of stay / improve discharge planning / provide home care packages	Q1	Local Transformation Implementation Team
Etc. (i.e. any other additional required deliverables)		

Level 2 Business Plans further detail the actions set out in the Level 1 Business Plans, at LHO / individual hospital, while also identifying the key responsible people for ensuring that this work takes place, within specified timeframes.

Example of Cavan Monaghan Hospitals Group Level 2 Business Plan Deliverables in support of the North East Hospitals Network Level 1 Business Plan

Deliverable 2009	Timescale	Person responsible
Identify and upgrade space in Cavan	Q1	Local Transformation Implementation Team
Agree staffing requirements based on agreed model of service delivery	Q1	Local Transformation Implementation Team/ relevant Manager
Etc. (i.e. any other additional required deliverables)		

Level 3 Business Plans further detail the actions, set out in the Level 2 Business Plans, at individual service / department level, identifying key responsible people for ensuring this work takes place, within specified timeframes.

Example of Cavan Monaghan Hospitals Joint Department of Medicine Level 3 Business Plan Deliverables in support of the Cavan Monaghan Hospitals Group Level 2 Business Plan

Deliverable 2009	Timescale	Person responsible
Develop rota for NCHD Support to MAU	Q1	Clinical Lead – joint Dept of Medicine/Med. Manpower Mgr.
Develop referral, admission and discharge criteria	Q1	GP/Bed Mgr/Practice Nurse development
Etc. (i.e. any other additional required deliverables)		

(Source: HSE Intranet 2009)

The following section is intended only as a guide to writing a business plan. Business plans should be prepared to reflect the overall format of the National Service Plan (HSE, 2009) but should be customised to suit local demographics and deliverables within financial and employment control limits appropriate to your relevant area. In developing the business plan four key principles should be adhered to, these are:

- There is a demonstrable and measurable positive clinical outcome for the patient/client.
- The service to be provided will be demonstrably cost-effective and be value for money.
- The service model or care delivery model will be based on evidence relating to the needs of the specific population and/or the case load.
- The DoHC and the HSE's key strategic objectives and health challenges are reflected.

A successful business plan should meet the following three criteria:

1. Credibility - the plan is believed.
2. Practical value - it enables decision makers and planners to act with confidence.
3. Accuracy - it predicts what actually happens.
   (Source: Business Case Essential: Schmidt 2009)

The content of the business plan should include:

1. The Introduction.
2. The Service Needs Analysis.
3. Human Resource Implications.
4. Financial and Non-Financial Analysis.
5. Evidence and Risk.
6. An Implementation Plan.

1. The Introduction

A business plan sets out to explain an idea, problem or opportunity for which funding is sought to initiate or remedy. The introduction should be used to outline the current situation and detail why the need for additional funding has arisen. The introduction should briefly outline the legal and policy framework and identify the key underlying planning assumptions and strategic objectives. The accountability and governance arrangements to ensure implementation, delivery and monitoring should be detailed. Where there are relevant local strategies or polices these should be included here. A statement of the new service, or reconfiguration of an existing service, that is being proposed should be included in the introduction. This should detail the anticipated benefits to the patient/clients.

2. The Service Needs Analysis

See section two of this document, the *National Service Plan* (HSE, 2009) and the *Corporate Plan* (2008- 2011) include sections on health status which outline the population health priorities which have been used to guide its preparation. Where the data exists this information should be combined with your own local demographic or health status information.

3. Human Resource Implications

Quality and Fairness: 'A Health System for You (DoHC, 2001) outlines a strategy which involved organising the future health system around a new vision. The Health Strategy recommends having the right person with the right level of knowledge and expertise to lead the service from a clinical perspective. In many cases a business proposal will be concerned with re-engineering the way in which people work by maximising potential and enhancing skills competencies. A good business plan should include the competencies and skills that will be required to deliver the proposed service. This should include the level of decision making and the level of accountability, authority and autonomy required. If acquiring new knowledge and skills for practitioners is included in the business plan, the availability and financial implications of further education should be included. Agreements with educational providers should be outlined along with the cost implications associated with fees, replacement costs and study time. Where possible the feasibility of running educational programmes from within the organisation should be examined.

4. Financial and Non-Financial Analysis

This section of the business plan is critical. Accurate data should be provided in relation to the scale of the new service. This includes, new posts, up skilling, improved or enhanced IT and any other resources that have a financial implication. Utilise the assistance of the finance department of your organisation for help with this section. The costs should be split between recurring and non-recurring. For example non-recurring costs include project management, equipment, recruitment, initial training and evaluation and changes to the accommodation for example. Recurring costs could include changes to salaries and maintenance.

Estimated savings can be more difficult to identify than recurring and non-recurring costs. Identifying ways of doing things differently by adopting for example the LEAN[2] approach, as opposed to, for example, simply using extra staff. Examine what the organisation is currently spending which can be different to what is actually budgeted for and project what could be saved over time. Identify savings in staff costs such as reduced use of agency and locum staff, reduced turn over and from reducing multiple visits by patients/clients to hospital.

Value for money is a significant component of managing overall finances. Again the National Service Plan (HSE, 2009) and the Corporate Business Plan (HSE, 2008-2011) identify specific initiatives for each year. The business plan should reflect, where appropriate, the implementation of these deliverables at a local level and where the service has identified additional ones specific to your own area.

5. Evidence and Risk

Detail how the proposed change will work. Give examples of small-scale pilots or previous work which may have demonstrated success that have worked in other organisations. Include potential risks and contingency plans to prevent them. If evidence exists from international experience, which demonstrates the efficacy and VFM of your proposal then refer to it. Discuss what the introduction of a new service will bring to the organisation that was not already there and review and critically compare other similar services within the region as appropriate.

6. The Implementation Plan

As discussed above a project management approach to developing the business plan should be utilised. This will entail identifying the key stakeholders, establishing a project team and setting targets to be achieved within an agreed timeframe. Members of the project team should be chosen according to their particular area of expertise, ensuring that a multidisciplinary and/or interdisciplinary approach is adopted. Finance and human resource departments can provide expertise, as they have the required knowledge in their specific fields. An implementation plan should be outlined with clear lines of responsibility and accountability. It is always advisable to name who is responsible on the project team for each action. However, as with any new initiative, translating the vision into reality is often the stage at which the project fails. With regard to change management templates the HSE has developed an online resource for all HSE employees who wish to initiate change within their organisation. *Improving Our Services: A User's Guide to Managing Change in the Health Service Executive* (HSE, 2008) provides an extensive template for initiating change within a service. The User's Guide outlines how understanding the cultural and people aspects of change greatly enhance our capacity to effectively manage change.

The HSE User's Guide outlines, what it terms, the initial business case for change (p. 33). As with most business case templates and project management frameworks it is wisest to use the models that you have already tried and tested and that your staff are familiar with. However the User's Guide is a ready made template for initiating change and should be consulted by any nurse or midwife manager who wants to introduce a change into the service. Completing the business case provides an early analysis and outline description of the following:

- The vision for change
- Need, rationale and mandate for the change
- Change leadership roles and early identification of resource requirements
- Key stakeholders and influencers in the system
- The drivers of the change and the degree of urgency

[2] The process of the LEAN concept is thoroughly described in the book The Machine That Changed the World (1990) by James P. Womack, Daniel Roos, and Daniel T. Jones. There are five core LEAN principles:

- Specify the value desired by the customer
- Identify the value stream for each product providing that value and challenge all of the wasted steps (generally nine out of ten) currently necessary to provide it
- Make the product flow continuously through the remaining value-added steps
- Introduce pull between all steps where continuous flow is possible
- Manage toward perfection so that the number of steps and the amount of time and information needed to serve the customer continually falls.

- The leverage points and interdependencies for making the change happen
- Options and risk factors (initial analysis of the impact of the change in terms of the organisational and people factors)
- Purpose, objectives and outcomes
- Possible timeframe and outline costs
- Plan for communicating the business case.

There are numerous books, academic articles, courses, degrees in business and models for writing a business plan and/or undertaking a service needs analysis but perhaps the most important aspect of all change management projects is communication. The concept of *'relentless communication'* is alluded to in the HSE's Users Guide. The guide recommends that a comprehensive communication plan which addresses both internal and external communication is a critical success factor for change.

Conclusion

This second edition of the *Service Needs Analysis: Informing Business and Service Plans* has identified the key policy drivers and strategic objectives of the HSE and the DoHC. Health challenges, disease epidemiology and population demography have been referred to. Critical resources for analysis of service needs have been provided. Essential components of clinical governance and developing new clinical directorate structures for service delivery have been described.

Enhancing and developing the potential roles of nurses and midwives in the Irish health service should always occur in the context of multidisciplinary, multi-skilled teams. National, regional and local data must be accurately collected and collated in order to support the successful business case.

Consultation and relentless communication are critical to the success of an inclusive business plan. Clinical audit conducted within a clinical governance framework will form the bedrock of a robust service needs analysis, which will in turn contribute effectively to building a convincing business plan.

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APPENDIX A

Web based sources of information

This section is intended to help a nurse or midwife manager who needs to find health data that is relevant to his or her service. There are numerous databases available but knowing where to source data that is relevant for you at local, regional and national level is key to building your business case.

Web bases sources of demographic and epidemiological data

www.hse.ie/eng/Publications/corporate/HSE_National_Service_Plan_2008.html
HSE National Service Plan (2009)

www.hse.ie/eng/Publications/corporate/HSE_Corporate_Plan_2008-2011.html
HSE Corporate Plan (2008- 2011)

www.hse.ie/eng/Publications/corporate/HSE_Annual_Report_and_Financial_Statements_2007.html
HSE Annual Report (2008)

www.hse.ie/eng/Healthstat
Healthstat

www.hse.ie/eng/Publications/corporate/transformation.html
HSE Transformation Programme (2007-2010)

www.irlgov.ie
National Development Plan (2007- 2013)

www.publichealth.ie
The Institute for Public Health

www.cervicalcheck.ie/
The National Cervical Screening Programme

www.hpsc.ie/hpsc/
National Disease Surveillance Centre

www.cso.ie
Central Statistics Office (CSO)

www.esri.ie/health_information/hipe/
Hospital In Patient Enquiry (HIPE)

www.esri.ie/
Economic & Social Research Institute (ESRI)

www.whc.ie/
The Women's Health Council

www.genetics.ie/
The National Centre for Medical Genetics

www.citizensinformation.ie/categories
Citizens Information

www.hiqa.ie
Health Information and Quality Authority (HIQA)

www.ncnm.ie/files/publications08/Review_summer08.pdf
NCNM Review Establishing the Need for an ANP Post: The Survey Approach (2008) Summer

www.hse.ie/eng/Publications/corporate/palframework.html
Palliative Care - A Five Year/Medium Term Development Framework

www.hse.ie/eng/Publications/HealthProtection/Public_Health_/Health_Status_of_the_Population_of_Ireland_2008.html
Health Status of the Population of Ireland (2008)

www.hse.ie/eng/Publications/services/Children/2007reviewofadequacy.html
Review of Adequacy of Child and Family Services (2007)

www.hse.ie/eng/Publications/services/Older/open%20your%20eyes.html
Open Your Eyes - Elder Abuse Service Developments (2008)

www.hse.ie/eng/Publications/services/Hospitals/midwestreport.html
Review of Acute Hospital Services in the Mid-West

www.hse.ie/eng/Publications/services/Hospitals/Code_of_Practice_for_Integrated_Discharge_Planning.html
Code of Practice for Integrated Discharge Planning

www.hse.ie/eng/Publications/corporate/Diabetes_Expert_Advisory_Group_First_Report.html
Diabetes Expert Advisory Group First Report

www.who.int/en/
The World Health Organisation (WHO)

www.oecd.org
The Organisation for Economic Co-operation and Development (OECD)

www.esri.ie
The Economic and Social Research Institute (ESRI)

www.fas.ie/en/
National Training and Employment Authority (FÁS)

www.sign.ac.uk/
Scottish Intercollegiate Guidelines Network (SIGN)

www.nice.org
National Institute for Clinical Excellence (NICE)

Disclaimer

APPENDIX B

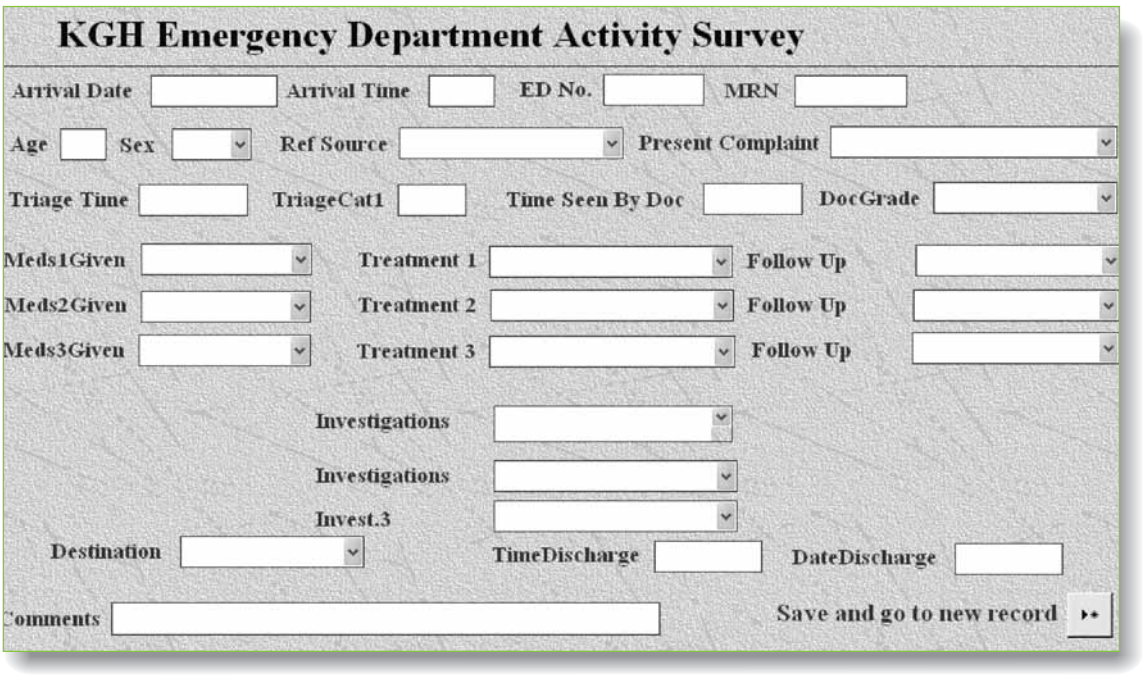
Establishing the Need for an Advanced Nurse Practitioner Post: The Survey Approach

Ann Kelleher was appointed in 2005 by the Nursing and Midwifery Planning Development Unit in Cork to develop ANP posts in acute and community areas. In this article Ann describes her experience of using a patient activity survey instrument at Kerry General Hospital to determine the caseload and scope of practice for an ANP post in the hospital's emergency department.

Since taking up the post of ANP projects officer, I have facilitated the development and approval of ten ANP posts in emergency nursing - five at Cork University Hospital (CUH), two at the Mercy University hospital (MUH) and three at Kerry General Hospital (KGH). In my experience, the most challenging tasks have been identifying the healthcare need for the post and the scope of practice of the ANP post-holder. This challenge has been largely overcome by utilising a survey approach to capture the key aspects of the patient's journey. A survey instrument was designed to capture data on the health care and service needs of patients. The findings from the survey offered local service planners, budget holders and other key stakeholders a guide to informing changes to clinical practice. At each site, the survey instrument has been developed and implemented in collaboration with key stakeholders such as ANP candidates, nurse managers, staff nurses working in the area, consultants, the information technology departments and administration staff.

While the effectiveness and benefits of ANP posts in emergency nursing, for both the patient and the organisation, have already been demonstrated, key stake-holders and service planners require evidence that ANP posts will enable the organisation to delivery a high-quality service. With this in mind, relevant data needs to be collected and interpreted in a strategic and effective manner. Once the decision was made by the management of KGH to develop an ANP (Emergency) post, the first step was to identify a means of collecting relevant information to support the ANP post development. The survey instrument originally used during the development of a similar post at CUH was identified as the most beneficial method of collecting the key information required. The fields used in this instrument captured specific information on the flow of ambulatory patients with non-urgent conditions attending the emergency department (ED) (see Box 1).

Box 1: Fields Used in the Patient Activity Survey



The next step was to identify and secure the resources required to conduct the survey. The key tasks associated with the survey included the following:

- Patient activity to be captured for a duration of a seven-day, twenty-four hour period to ensure the sample comprised large gain credible data
- Patient charts to be photocopied to minimise service disruption
- Adaptations to the instrument to reflect local practice
- A pilot survey to check the suitability and design of the instrument
- Data to be retrieved manually from individual patient ED charts
- The eligibility of each individual patient chart to be identified
- Inputting of data into a Microsoft Office Access database
- Descriptive data analysis
- Writing up and presenting the results.

Carrying out this work entailed identifying a staff nurse familiar with the ED, who would facilitate the survey for a period of one month. A systems analyst was recruited to assist with data analysis and training was provided to all staff involved in the survey process (including administrative staff in the ED). A total of 265 patients' records were included in the survey. During the data collection phase, some unanticipated issues were identified relating to triaging of patients and the number of injuries associated with alcohol abuse.

The survey findings were analysed using descriptive statistics. Some of the findings are enumerated below:

- Patients under the age of fifteen accounted for 22% of attendances, while those aged between 15 and 30 accounted for a further 30%
- 57% of patients presented with limb problems; 10.9% with wound problems; 8% with falls-related injuries; 2.3% with dental problems; and 1% with bites and stings
- 71% of patients were x-rayed
- 81% of patient attendances were self-referrals compared with 16% referrals from general practitioners (GP)
- 61% of patients were referred to another healthcare professional for ongoing care
- 98% of patients were discharged home
- 16% of the sample had a four-hour or longer stay in the ED, 50% of the sample had a three hour stay and a further 34% had a two-hour stay. Many patients who experienced long waiting times or delays were under the age of 16
- 75% arrived in the ED between 08.00 and 20.00.

The findings relating to attendances by children led to the decision to include the care of children within the ANP's proposed scope of practice and to conduct a more in-depth survey of children's attendances at the ED. The long waiting times identified within the ED and findings from the international literature concerning adverse impacts on the quality of care and outcomes for patients supported the notion that by introducing an ANP service for adults and children, waiting times for patients attending the ED at KGH would be reduced and the quality of care improved.

Feedback from the survey to KGH's Executive Management Board (EMB) led to the approval of funding for the ANP post. This feedback also informed the post-holder's scope of practice and the site preparation. The data collection stage identified the need for training and development of staff in triage and also identified areas for future research, particularly on the impact of alcohol abuse on ED attendances, as well as providing evidence to support assertions about the improvements to patient care resulting from the establishment of ANP posts (see Box 2). These survey findings also led to a new awareness of the special needs of children in EDs and the need to plan services accordingly.

Box 2: Actual and Potential Improvements to Patient Care Resulting from the Establishment of an ANP Post in an Emergency Department as Identified within Health Policy and other Literature

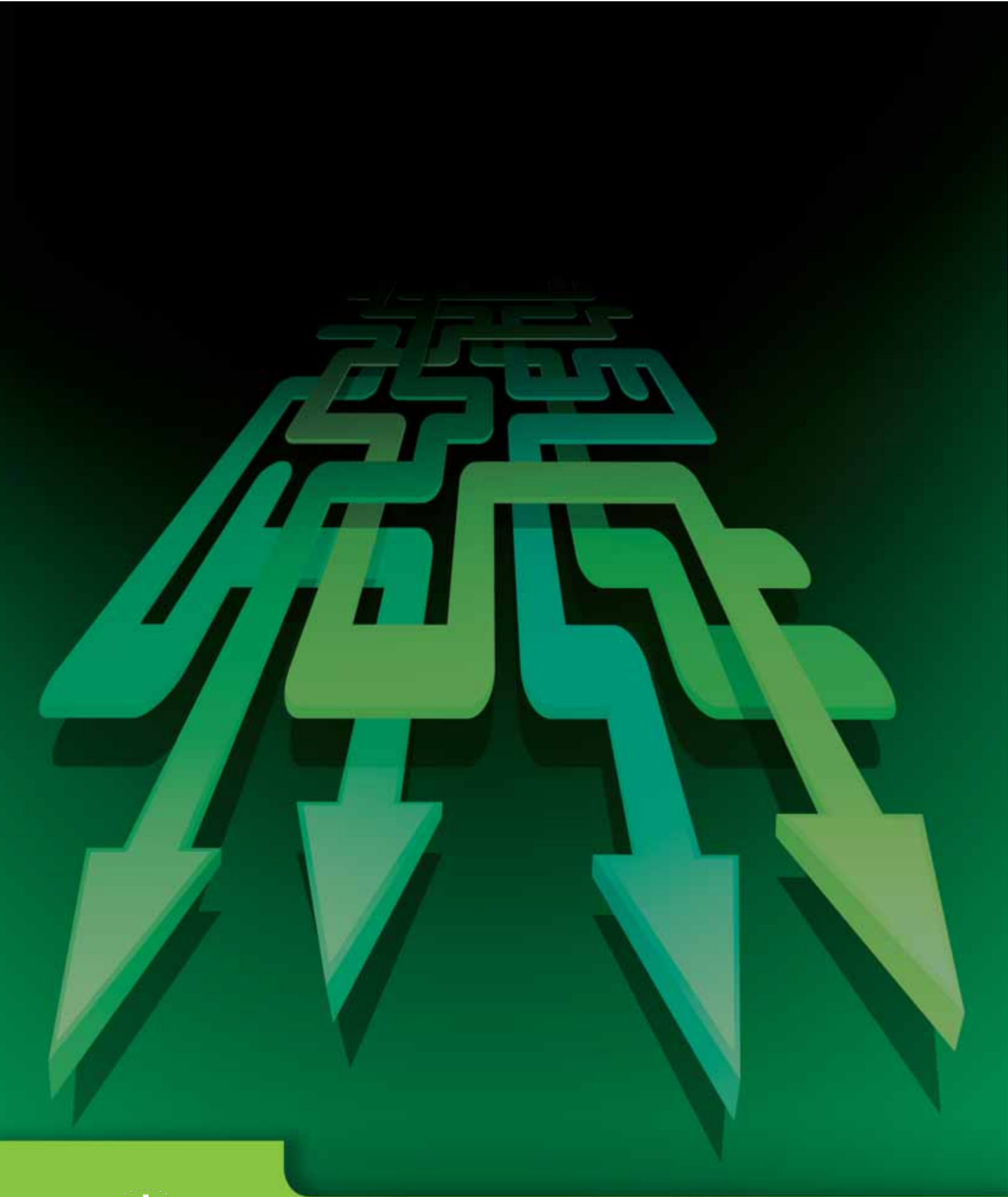
- Waiting times are reduced for patients with minor injuries
- The holistic approach to patient care offered by an ANP will lead to greater patient satisfaction in relation to information, guidance and education on lifestyle and risk modification
- More cost-effective use of healthcare resources for nursing and medical professionals
- More efficient use of staff and other resources in the ED
- Enhanced working relationships between nursing, medical and other healthcare professionals
- Increased opportunities for interdisciplinary teaching in areas emergency nursing
- Greater use of evidence-based practice and improved clinical governance

The National Council's *Service Needs Analysis for Clinical Nurse/Midwife Specialist and Advanced Nurse/Midwife Practitioner Posts* (2005) was an essential reference point for this project. The director of nursing and the ED's divisional nurse manager offered their full support. With their assistance, suitable people were identified, sourced and given protected time to undertake the project work. Strategic planning, full briefing of key personnel and effective training in data collection methods were essential to the successful completion of the survey work. Follow-up measures such regular telephone contact and twice-weekly site visits meant that the project was completed on schedule and a timely final report could be prepared.

One striking finding from this project was the discovery that the survey instrument itself helped to alleviate certain aspects of patients experiences in the ED. Feedback from the users indicated that it was user-friendly, logical and relevant to practice. To date, I have used the approach outlined above in identifying the need and the scope of practice for ANP posts in cardiology, wound care and colorectal nursing. Furthermore, with some modification the survey instrument itself could form the basis on which to audit ANP practice. I would highly recommend this approach to others seeking to develop ANP posts.

Notes

Notes



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