

Competencies: an integrated career and competency framework for paediatric endocrine nurse specialists





Royal College
of Nursing

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Contributors

Angela Casey RGN, RSCN, Dip HE, B. Ed, Senior Specialist Nurse in Paediatric Endocrinology, Birmingham Children's Hospital NHS Foundation Trust

Kate Davies RN (Child), Dip HE, BSc (Hons), MSc, Clinical Nurse Specialist in Paediatric Endocrinology, King's College Hospital NHS Foundation Trust

Shirley Langham MA, RGN, RSCN, Clinical Nurse Specialist in Paediatric Endocrinology, Great Ormond Street Hospital for Children NHS Trust

Lee Martin BSc, Dip H.E. (Child), Clinical Nurse Specialist in Paediatric Endocrinology Barts and The London NHS Trust

Ethel McNeill RGN, RSCN, BSc, Clinical Nurse Specialist in Paediatric Endocrinology Royal Hospital for Sick Children, Glasgow

Pauline Musson RGN, RSCN, Clinical Nurse Specialist in Paediatric Endocrinology Southampton University Hospital NHS Trust

Jacque Reid MA, RSCN, RGN, Clinical Nurse Specialist in Paediatric Endocrinology Royal Aberdeen Children's Hospital

Jenny Walker RGN, RSCN, Clinical Nurse Specialist in Paediatric Endocrinology Leeds Teaching Hospitals NHS Trust

Mandy Whitehead RGN, RSCN, Clinical Nurse Specialist in Paediatric Endocrinology Leeds Teaching Hospitals NHS Trust

We also want to acknowledge the work of:

Dr Justin Davies MD, FRCPC, MRCP, Consultant Paediatric Endocrinologist, Southampton University Hospital NHS Trust

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Introduction

Competence can be defined as: “The state of having the knowledge, judgement, skills, energy, experience and motivation required to respond adequately to the demands of one’s professional responsibilities” (Roach, 1992).

The changing context

The fields of nursing are highly specialised, and subject to dramatic change as innovations and new techniques are adopted. The RCN Paediatric Endocrine special interest group believes that professional advice and support are required for nurses developing their roles in a dynamic and rapidly advancing field.

The competency framework has been developed in this context, as well as taking into account other professional and political factors such as:

- ◆ *Agenda for Change* (DH, 1999)
- ◆ need for leadership in specialist nursing
- ◆ need for the development of UK-wide standards in paediatric endocrine nursing
- ◆ NHS Plan (DH, 2000) and its equivalent in Scotland, Wales and Northern Ireland
- ◆ increased focus on work-based and lifelong learning plus supervision
- ◆ increasing patient and user expectations
- ◆ inconsistency of provision and access to paediatric endocrine nursing education in the UK
- ◆ need for professional accreditation of skills and knowledge in practice
- ◆ national service frameworks and service modernisation
- ◆ *Future Nurse* (RCN, 2003)
- ◆ knowledge and skills framework (DH, 2004).

Agenda for Change

Agenda for Change (AfC) was implemented in the NHS, across the UK in December 2004. It was the biggest overhaul of NHS-wide pay, terms and conditions in over 50 years. It applies to all NHS organisations and therefore sets a UK framework for pay, terms and conditions of employment.

AfC and its knowledge and skills framework (KSF) means that all staff will have clear and consistent development objectives; can develop in such a way that they can apply the knowledge and skills appropriate to their level of responsibility; and are helped to identify and develop knowledge and skills that will support their career progression.

Under AfC, jobs are evaluated using a bespoke NHS job evaluation scheme. This gives each job a 'weighting' that then determines where each job slots into the pay bands. Common 'job profiles' are applicable across the UK. Each pay band has a number of pay points. Staff below the maximum point can expect to progress to the next point each year.

There are two points on each pay band called gateways where staff knowledge and skills are assessed using the knowledge and skills framework. Pay progression at the gateways is linked to the demonstration of applied knowledge and skills to support continuing professional development. The presumption in the KSF is that staff will pass through these gateways unless there are reasons as to why they shouldn't.

For more comprehensive information on Agenda for Change please refer to www.rcn.org.uk/agendaforchange/. This site is your guide to the ins and outs of the pay, terms and conditions for the NHS. It will help you to understand AfC, how it was developed and how you can make the most of the system, particularly the KSF. To ask questions and debate issues use the RCN's Discussion Zone (open to RCN members only).

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Paediatric endocrinology

Paediatric endocrinology – children’s hormones – covers a wide range of illnesses and disorders, varying from minor disorders to severe life-threatening conditions. The most common disorder seen in a paediatric endocrine clinic is short stature (Davies, 2004), and the National Institute of Clinical Excellence (NICE, 2002) estimates that there are 1 in every 20,800 children (or 48 per million) children diagnosed with growth hormone deficiency. Congenital hypothyroidism has an even higher incidence, which is estimated at 1 in 4,000 (or 250 per million) and every newborn baby in the UK is now tested for it (Raine et al., 2006). It is therefore clear that the need for specialist paediatric endocrine services is paramount, and it is suggested that these patients would benefit from the care provided by specialist paediatric endocrine nurses.

Most children or young people can maintain a normal, healthy lifestyle with the assistance of hormone replacement. However, this can only be gained through accessing specialist paediatric endocrinology services, where the position of a nurse specialist is paramount. Links from primary, secondary and perhaps tertiary care can be formed, also links with schools and multidisciplinary agencies. Conditions can be congenital or acquired, and can sometimes be lifelong, necessitating seamless links into adult endocrine services where, “a staged transition hopefully allows a trusting therapeutic relationship to develop between patients and adult services and to continue in the long term.” (Davies and Ibbotson, 2005)

The paediatric endocrine nurse specialist role

The intricate detail of the role and what is expected is reflected in the specific competency framework in Section 5. The paediatric endocrine nurse specialist should be working towards the aims in the mission statement for the RCN Paediatric Endocrine special interest group:

“To offer support, advice and expertise to nurses and professionals working with children, young people and their families with an endocrine disorder”

Through this, optimum nursing care should be delivered.

In essence, the paediatric endocrine nurse specialist should:

- ◆ promote excellent practice in the assessment, diagnosis,

treatment and transition in the care of children and young people and their families with an endocrine disorder

- ◆ be the first point of contact and principle keyworker/advocate for children and young people and their families with an endocrine disorder
- ◆ act as principle liaison for the GP, health visitor, school nurse, and other members of the multidisciplinary team to ensure a smooth provision of service to provide optimum care
- ◆ support and counsel the child/young person and their families by providing teaching, ongoing support (by nurse-led clinics, telephone, text message and email, according to local hospital policy), provision of specialist support networks, and referring to other professionals when necessary
- ◆ provide education and training to other disciplines in the community where necessary. For example, training of the need for administration of emergency IM hydrocortisone to school nurses/teachers
- ◆ practice as key member of the local multidisciplinary team, leading in the development of key policies, protocols and standards, through research and audit.

Qualifications

The paediatric endocrine nurse specialist should be a nurse with a children’s nursing qualification and registered as such on the Nursing & Midwifery Council (NMC) register, with additional paediatric endocrine theoretical and practical knowledge. It is envisaged that the paediatric endocrine nurse specialist acting in the ‘expert’ role should be practising at Masters degree level, with the view to working towards such a qualification.

Support and development

Establishing local and national links is paramount to function effectively as a paediatric endocrine nurse specialist. Links should be made with the local multidisciplinary team, and also adult endocrine services, to initiate effective transition services. Effort should be made to join the RCN Paediatric Endocrine special interest group, and also the British Society for Paediatric Endocrinology and Diabetes (BSPED) Nurses group. Annual meetings are an effective way of networking and forming valuable professional relationships. Additional nurse meetings are run by the different pharmaceutical companies, offering opportunities to share clinical expertise, research and practice. Such meetings and conferences are essential in benchmarking and appreciating other roles. Links can also be formed with the American Pediatric Endocrine Nursing Society (PENS), if UK paediatric endocrine nurse specialists have the opportunity to travel to their meetings.

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Purpose and scope of the framework

This competency framework was developed by the Royal College of Nursing (RCN) Paediatric Endocrine special interest group to enhance the clinical care that children and young people with an endocrine disorder receive. There are only approximately 60 paediatric endocrine nurses in the UK, and it is imperative that specific competencies are outlined. To achieve the appropriate care, nurses must be deemed to function at an optimal level, and “assessing competence in clinical practice is of paramount importance” (Gibbon and Luker, 1995). By formulating a competency framework from which a paediatric nurse specialist can work, it is envisaged that their development as a professional practitioner can be enhanced.

3

How to use the framework

The framework focuses on knowledge, skills and interventions that are heightened or specific to nurses working in paediatric endocrine nursing. Although the intention is for this framework to have a stand-alone function, it should be used in conjunction with other frameworks that focus on core skills and competencies for all qualified nurses. In addition the specific frameworks developed by specialist nurses can be used to support and enhance their nursing practice.

Benefits of the framework

The competency framework provides benefits for nurses, their employers, patients and the public.

Nurses benefit because it helps to:

- ◆ deliver consistently high standards of care
- ◆ identify the level of practice and plan a career in a more structured way
- ◆ pinpoint personal education and development needs
- ◆ realise potential more effectively
- ◆ seize opportunities to influence the direction of nursing.

Employers benefit because it provides:

- ◆ a model to ensure consistently high standards of care
- ◆ clearer insight into the expertise and competence of staff, for example, in assessment of risk management
- ◆ assistance in organisational planning.

Patients and the public benefit because it makes it possible to deliver:

- ◆ consistently high standards of patient care
- ◆ increased effectiveness of service provision
- ◆ improved access and choice for care provision.

Using the framework

Rather than practice being strictly questioned, it should be used as a tool to plan clinical aims and objectives. It can also be used for a personal development plan, and used by mentors and managers in the performance appraisal process. This needs to be used with reference to local and national guidelines, incorporating the KSF and National Occupational Standards. It should be used for:

- ◆ assessing clinical competence at differing levels

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Specialist competencies

- ◆ developing personal goals and objectives
- ◆ performance appraisal
- ◆ supporting job descriptions and pay reviews/negotiations by detailing targets in accordance with local and national guidelines and policies.

However, it must be recognised that a nurse specialist working in the field of paediatric endocrinology undertakes a vast role. Not every nurse specialist has the same job description, and therefore not every competency is relevant to each practitioner. For example, not every paediatric endocrine nurse specialist undertakes dynamic endocrine function testing.

Therefore, it must be made clear which competencies are relevant when this framework is used as previously described, as an organisational tool. The document is a starting point, and practitioners using the framework need to ensure that they keep up to date with changes in legislation, policy and practice that can impact on their role, in line with the NMC Code (NMC, 2008).

Overview and sources

The primary source for this document is the *Paediatric epilepsy nurse competency framework* (RCN, 2005), the RCN guidance for newly appointed diabetes nurse specialists (using Benner's roles according to *Dreyfus' Model of Skill Acquisition*) and the *Key elements of the career framework* under Skills for Health. The principle concept to focus on is that the "Dreyfus definition of competence is based on how people approach their work, not on whether they should be judged as qualified to do so" (Eraut, 1994). Links to the NHS KSF (DH, 2007) have also been explored, by concentrating on the 'novice' (in specialty) (competent nurse), 'competent' (experienced nurse) and 'expert' (senior practitioner). These are drawn up against the levels 5 to 7. A full list of references, further reading and useful websites are included at the end of this document.

The paediatric endocrine nurse specialist competency framework is presented in the tables in section five. The paediatric endocrine nurse specialist should be working at an 'expert' level (3/4 in KSF guidelines) within paediatric nursing. The levels of competence, which had previously been based on Benner's novice to expert continuum, have been translated into the RCN *Career and competence framework*. The levels in this framework refer to competent, experienced and senior or expert practitioner. They align to levels 5, 6 and 7 of the *Career framework for health* (Skills for Health, 2006). *These levels refer to a lifelong learning continuum and do not directly correlate with the Agenda for Change pay bandings.*

Progression through the levels will obviously be different for each nurse, depending on context, level of skill, performance appraisal, and individual objectives. However, it is envisaged that movement towards 'experienced' (level six) should occur after being in post for approximately 18 months to two years. Dependant on the patient population, workload, and individual needs, the paediatric endocrine nurse specialist should be achieving 'expert' (level seven) status after approximately five years in post. It should be stressed that nurses should always be working to advance their practice. Even in the early 1990s, the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (now the NMC) 1992 *Code of conduct* clearly describes how all nurses, midwives and health visitors must endeavour always to achieve, maintain and develop knowledge, skills and competence (Lillyman, 1998), and this is echoed in the new, updated version (NMC, 2008).

Formulating the differing competencies was a challenge because there are so many cross-overs among skills and abilities and differing role needs. Levels five, six and seven of the key elements of the career framework are used as previously described. They range from practitioner, senior/specialist practitioner and advanced practitioner.

Care of children and young people with growth and endocrine disorders

- ◆ during period where diagnosis not yet reached
- ◆ once diagnosis is confirmed
- ◆ endocrine testing
- ◆ transition.

Nursing considerations and understanding children and young people with growth and endocrine disorders

- ◆ factors influencing growth
- ◆ auxology
- ◆ assessment of skeletal maturity
- ◆ physiology and pathology.

The following competencies have been researched by this group, and we envisage that they will be included in a generic children's nursing specialist framework currently being explored by the RCN. Therefore, focus within this framework is directed solely at paediatric endocrine practice only.

- ◆ relationships with children and young people with endocrine disorders and their families
- ◆ personal planning and organisation
- ◆ working in different health and social environments
- ◆ accountability
- ◆ teaching and sharing knowledge
- ◆ research and audit
- ◆ relationships with professionals
- ◆ professional and personal development.

Practical applications

This framework has a multi-faceted purpose. It is a personal tool to form individual goals and objectives to advance nursing practice continually – both personally and professionally. It can also be used as a management tool. In this way, the RCN framework can be used against national NHS/KSF frameworks in the performance appraisal process. This will ensure that paediatric endocrine nurse specialists are banded in Agenda for Change fairly and equally throughout the UK, while operating within their scope of professional practice. Such continual practice is echoed by Eraut (1988).

“Part of a professional's capacity involves being able to develop or transform one's own practice over time, to create new knowledge through one's own practice, as well as learning from others” (Eraut, 1998).

It is stressed that this method for enhancing nurses' clinical, practical and professional skills is the way forward in advancing and enhancing specialist nursing practice. It has been described that “the competence-based approach to education has been heralded as an objective assessment method, facilitating distinctions in levels of competence

when a variety of sources of evidence are used to support judgements concerning performance” (Percival et al., 1994; cited by Gibson and Soanes, 2000).

Next steps

This is the first framework for paediatric endocrine nurse specialists. The RCN Paediatric Endocrine special interest group welcomes constructive feedback on the document, both nationally and internationally, in the hope that further developments and ideas can be incorporated into future versions.

Please contact:

RCN Adviser in Children's and Young People's Nursing
Royal College of Nursing
20 Cavendish Square
London
W1G 0RN

RCN Paediatric Endocrine special interest group
www.rcn.org.uk/cyp/endocrinology

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The competencies

Care of children and young people with growth and endocrine disorders

During the period whilst diagnosis not yet reached						
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes and behaviour	Contextual factors
5	Provide support by listening and providing contact details for the endocrine team and simple factual information about test procedures.	Core 1 level 3	Clear documentation of issues raised by the child/young person and family, information and contact details given.	Listening skills How to access relevant information. Test/investigation procedures. Contact details for the endocrine team.	Actively listens.	Skills for Health Competences: CS19, CS22.
	Respond confidently to emotional responses.		The child/young person and their family are supported effectively. Patient records clearly document support provided.	Awareness of the emotional responses likely to be experienced by the child/young person and family during the period of investigation.	Calm. Reassuring. Sensitive.	Skills for Health Competences: CS1.
	Provide more detailed information and support – individually tailored to the needs of the child/young person and family.		Clear documentation of issues raised and correct information given to the child/young person and family.	Common endocrine investigations Information and support available for children/young people and their families/carers in relation to specific endocrine conditions and investigations.	Understanding	Skills for Health Competences: CS20, CS30.
7	Develop an ongoing relationship with the child/young person and family.	Core 1 level 4	Records clearly demonstrate an auditable trail of contact and support provided relevant to the child/young person's needs.	Cultural and social diversity issues applicable to the child/young person and their family/carers.	Confident social skills Empathic.	Skills for Health competences: CS19, CS22.
	Empower the child/young person and family to be actively involved in managing their condition and making decisions about treatment.	HWB4 level 4	Records clearly demonstrate child/young person and their family being actively involved in decision-making regarding their plan of care.	Enabling behaviours to promote individual development and independence.	Enabling Empowering	Skills for Health Competences: CS9, CS22, CS30.
	Refer to other agencies when appropriate e.g. CAMHS*, support groups.	HWB6 level 4	Accurate completion of referral documentation and clear records of other agency involvement.	Relevant agencies. Referral pathways to relevant agencies/support groups		Laming report – Climbié.

* Glossary of terms on page 21

Care of children and young people with growth and endocrine disorders

Once diagnosis confirmed						
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
5	Identify need for further information/support.	Core 2 level 3 HWB4 Level 2	Clearly and comprehensively completed assessment of child/young person's needs and the needs of their families and carers.	Normal patterns of growth and puberty. Non-pathological factors that may influence normal growth patterns e.g. child's nutritional state; underlying chronic disease; parental stature. Information/support available and how to access/refer.	Seek support, advice and guidance.	NMC Code of Conduct. Skills for Health Competences: CS2, CS3, CS20.
	Provide written information on condition and details of support groups where available such as CAF support group.	Core 1 level 3 HWB4 Level 3	Documentation clearly shows that the child/young person and family/carer have been provided with information relevant to their need, age and level of understanding.	Relevant agencies. Information available for children/young people and their families/carers, how to access and use. Common endocrine conditions. Relevant support groups. How to appraise information as to whether it is correct and/or beneficial to the child/young person and their family.		Skills for Health Competences: CS22; CS30, GEN62.
	Liaise with outside agencies as needed.	HWB2 Level 3 HWB6 Level 3	Documentation shows clear evidence of liaison with school, GP, Health visitor, community paediatrician etc.	All agencies, professionals, and relevant contacts for the individual child/young person in their care. How to contact relevant agencies/professionals and involve them in the plan of care.		Skills for Health Competences: CS1.
6	Discuss information about the condition or treatment in more detail.	Core 1 level 3	Patient documentation clearly records the extent of the information given. All documented information is accurate, complete and applicable to the patient's condition, situation, age and understanding.	Relevant anatomy and physiology. Common endocrine conditions e.g. isolated growth hormone deficiency; Turner syndrome; thyroid disorders and adrenal insufficiency; PSM; CDGP; DI and craniopharyngioma; CAH; MPHD; Prader Willi Syndrome; small for gestational age. Treatments available. Genetic implications of some of these disorders. Content of information available and its applicability to the child/young person's needs and the needs of their family/carers.	Alert to child/family's information need.	RCN Information Sharing Competencies. Skills for Health Competences: CS20, CS30.
	Give advice on management of intercurrent illness for children/young people with cortisol insufficiency.		Clear documentation of correct advice given to the child/young person, their family/carers in relation to the management of intercurrent illness for child/young person with cortisol insufficiency.	Management of intercurrent illness for child/young person with cortisol insufficiency.		

Once diagnosis confirmed (continued)

Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
6	Where choices of treatment need to be made (such as growth hormone device) consider the needs and resources available to the family prior to providing objective information/ advice.	HWB2 level 3 HWB6 level 3	Clear documentation of the treatment options available and the accurate advice given to the child/young person their family/carer.	Treatment choices available and applicable to the child/young person's condition. Awareness of the financial implications of high cost treatments.	Sensitive	Skills for Health Competences: CS5, CS6, CS7, CS8, CS9, CS20, CS22, CS30.
	Plan and implement treatment with growth hormone.	HWB7 level 3	Clear documentation of an accurate plan of care and implementation as per the care plan.	Use of growth hormone, side effects and potential complications. Care management of children/young people being treated with growth hormone.	Organised	Skills for Health competences: CS13, CS14.
	Monitors straightforward treatments such as growth hormone.		Clear records of monitoring, evaluating and reassessing the child/young person's needs in relation to the treatment undertaken i.e. discontinuing growth hormone if poor response.	Dosages and side effects of commonly prescribed endocrine drugs.		
	Assess problems that may arise with compliance and take steps to address these.		Documentation records actual and potential issues in relation to compliance with treatment regimens and advice/support provided.	Possible issues regarding compliance and solutions to overcome these.	Understanding	Skills for Health competences: CS15.
7	See child/young person and/or family independently in nurse led clinic.	HWB6 level 4	Adheres to organisational policies, carrying out appropriate assessment processes applicable to the child/young person's condition.	Relevant anatomy and physiology Relevant agencies. Pubertal assessment Physical Assessment Local organisational policies/ procedures. Confidentiality.	Sensitive	Skills for Health competences: CS9.
	Discuss complex conditions and treatment regimens.		Contribution to discussion with the MDT. Clear discussion with the child/young person using language appropriate to age and level of understanding. Clear records of condition and treatment regimens discussed.	In depth knowledge of complex conditions and treatment regimens e.g. MPH; endocrine late effects in survivors of childhood cancer; congenital adrenal hyperplasia; disorders of sexual development; diabetes insipidus and craniopharyngioma; Prader Willi Syndrome; bone and calcium disorders.		

Once diagnosis confirmed (continued)

Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
7	Takes into account educational, social and cultural needs of the family when planning education or support.		Records clearly demonstrate the education support required, agreed, provided and clarified with the child/young person and their family.	Educational and social support mechanisms available. Aware of potential benefits/difficulties of support groups.		
	Is able to assess critically written information/web sites prior to recommending them to the child/young person and family.	IK2 level 3	Records clearly demonstrate the child/young person and their family have been directed to appropriate sources of information and advice.	Critical appraisal skills. Available information/websites including content and suitability for child/young person and their families. Understanding of child development and age appropriate material. How to identify gaps in the literature available.		Skills for Health competences: GEN32, H111.
	Develops written information for families and other health care professionals where need identified.	Core 1 level 4	Written information is applicable to the need of the family/health care professional and supplements existing resources.	Relevant local policies and protocols. Understanding of child development and age appropriate material. How to identify gaps in the literature available.	Sensitive	Skills for Health competences: CS20, GEN62.
	Prescribe safely and cost-effectively.	HWB7 level 4	Patient records clearly identify appropriate prescription for the child/young person's clinical needs.	Side-effects and contraindications of medications used in clinical practice.	Sensitive	Completion of a recognised independent prescriber course and accreditation as an Independent Prescriber. Skills for Health competences: CM_A7, CS15.

Endocrine testing							
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors	
5	Assist senior nurse or medical practitioner in carrying out tests.	HWB6 level 3	Support applicable to the tests required.	Protocols for endocrine function tests. Normal ranges. Their role and responsibilities in relation to assisting tests and investigations.	Observant		
6	Be able to explain rationale behind protocols for endocrine function tests.	HWB6 level 3	Accurate explanation applicable to the child/young person, their families, and relevant health care professionals.	Relevant anatomy and physiology. Normal functioning of the endocrine system. Common endocrine function tests.	Understanding		
	Have understanding of limitations of tests.			Rationale behind the protocols for endocrine function tests. i.e. differing protocols/ assays/ indicators.			
	Safely and competently carry out shorter tests with minimal supervision.			Preparation, implementation, and completion of the test according to agreed protocol, while ensuring the child/young person and family are supported effectively throughout.			What shorter tests are available, why and how they are carried out e.g. LHRH, TRH, short synacthen, and hCG tests.
	Safely and competently carry out complex tests with supervision from senior nurse or experienced medical practitioner.						What complex tests are available, why and how they are carried out such as insulin tolerance test, glucagon and clonidine for growth hormone stimulation.
	Be able to identify results outside normal limits and liaise with medical personnel.	IK2 level 2	Prompt reporting to the relevant member of the MDT. Accurate interpretation of results, and actions taken clearly documented in the patient records.	Normal results/values, applicable to the child/young person's age and gender.			

Endocrine testing (continued)							
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors	
7	Develop and update evidence based protocols for endocrine function tests.	IK2 level 3	Protocols clearly referenced to appropriate timely research. Clear review dates included in the protocols.	How to appraise critically available research to inform the evidence base used to develop the protocols.	Organised. Critically analytical.	Skills for Health competences: CHS170.	
	Provide advice on all aspects of endocrine tests at local and regional level.		Personal records of clear accurate advice given, when and to whom. Clear documentation of advice given within own local sphere of influence.	Relevant anatomy and physiology. In depth knowledge of all aspects of endocrine tests, and potential adverse reactions.			
	Carry out endocrine tests adhering to organisational policies and procedures.	HWB6 level 4	Clear documentation of endocrine tests undertaken.		Observant		
	Initiate new tests where indicated and appropriate using standard operational procedures.				Empathic with children and families.		
	Accept direct referrals from other consultants as agreed by local protocols.				Clear documentation of referrals received.		Relevant local protocols. Referral pathways. Own limitations.
	Supervise nursing and medical practitioners undertaking tests.	IK2 level 3 HWB6 level 4	Evidence of supervision provided as evidence of continuing professional development.	In depth knowledge of all aspects of endocrine tests.			
	Interpret results and act appropriately as indicated.		Discussion with the MDT of the need for further tests or to initiate/change treatment regimens.	The normal values of endocrine biochemistry. Treatment regimens and desired outcomes.			Skills for Health competences: CS14. NICE guidelines for growth hormone treatment in children. Day 5 heel prick: newborn blood spot screening.

Transition						
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
5	Demonstrate understanding of the changing needs of adolescents and young adults.	HWB6 level 3	Clear identification of needs in patient documentation. Attend transition clinics where available.	The changing needs of adolescents and young adults.	Empathic. Understanding.	RCN guidance re. transition. DH guidance re. transition. ESPE transition guidance.
	Identify the key people within adult endocrine services.		Records clearly show where advice and support has been sought from the adult endocrine services.	Who the key people in the adult endocrine services are and how to access them.	Liaises and networks.	
6	Demonstrate understanding of how endocrine conditions change during adolescence	HWB7 level 3	Clearly explain the management of endocrine conditions in ways relevant to the target audience e.g. in simple terms to the young person and their family.	Relevant anatomy and physiology. Growth and development. Management of endocrine conditions related to growth and development.	Understanding.	Skills for Health competences: CS23.
	Develop a working relationship with the adult endocrine team.	Core 1 level 3	Effective working relationships with all members of the MDT. Records show clear evidence of seeking advice and support from the adult endocrine team in order to support service development	The roles and responsibilities of members from the MDT.	Builds and maintains professional relationships.	
7	Demonstrate the ability to manage endocrine conditions during the transition phase.	HWB7 level 4	Patient records clearly demonstrate appropriate management of the young person's endocrine condition	The needs and requirements of the child/young person during the transition phase.	Liaises Empathic	Skills for Health competences: CHS170.
	Take a lead in educating young people about their ongoing health needs and how these will change over time.	HWB1 level 3	Provide and use appropriate educational materials relevant to the young person's needs.	Educational strategies to engage young people in the management of their health and wellbeing.	Empowering	Skills for Health competences: CS11, CS12, CS20, CS30.
	Encourage the young person to become more responsible for their own health and more involved in consultations with the MDT.	HWB4 level 4	Patient records will clearly show the young person has been involved in the discussion with the MDT.	Enabling and empowering strategies to encourage independence and the development of self-management of condition. Aware of treatment regimes and assessment and strategies to determine management of endocrine disorders.		NICE guidelines in adult growth hormone deficiency. Skills for Health competences: CS22 CS15.

Transition (continued)						
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
7	Initiate contact with adult endocrine nurses at start of transition process.	Core 5 level 3	Records show the involvement of the adult endocrine nurses at the start of the transition process.	How to identify the transition phase. Appropriate adult endocrine team contact details.	Liaises. Team worker. Negotiates.	Trust and local guidelines and policies. Skills for Health competences: CS23 M&L_A3.
	Identify the gaps in service provision and work closely with paediatric and adult colleagues to address these.		Service improvement and development plans demonstrating stakeholder engagement across organisational boundaries.	How to analyse service provision to identify gaps. How to engage colleagues and stakeholders across the adult and paediatric endocrine services. How to identify and engage key stakeholders external to the endocrine service.		
	Work closely with appropriate primary care trusts and commissioning departments to establish appropriate services.					

Nursing considerations and understanding children and young people with growth and endocrine disorders:

Factors influencing growth						
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
5	Demonstrate understanding of normal patterns of growth and puberty.	HWB2 level 3	Patient assessment records clearly identify all required measurements undertaken correctly and development of appropriate plan of nursing care as a result. Patient records clearly identify all issues identified and reported to the MDT.	Normal patterns of growth. The developing child. Normal childhood milestones.		
	Demonstrate understanding of non-pathological factors that may influence this including: 1. The child/young person's nutritional state 2. Underlying chronic disease 3. Parental stature.			Non-pathological factors that may influence growth.		
6	Be able to explain common endocrine conditions.	Core 2 level 3	Clearly articulate and share knowledge in manner appropriate to the target audience.	Relevant anatomy and physiology. Endocrine related pathology. Common endocrine conditions e.g. isolated growth hormone deficiency; Turner syndrome; thyroid disorders; disorders of puberty; adrenal failure.	Understanding.	Skills for Health competences: CS5, CS6.
	Understand the genetic implications of some of these disorders.					
	Understand the investigations of short and tall stature, metabolic syndrome and obesity.	Core 3 level 3	Clear documented plan of nursing care and identified risk factors.			
7	Demonstrate expertise in managing more complex endocrine conditions.	Core 2 level 4 HWB6 level 4 HWB7 level 4	Clearly articulate and share knowledge in manner appropriate to the target audience. Clearly documented records of contribution made to care plan for patients with complex endocrine conditions.	MPHD; endocrine late effects in survivors of childhood cancer; congenital adrenal hyperplasia (CAH); disorders of sexual development (DSD); diabetes insipidus (DI); Prader Willi Syndrome; and familial endocrine neoplasia syndromes.	Applies critical thinking skills.	

Auxology						
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
5	Demonstrate understanding of techniques for measuring children.	HWB6 level 3	Reliably and accurately measure height, length, sitting height, head circumference and weight of children. Accurately plot measurements on appropriate centile charts. Accurately carry out calculations of BMI, BSA, height velocity and mid-parental height.	Techniques for measuring children. Centile charts & decimal ages.	Attention to detail.	Skills for Health competences: CHS19.
6	Enable other health care workers to measure children accurately using recognised tools.	Core 2 level 3	On an individual basis teach other health care workers techniques for measuring children. Explain centile charts and normal growth patterns.	As for level 5.	Facilitates learning in others.	Skills for Health competences: LLUK_L4 LLUK_L7.
	Be able to describe Tanner system for pubertal staging.		Describe Tanner system appropriate to target audience.	Relevant anatomy and physiology. Tanner system for pubertal staging.		
7	Teach pre- and post-graduate health care professionals correct techniques for measuring children.	Core 2 level 4	Lesson plans and associated documentation clearly demonstrate the correct techniques taught and the teaching and assessment methods used.	All techniques required to measure children's growth. Teaching and assessment.	Organised	Skills for Health competences: LLUK_L4 LLUK_L7.
	Accurately interpret growth patterns such as familial short stature, constitutional delay of growth and puberty.	HWB6 level 4	Accurate interpretation and assessment of growth patterns clearly documented in patient records.	Normal growth patterns. Signs of growth patterns relevant to endocrine conditions e.g. familial short stature, constitutional delay of growth and puberty. Interpreting growth charts.	Sensitive Empathic	Skills for Health competences: CS4, CS7, CS13.
	Accurately assess pubertal development according to local guidelines.			Normal pubertal development. Use and application of pubertal development tools.		

Assessment of skeletal maturity						
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
5	Demonstrate an understanding of techniques for assessing skeletal maturity using the TW ₃ (2001) method.	HWB2 level 3	With guidance from a senior nurse and doctor reliably and accurately assess skeletal maturity.	TW ₃ (2001) method using either the 13 bones of the radius, ulna and small bones of the hand (RUS) or 20-bone score.	Attention to detail.	Appropriate new standards for assessment.
6	As an independent practitioner reliably and accurately assess skeletal maturity.	HWB2 level 3	Reliably and accurately assesses the skeletal maturity of children and young adults.	Other forms of skeletal assessment e.g. the Greulich and Pyle (1959) system.		
			Clearly documented accurate findings.			
7	Teach junior nurses and doctors the techniques of assessing skeletal maturity using the TW ₃ (2001) method.	Core 2 level 3 G1 level 3	Records of training given.	As above. How to teach others.	Facilitates learning in others.	Skills for Health competences: LLUK_L4 LLUK_L7.

Physiology and pathology						
Level	Competence	KSF	Performance criteria	Knowledge and understanding	Attitudes & behaviour	Contextual factors
5	Demonstrate understanding of: the endocrine system; glands and hormones involved; stimulation, suppression and feedback mechanisms.	HWB5 level 3	Accurate plan of nursing care developed to meet the child/young person's needs. Clearly and accurately explains the care required to a senior team member.	Relevant anatomy and physiology. Understand the endocrine system, glands and hormones involved. Stimulation, suppression and feedback mechanisms and how this relates to normal growth and development.		Skills for Health competences: CS5.
6	Teach (one-to-one or small groups) the basic anatomy and physiology of the endocrine system, hormone regulation and feedback mechanisms.	Core 2 level 3	Clearly and correctly articulates and shares knowledge of the endocrine system applicable to the target audience e.g. junior doctors training programmes; and staff induction.	Learning and development strategies. Teaching methods. Basic anatomy and physiology of the endocrine system, hormone regulation and feedback mechanisms.		Skills for Health competences: LLUK_L10 LLUK_L11 LLUK_L13.
	Explain how this relates to common disorders such as IGHD, Turner syndrome, thyroid disorders and disorders of puberty.			Physiology and pathology of common disorders such as IGHD, Turner syndrome, thyroid disorders and disorders of puberty.	Understanding	
7	Teach at local and regional/national level on paediatric endocrine care.	G1 level 4	Incorporates endocrine care and its related A&P in teaching at appropriate level for audience.	In depth knowledge of A&P including developments of biology and genetics, and relationship to complex endocrine disorders.	Networks. Facilitates learning in others. Liaises.	Poster presentations at conferences. Lecturing. Skills for Health competences: LLUK_L4 LLUK_L7 CM_F1.

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Legislation, policy and practice

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Resources and contacts

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www.rcn.org.uk
www.rcn.org.uk/support/pay_and_conditions/agendaforchange

RCN Paediatric Endocrine Group online community

www.rcn.org.uk/cyp/endocrinology

Nursing & Midwifery Council

www.nmc-uk.org

British Society for Paediatric Endocrinology and Diabetes

www.bsped.org.uk

The Society of Endocrinology

www.endocrinology.org

European Society of Paediatric Endocrinology

www.eurospe.org

Pituitary Foundation

www.pituitary.org.uk

Child Growth Foundation

www.heightmatters.org.uk

Turner Syndrome Support Society

www.tsss.org.uk

Climb Congenital Adrenal Hyperplasia Support Group

www.cah.org.uk

Prader-Willi Syndrome Association (UK)

<http://pwsa.co.uk>

British Thyroid Association

www.british-thyroid-association.org

Contact a Family

www.cafamily.org.uk

Skills for Health

www.skillsforhealth.org.uk

Endocrine courses

Paediatric Endocrine Module, Level 3: Keele University.

Auxology Training Course: Barts and The London NHS Trust.

Society for Endocrinology annual nurse training course

General courses of relevance/interest

Teaching and assessing in clinical practice

Counselling

Nurse prescribing

Paediatric physical assessment

Care of adolescents

BSc modules

MSc modules

PhD/Doctorate of Health Care

Glossary

A&P	Anatomy and physiology
BMI	Body mass index
BSA	Body surface area
BSPED	British Society of Paediatric Endocrinology and Diabetes
CAMHS	Child and Adolescent Mental Health Services
CAF	Contact a Family
CAH	Congenital adrenal hyperplasia
CDGP	Constitutional delay of growth and puberty
DI	Diabetes insipidus
DSD	Disorders of Sexual Development
GP	General practitioner
HCG	Human chorionic gonadotrophin
IGHD	Idiopathic growth hormone deficiency
IM	Intra-muscular
KSF	Knowledge skills framework
LHRH	Luteinizing hormone releasing hormone
MDT	Multidisciplinary team
MPHD	Multiple pituitary hormone deficiency
NICE	National Institute for Health and Clinical Excellence
NMC	Nursing & Midwifery Council
PCT	Primary care trust
PENS	Pediatric Endocrine Nurses Society (US)
PSM	Premature sexual maturation
PWS	Prader Willi Syndrome
RCN	Royal College of Nursing
RUS	Radius ulna score
TRH	Thyrotrophic releasing hormone
TW3	Tanner Whitehouse Three



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