

SPIN Module curriculum in

Paediatric Nephrology

SPIN Version 1.0Approved for use from September 2021

This document outlines the curriculum and Assessment Strategy to be used by Paediatricians completing the RCPCH SPIN module in Paediatric Nephrology.

This is Version 1.0. As the document is updated, version numbers will be changed, and content changes noted in the table below.

Version number	Date issued	Summary of changes

This information is correct and up to date at time of publication. @RCPCH 2021

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Section 1

Introduction and purpose

Introduction to SPIN modules

Special Interest (SPIN) modules are the additional training/experience a paediatrician completes so that they can be the local lead and part of the clinical network providing for children who need specialist paediatric care. They are designed to meet a specific service need, with possible roles suitable for those who have completed a SPIN module identified within the SPIN purpose statement.

Paediatricians will be able to seek training in an area of special interest or in aspect(s) of subspecialty care. This will involve training, assessment and supervised care. It will vary in breadth and depth, depending upon the specific SPIN syllabus. The SPIN can be completed before or after CCT. It should be feasible to complete the SPIN in no more than 12 months full time training. SPIN training does not have to be completed within one placement or over one continuous period. The assessment of whether the clinician has attained the required learning outcomes will only examine evidence relating to a maximum of five calendar years prior to submission.

Please note that SPIN Modules are:

- NOT a route to GMC sub-specialty accreditation.
- NOT required for GMC accreditation in Paediatrics or any of its sub-specialties.
- NOT sub-specialty training and not equivalent to GRID training.

SPINs are undertaken and assessed within the working environment, under the guidance of a designated Supervisor, recording evidence within the ePortfolio. The RCPCH SPIN Lead, usually the relevant College Specialty Advisory Committee (CSAC), is responsible for reviewing completed portfolios and confirming if the SPIN is to be awarded.

More information regarding SPIN modules, including how to apply to undertake a SPIN and how to submit evidence against the competences, is contained in the SPIN module Guidance on the RCPCH SPIN webpages: www.rcpch.ac.uk/spin.

Purpose statement

This purpose statement demonstrates the need for clinicians to undertake a SPIN module in Paediatric Nephrology, and the benefits to and expectations of a clinician undertaking training in this area.

This SPIN module meets the current and future anticipating requirements of the health service, reflecting patient and population needs:

Paediatricians increasingly work as part of wider clinical networks. By supporting them in developing an interest in a specific area of practice, SPINs help facilitate more patients being seen by a paediatrician with the expertise to treat certain specific conditions nearer to their home, rather than having to travel to a major paediatric unit.

Children with rare and complex kidney diseases are largely managed by paediatric nephrologists, with those that need renal replacement therapy being cared for at one of the 13 paediatric tertiary renal centres that serve large geographical regions within the UK. There are however significant numbers of infants and children who attend secondary care hospitals with other nephrology conditions, such as those diagnosed with congenital abnormalities of the kidney and urinary tract (CAKUT), nephrotic syndrome, glomerulonephritis, acute kidney injury (AKI), and pre-renal replacement chronic kidney disease (CKD). Short and long-term management of a majority of these children within secondary care must involve specialists input from a regional tertiary unit, and should ideally be led locally by skilled paediatricians who are trained and or have a specialist interest in Paediatric Nephrology.

The British Renal Society (BRS) workforce document in 2002 and most recently in 2020, acknowledged workforce and multidisciplinary resources as key challenges facing paediatric nephrology. The basis for this is largely the challenges of an increasing UK population and diversity, social inequality with comorbidities, and demand on paediatric services; culminating in a wider gap between workload and available paediatric nephrology consultants working at the 13 renal centres in the UK. SPIN training in nephrology offers the opportunity for pre and post CCT paediatricians to develop relevant skills, that will have them as part of a regional renal network working to achieve the delivery of sustainable, safe and high quality care for all children and young people nearer to their homes, as recommended in 'Facing the Future Standards' audits and reports. The service description and care pathway contained in the National Service contract for paediatric nephrology in 2013, and RCPCH report on 'Improving the standard of care of children with kidney disease through paediatric nephrology networks' published in 2011, underlined the important roles of specialised general paediatricians in care of children closer to their homes, and the creation of clinical networks. A nephrology SPIN paediatrician based in a secondary care hospital can oversee the management of many children that do not require direct care at tertiary centres, thereby minimising the impact of long distance travel for families, lost days of education, and possible loss of income.

In a survey sent to paediatric nephrologists working in multiple tertiary centres to explore their experience working with SPIN paediatricians, the majority of respondents agreed paediatricians with nephrology interest are best skilled to manage and follow up renal patients with stable long-term kidney conditions. Responses in the same survey also supported the opinion that SPIN paediatricians are able to facilitate network collaboration between secondary and tertiary units in order to improve the standard of nephrology services in areas of patient safety, research, service provision benchmark and quality improvement.

Training in nephrology SPIN is aimed at developing paediatricians to be competent at clinical management of children and young people with kidney and urinary tract disease. It offers the opportunity to gain relevant experience in services such as continence (bedwetting and daytime wetting), bladder and other urology problems affecting children, and transition to adult services. The training also targets acquisition of skills required to enable trainees to work collaboratively within renal networks and contribute to regional multidisciplinary teams in all areas relevant to clinical governance (education, research and quality improvement).

This SPIN module considers interdependencies across related specialties and disciplines, and has been developed and supported by the relevant key stakeholders:

This SPIN module has been developed by the Nephrology SPIN lead with the support of paediatric nephrology CSAC, British Association for Paediatric Nephrology (BAPN) Assessment Advisor, and in conjunction with other stakeholders that include other BAPN representatives, SPIN Paediatricians and general paediatricians with nephrology interest, nephrology SPIN trainees and British Association of Paediatric Urologists (BAPU).

A number of skills involved in the management of children with nephrology conditions are similar to other specialities; in particular rheumatology, endocrine, and oncology. Cross cover or interactions with these specialities, such as attendance at joint speciality clinics, will benefit trainees in acquisition of knowledge and understanding of inter-specialty co-ordination for some complex patients. There is also wide application of nephrology skills within paediatric intensive care, high dependency and neonatal unit settings.

The SPIN module supports flexibility and the transferability of learning, and provides a clearly-defined professional role for clinicians who have completed a SPIN. The SPIN module sets out what patients and employers can expect from clinicians, who have gained the SPIN:

Following successful completion of this SPIN module and level 3 Paediatric specialty training, the CCT holder will be competent to take up a post as a Consultant Paediatrician with a special interest in Paediatric Nephrology. It will be possible to complete this module post-CCT.

By the end of training, it is expected that clinicians who have completed this SPIN will have a sound understanding of the management of a range of disorders affecting the kidneys and urinary tract in children and young people. They will acquire expertise that will enable them to care for children within a renal network, and they would be able to demonstrate leadership and management skills needed to develop and improve local nephrology services within a district general hospital (DGH).

The SPIN training will enable the clinician to:

- Lead on shared care management of children diagnosed with acute and chronic kidney disease that allows children and young people to have care delivered close to home.
- Optimise antenatal and postnatal local management of babies diagnosed with congenital abnormalities of kidney and urinary tract (CAKUT) and facilitate appropriate referrals to tertiary centres.
- Lead on quality improvement projects linked to children and young people with kidney disease
- Champion the transition service for young people with chronic kidney disease using different modalities (such as the Ready, Steady, Go programme) that allow for a structured

patient centred process.

• Develop and contribute to local education activities that promote management of children with kidney disease at secondary care centres.

Other specific roles a clinician who has completed this SPIN may be able to undertake include:

- Be the local liaison at a DGH for the regional renal network.
- A local nephrology lead with oversight of all services associated with nephrology including continence and urology.
- Collaborate with local, regional and national research projects.

To continue their ongoing development following completion of the SPIN, it is recommended that clinicians:

- Engage with regional educational and research activities.
- Undertake regular continuing professional development meetings at regional and national levels.
- Be an active member of BAPN.

During SPIN training, it is recommended that clinicians identify a children and young people's group with relevant experiences to visit to listen and learn from their experiences and reflect with their supervisor on how to improve clinical and service practice. The #VoiceMatters section of this document raises the views of children, young people and their families. This can be used to inform practice and discussions with supervisors and colleagues, as well as improving understanding and awareness of patient and family experiences.

Requirements to undertake this SPIN module

Applicant requirements

This SPIN module is available to Level 3 trainees and all post-CCT paediatricians with an interest in Paediatric Nephrology, who are able to access sufficient training opportunities to meet the requirements of the SPIN curriculum.

Trainees who are interested in undertaking this SPIN module should approach their Head of Schools and Training Programme Director in the first instance to confirm if the necessary posts would be available and request support in undertaking this extra training. SPIN applicants are required to demonstrate that they have support of their Training Programme Director and have an appropriate Educational and Clinical Supervisor in place. Further guidance for post-CCT applicants is available on the RCPCH website.

Applicants with relevant recent experience may use some retrospective evidence towards their SPIN module in some cases. Please see the applicant guidance at www.rcpch.ac.uk/spin for more details on how to apply to undertake a SPIN module.

Training duration

SPIN training should be feasible within 12 months for full time training, or pro-rata for Less Than Full Time (LTFT) training. It is expected that to achieve the necessary learning outcomes, a clinician will need to train in the following clinical settings:

- It is recommended that the person completing SPIN has at least 6 months Full Time Equivalent (FTE) experience in a paediatric nephrology centre under the supervision of a named paediatric nephrologist.
- It is important the clinician participates and engages in clinical management (admissions, ward rounds, case discussions) of patients in paediatric intensive care and neonatal intensive care settings.
- The clinician should attend joint or separate specialty clinics (rheumatology, vasculitis, oncology, endocrine), and antenatal counselling meetings lead by tertiary unit specialists to gain experience of communication, multidisciplinary approach and shared care principles.
- The clinician needs to have an understanding of the principles and processes involved in kidney biopsy, dialysis and transplant, but is not required to have the practical or clinical skills required in those areas.
- Another 6 months Full Time Equivalent (FTE) experience at a secondary care hospital under the supervision of a SPIN Paediatric Consultant or general paediatric consultant with renal interest.
- The clinician should attend local nephrology clinics including shared clinics that have both paediatric nephrologist and SPIN paediatrician in attendance.
- The clinician should attend continence and urology clinics run by a paediatric urologist or urology nurse, or both.
- The clinician should attend regional educational meetings and contribute to clinical governance activities (quality improvement and research) that are opportune during higher specialist training rotation.

A suitable training centre is one which is currently approved for higher specialist training (see sub-specialist training section of the RCPCH website for more detail).

Out of Programme (OOP) training

Trainees should not need to take out of programme (OOP) to complete a SPIN module. Undertaking a SPIN will NOT be considered as a basis for an OOP except in exceptional circumstances and where both deaneries/Local Education Training Boards (LETBs) agree and approve the SPIN module programme. These exceptional circumstances include applications from trainees where approved training in a particular special interest is not available in their current deanery/LETB. Permitting OOP for these exceptional circumstances provides a positive contribution to workforce planning in regions where limited approved SPIN modules are available. For example, smaller sub-specialties such as Nephrology or Immunology & Infectious Diseases (IID) may only be available in a limited number of deaneries/LETBs. In order for applications utilising OOP to be considered by the RCPCH, both deaneries/LETBs must agree and approve the SPIN module programme and provide clear justification as to why the module could not be completed in the trainee's current deanery/LETB.

Post requirements

When applying to undertake a SPIN, applicants must demonstrate that they will be able to access the necessary learning opportunities and placements, and an appropriate Educational and Clinical Supervisor in place. Additional requirements for delivering this SPIN module are provided in the checklist in Appendix B. This addresses any specific requirements; for example, the human or physical resource experiences the trainee will need to be able to access in order for the curriculum to be delivered successfully. Please contact the SPIN Lead (usually the relevant CSAC) if further guidance is required.

Meeting GMC training requirements

All training must comply with the GMC requirements presented in Promoting excellence: standards for medical education and training (2017). This stipulates that all training must comply with the following ten standards:

Theme 1: Learning environment and culture

- S1.1 The learning environment is safe for patients and supportive for learners and educators. The culture is caring, compassionate and provides a good standard of care and experience for patients, carers and families.
- S1.2 The learning environment and organisational culture value and support education and training, so that learners are able to demonstrate what is expected in Good Medical Practice and to achieve the learning outcomes required by their curriculum.

Theme 2: Educational governance and leadership

- S2.1 The educational governance system continuously improves the quality and outcomes of education and training by measuring performance against the standards, demonstrating accountability and responding when standards are not being met.
- S2.2 The educational and clinical governance systems are integrated, allowing organisations to address concerns about patient safety, the standard of care, and the standard of

- education and training.
- S2.3 The educational governance system makes sure that education and training is fair and is based on the principles of equality and diversity.

Theme 3: Supporting learners

S3.1 Learners receive educational and pastoral support to be able to demonstrate what is expected in Good Medical Practice, and to achieve the learning outcomes required by their curriculum.

Theme 4: Supporting educators

- S4.1 Educators are selected, inducted, trained, and appraised to reflect their education and training responsibilities.
- S4.2 Educators receive the support, resources and time to meet their education and training responsibilities.

Theme 5: Developing and implementing curricula and assessments

- S5.1 Medical school curricula and assessments are developed and implemented so that medical students are able to achieve the learning outcomes required for graduates.
- S5.2 Postgraduate curricula and assessments are implemented so that doctors in training are able to demonstrate what is expected in Good Medical Practice, and to achieve the learning outcomes required by their curriculum.

It is the responsibility of each Deanery/ LETB to ensure compliance with these standards for paediatric training, and to notify the RCPCH if further support is required in achieving this. Training delivery must also comply with the requirements of the Conference of Postgraduate Medical Deans' (COPMeD), a reference guide for postgraduate specialty training in the UK (8th ed.).

#VoiceMatters

RCPCH &Us is a children, young people and family network, working with over 2,000 young patients, their families and friends across the UK each year. Through the work of RCPCH &Us we keep children and young people at the centre of everything we do, supporting their voice to inform, influence and shape the work of RCPCH.

RCPCH is guided by the United Nations Convention on the Rights of the Child, particularly article 12 which encourages children and young people's voice in decision making and article 24, providing them with the best health care possible. You can find out more about the rights of the child, how it relates to your practice and useful resources at www.rcpch.ac.uk/rightsmatter.

To support the development of this SPIN, we have reviewed the voice and views of children, young people and their families who have worked with RCPCH &Us. You can find out more about RCPCH &Us at www.rcpch.ac.uk/and_us.

What children, young people and families said

"The best doctor is someone who can change your feelings of health can help you on the worst day possible" RCPCH &Us

It can be hard for us and our families when we have a condition that we are just learning about or that we might have for the rest of our life. We can be worried, nervous and trying to be strong for everyone else, including you. It helps us when people take time, when they are patient, kind and explain things in different ways for different people in our family, so that we can understand what is going on. Sometimes we need to have conversations and time with you separately from our family members, so that we can talk to you about things that we might not want to mention in front our families.

"The best doctor is informed about national and local support services for children and young people, signposting and engaging with them" RCPCH &Us

There is so much to understand when you are told about different conditions or treatments, medicines and rules that we have to follow. We wish that we were told sooner about local support groups or services and national charities that can help us to understand things like how you live with the condition or manage the symptoms, or to talk to someone who isn't your doctor to get help understanding things.

"I want to know why this has happened to me and why I am different, and if the kidney thing will be something I always have to live with?" RCPCH &Us

When we have a kidney condition or transplant or something like that, we would really like it if our school, our GP and our specialist doctor all has the same information at the same time, and talks to each other to make sure that everyone knows what it happening. It can be really hard when one of the places looking after us doesn't have all the information, or doesn't believe when we tell them that our medicines has changed. It would help if we had a care plan that has all the up to date information and is easy to share between everyone. It would also be good if we got given tips to help us manage our condition when we are at school, at friends' houses, doing sports or out and about.

"We need to have really easy to understand information that we can then tell our friends when we go to their houses especially about food" RCPCH &Us

Sometimes there are things going on at home that might be making our conditions worse, but it might be hard for us to talk about them if our families are there, or we might be embarrassed or frustrated that things aren't changing. You might be able to help us by getting us help for what is going on at home, like writing to the council if we are in temporary accommodation which isn't helping our health or getting a family support worker to help us out. It would be great if you can find out about services in the local area or national charities and have this ready to explain to us separately, and to our families, and to remind us regularly when you see us as it is easy to forget or lose the information when there are lots of other things going on.

Having an illness or condition that people can't see can be hard for people to understand. It helps when doctors think about how to help make sure you have good mental health as well as looking after physical health. Sometimes mental health can be worse when you have got a medical condition. Having doctors who know how to talk to us about mental health as well as our physical health is important. Talking about how we are coping and feeling should be an everyday normal conversation, not just something that is mentioned or checked once.

"Mental health is equally important; it might even be more important than physical health" RCPCH &Us

For people with long term conditions, we might be seeing doctors for our whole lives. It can be worrying thinking that the doctor, nurses, receptionists and everyone you have grown up with in your children's clinic will change when you move to adults. This could be when you are still at school so it doesn't always feel like it is time to go to another hospital and be helped by a different doctor or nurse in a new clinic. It would be good to find out different ways to help that move and transition, like lots of appointments with both sets of doctors (old and new), virtual tours, phone calls and visits so you get used to it, and that you start talking about it really early so a few years before you have to move.

We also know that virtual appointments are going to be around for a while to help the NHS while it isn't safe for everyone to come into clinics and hospitals at the same time.

"Offering online appointments - the issue is that sometimes at home with the family there is no safe space to a have confidential call and feel safe that no one is listening in." RCPCH &Us

There are a few things that can be done to help us have good appointments whether they are on the phone or using video.

- 1. Reassure us about how it will work
- 2. Give us choice of how to talk with you
- 3. Help us to keep it private when we are at home
- 4. Help us to prepare for our virtual appointment
- 5. Make it easy for people without good WiFi access
- 6. Make it clear and simple about how we get help when we need it

"Remember that for some young people it is becoming too much with everything happening in their bedroom: school, friend socials, mental health appointments/health consultations. You can't get away from it space wise" RCPCH &Us

Thank you for doing this course to be the best doctor ©

"the best doctor is someone like you, kind, funny, happy and listens to me and my family" RCPCH &Us

Questions to think about:

- 1. How are you going to support children and young people to feel comfortable in opening up? Are there tools and resources that could help?
- 2. Have you asked about other things in their house, where they live or at school that they might need help with?
- 3. What ways will you use to help everyone talk with you on their own, in the way that is right for them?
- 4. What local and national charities do you know that help families dealing with this condition?
- 5. How will you help to make virtual health appointments safe, private and confidential for patients?

Thank you to children, young people and families from RCPCH &Us network for sharing their ideas and views used in this section.

Ensuring fairness and supporting diversity

The RCPCH has a duty under the Equality Act 2010 to ensure that its curriculum and assessments do not discriminate on the grounds of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex or sexual orientation.

Care has been taken when authoring the SPIN module curricula to ensure as far as is reasonable and practicable that the requirements for those undertaking the module do not unnecessarily discriminate against any person on the basis of these characteristics, in line with the requirements of the Act.

The RCPCH seeks to address issues of equality, diversity and fairness during the development of SPIN curriculum in a range of ways, including:

- Curriculum content to be authored, implemented and reviewed by a diverse range of individuals. Equality and diversity data is gathered regularly for clinicians involved in the work of the RCPCH Education and Training division.
- Undertaking careful consideration of the Learning Outcomes and Key Capabilities to ensure
 that there is a clear rationale for any mandatory content, and thus there are no unnecessary
 barriers to access or achievement. Beyond these mandatory requirements, the assessment
 tools can be deployed in a more flexible and tailored manner, meeting the requirements of
 the individual trainee.
- All draft SPIN curricula to be reviewed specifically against the protected characteristics
 prior to sign-off, identifying any possible barriers and ensuring these are appropriately
 addressed.
- All SPINs are approved for use by the RCPCH Education and Training Quality Committee (ETQC). As the body responsible for production of the Annual Specialty Report, and receiving summary reports on the National Training Survey from Heads of Schools and other sources, the Committee is well placed to ensure the curriculum meets the needs and addresses any existing concerns of the trainee population.
- All SPIN curriculum documents will be published in font type and size that is appropriate
 for a wide range of audiences, and optimised for readability. Information regarding the
 curriculum will be made available through a wide range of media, acknowledging differing
 learning styles.

The RCPCH is committed to gathering regular feedback from users of its SPIN modules, identifying any areas of bias or discrimination.

Please contact the RCPCH Quality and Standards Manager (qualityandstandards@rcpch.ac.uk) if you have any concerns regarding equality and diversity in relation to this SPIN module curriculum.

Quality assurance and continual improvement

Ensuring quality in delivery

A robust quality assurance and improvement framework is required to support an effective curriculum and assessment strategy. The purpose of this is to promote the improving quality of the trainee experience, and to ensure that the curriculum content, delivery, assessment and implementation is monitored and reviewed in a planned, systematic and appropriate manner.

The RCPCH quality infrastructure for training and assessment is based on the Plan, Do, Check, Act (PDCA) cycle, introduced by Deming. In the context of the Programme of Assessment, this means planning for effective assessment processes, executing those processes, review and evaluation including data analysis and multi-source feedback, and finally implementing any required changes.

The framework to support this curriculum will comprise a number of quality improvement tools and processes that impact on the overarching aspects of assessment. These will include:

- 1. **Effective selection mechanisms**. The SPIN application process ensures trainees will have the necessary capacity, supervision, and access to the breadth and depth of experience needed to meet the requirements of the SPIN module.
- 2. **Gathering and responding to feedback**. RCPCH gathers feedback in a structured way from SPIN module completers, and uses this and feedback from employers to support the regular review of SPIN modules.
- 3. **Review of attainment and evidence**. CSACs (or another designated SPIN Lead) review all completed SPIN portfolios prior to sign-off, ensuring consistency.
- 4. **Quality assurance of assessments**. This takes a variety of forms during the development, delivery and monitoring of assessment tools, as outlined in the <u>RCPCH Progress Assessment Strategy</u>.
- 5. **Quality of assessors and supervisors**. All SPIN applicants are required to have a suitable Educational Supervisor to support their SPIN training. RCPCH supports this through the Effective Educational Supervision course and a variety of guidance and resources available on the College website.
- 6. **Scheduled reviews**. All SPINs are subject to review every three years, although they may be updated more regularly where required.

By applying the framework processes outlined above, the College will ensure that SPIN modules are monitored and reviewed in a structured, planned and risk-based manner.

SPIN governance

The RCPCH's Education and Training Quality Committee (ETQC) has overall responsibility for the RCPCH SPIN curricula, working closely with the SPIN Lead. The ETQC will monitor the performance of the SPIN through the relevant CSAC/SPIN Lead, and receive scheduled reviews of feedback from SPIN users.

SPIN module review and revision

SPINs are reviewed every three years to ensure they remain fit for purpose, meeting the intended service need. Reviews are led by the SPIN Lead (usually the relevant RCPCH CSAC), who will report to the ETQC requesting any changes required. Where necessary, a SPIN can be updated before the three-year review is due, for example to reflect changes in guidelines.

Updated SPIN curricula will be published, making clear using the version tracking table at the front of each document what amendments have been made on each occasion. Where this amendment relates to a Key (mandatory) Capability, the ETQC will issue guidance for trainees currently undertaking the SPIN module, noting any implications of the amendment and whether they are required to meet the new criteria. Amendments will only be made where a clear rationale exists for doing so and every effort will be made to minimise any negative impact on the trainee.

Section 2

Paediatric Nephrology SPIN curriculum

How to use the RCPCH SPIN curriculum

This curriculum provides a framework for training, articulating the standard required to achieve the SPIN module and progress as indicated within the purpose statement. The curriculum ensures the quality and consistency of training and assessment, and encourages the pursuit of excellence in all aspects of clinical and wider practice. It must be referred to throughout training as the clinician records evidence demonstrating their developing skills and knowledge.

The curriculum should be used to help design training programmes locally that ensure all trainees can develop the necessary skills and knowledge in a variety of settings and situations. The curriculum is designed to ensure it can be applied in a flexible manner, meeting service needs as well as supporting each trainee's own tailored Learning and Development Plan.

The curriculum comprises a number of Learning Outcomes which specify the standard that clinicians must demonstrate to attain this SPIN module. Trainees are encouraged to consider innovative ways of demonstrating how they have met the Learning Outcome.

Trainees are strongly encouraged to record evidence against the Learning Outcomes throughout their SPIN training including engaging in active reflective practice to support their own development. The supervisor will review whether the trainee is on target to achieve or has achieved the Learning Outcome(s) and will suggest specific areas of focus to ensure that the trainee achieves the Learning Outcome(s) by the end of their SPIN training period. The Illustrations may be a useful prompt for this.

Components of the SPIN curriculum

The **Learning Outcomes** are the outcomes which the trainee must demonstrate they have met to be awarded this SPIN module. Progress towards achievement of the Learning Outcomes is reviewed at regular meetings with a designated supervisor. Learning Outcomes are mapped to the GMC's Generic Professional Capabilities framework.

The **Key Capabilities** are linked to specific Learning Outcomes and are mandatory capabilities which must be evidenced by the trainee, in their ePortfolio, to meet the Learning Outcome.

The **Illustrations** are examples of evidence and give the range of clinical contexts that the trainee may use to support their achievement of the Key Capabilities. These are intended to provide a prompt to the trainee and supervisor as to how the overall outcomes might be achieved. They are not intended to be exhaustive and excellent trainees may produce a broader portfolio or include evidence that demonstrates deeper learning. It is not expected that trainees provide ePortfolio evidence against every individual illustration (or a set quota); the aim of assessment is to provide evidence against every Key Capability.

The **Assessment Grid** indicates suggested assessment methods, which may be used to demonstrate the Key Capabilities. Trainees may use differing assessment methods to demonstrate each capability (as indicated in each Assessment Grid), but there must be evidence of the trainee having achieved all Key Capabilities.

This table contains the generic Learning Outcomes required for all trainees undertaking the RCPCH SPIN in Paediatric Nephrology. Within the curriculum and throughout the syllabi they are mapped to the GMC's Generic Professional Capabilities (GPCs).

More information on the GPC framework is available from the GMC website: https://www.gmc-uk.org/education/postgraduate/GPC.asp.

Please note, trainees will also be required to complete their generic and General Paediatric Level 3 Learning Outcomes in order to gain their Certificate of Completion of Training (CCT). Consultants undertaking a SPIN will already have demonstrated the required generic skills, knowledge and behaviours prior to having obtained their CCT. This SPIN curriculum only defines the specific Learning Outcomes for the stated focus, purpose and extent of remit stated for this SPIN module, and can not be used to indicate competence in any other aspect of paediatrics.

	SPIN Learning Outcome	GPCs
1	Assesses and manages a range of disorders affecting the urinary tract and recognises where long-term management is required, facilitates follow-up with other specialists and surveillance as necessary.	1, 2, 3, 4, 6
2	Recognises and assesses a number of common kidney disease presentations including haematuria, proteinuria and hypertension, and manages a range of glomerulonephritic conditions and tubular disorders including those associated with multisystemic involvement.	1, 2, 3, 4, 5, 6, 7, 8
3	Demonstrates expertise in fluid, electrolyte and acid-base management, and assesses or leads on the acute and long term management of children and young people with acute kidney injury (AKI).	1, 2, 3, 4, 5, 6
4	Recognises and leads on the acute and long term management of children and young people with chronic kidney disease (CKD), and liaises with tertiary care specialists and primary care physicians to deliver appropriate non-hospital treatments.	1, 2, 3, 4, 5, 6, 7, 8
5	Contributes to and improves local nephrology services through standardisation of clinical practice using evidence based approaches, development of nephrology educational activities at local hospital, and engagement in all clinical governance activities at regional and national levels.	1, 2, 3, 4, 5, 6, 7, 8, 9

The syllabus supporting these Learning Outcomes is provided on the following pages.

Assesses and manages a range of disorders affecting the urinary tract and	GPC 1, 2, 3, 4, 6,
recognises where long-term management is required, facilitates follow-up	
with other specialists and surveillance as necessary.	

Key Capabilities

Demonstrates understanding of normal development and physiology of kidneys, recognises range of congenital abnormalities of the kidney and urinary tract (CAKUT), and requirement for long term management.	GPC 2, 3, 4
Understands the diagnostic criteria, complications, and management of urinary tract infections in children of all age groups, recognising the role of nephro-urological imaging techniques, and the indications for involvement of a paediatric urologist and nephrologist.	GPC 1, 2, 3, 4
Assesses children and young people with renal stone disease and initiates treatment, recognising the involvement of multi-disciplinary teams where necessary.	GPC 2, 3, 4
Demonstrates understanding of the different disorders of micturition and their impact on childhood development, and initiates management with relevant investigations and treatment using pharmacological and non-pharmacological approaches.	GPC 1, 2, 3, 4, 6

- Explains to parents about a renal dysplasia disorder diagnosed antenatally, the postnatal plans that are indicated, and the structural and functional adaptation of the kidney where there is reduced renal mass.
- 2. Reviews the management of an infant with vesico-ureteric reflux (VUR), identifies the appropriate radiological and imaging investigations used for diagnosis and surveillance, and understands the role of prophylactic antibiotics.
- Manages or reviews the management steps in an infant diagnosed with posterior urethral valves (PUV), recognises principles of management that include urgent intervention for lower urinary tract obstruction, salt loss, kidney function monitoring, surveillance scans, and role of paediatric urologist.
- 4. Develops or contributes to a local audit or care pathway bundle on the investigation and management of urinary tract infection, applying knowledge of NICE guidelines.
- 5. Manages a child or young person with recurrent urinary tract infection, explaining the indications for relevant investigations, their interpretation and limitations, explores appropriate differentials including safeguarding, antibiotic prophylaxis and role of paediatric urologist or nephrologist where necessary.
- Appropriately investigates a child or young person with renal stone disease, demonstrating knowledge of metabolic and genetic aetiology factors and association with renal tubular disease; and initiates appropriate management including medical treatment and urology referral where required.
- 7. Applies knowledge of normal micturition and bladder control to explain to a family or young person about storage and voiding symptoms, interpret uroflow studies and fluid/

- volume charts, and explain behavioural therapies such as timed voiding, regulation of fluid intake and positive reinforcement techniques.
- 8. Manages a child or young person with primary or secondary nocturnal enuresis demonstrating knowledge of pharmacological and non-pharmacological treatment approaches.
- 9. In an outpatient setting, reviews a child or young person with refractory daytime wetting, acknowledges potential psychological impact and need for tailored support and MDT involvement where appropriate, and demonstrates knowledge of alternative treatment modalities such as biofeedback and neuromodulation.
- 10. Investigates a child or young person diagnosed with renal cystic disease, and in the process demonstrate knowledge of inheritance pattern and multisystemic involvement in some conditions; arranges relevant investigations including genetic screening, and discusses need for long term surveillance and transition to adult services where indicated.
- 11. Applies knowledge of upper and lower urinary tract development and physiology to appropriately investigate a child with CAKUT, bladder disorder, or neurological and spinal disorder such as spina bifida; and demonstrates skills to manage bladder drainage problems, recurrent urine tract infection, and multidisciplinary team involvement.

Recognises and assesses a number of common kidney disease	GPC 1, 2, 3, 4, 5,	
presentations including haematuria, proteinuria and hypertension, and	6, 7, 8	
manages a range of glomerulonephritic conditions and tubular disorders		
including those associated with multisystemic involvement.		

Key Capabilities

Recognises and assesses children and young people that present with haematuria and proteinuria, and manages children with nephrotic syndrome.	GPC 2, 3, 4, 6
Manages children and young people with hypertension, including investigations and treatment with antihypertensive medication.	GPC 2, 3, 4, 5, 7, 8
Demonstrates knowledge of glomerulonephritic diseases, including connective tissue disorders and vasculitis, and undertakes relevant investigations.	GPC 1, 2, 3, 4
Identifies and manages children with diagnosis of a renal tubular disorder, and collaborates with a renal tertiary specialist or multidisciplinary team where appropriate.	GPC 2, 3, 5, 6
Understands the pharmacology and range of side-effects of medications used to manage glomerulonephritic diseases, including diuretics, antihypertensives and immunosuppressant medications.	GPC 1, 2, 3, 4, 6

- Manages a child or young person with haematuria, appropriately investigates causes for the microscopic or macroscopic haematuria presentation, and liaises with nephrologist or urologist where indicated.
- 2. Investigates or contributes to the management of a child or young person with proteinuria, appreciating the glomerular and tubular handling of protein, differences between transient and persistent proteinuria, and indications for a kidney biopsy.
- Follows the investigative pathway towards diagnosis of nephrotic syndrome in a child, and initiates management based on sound understanding of the pathophysiology and associated complications of the nephrotic state.
- 4. Recognises the need for long term management of steroid-sensitive nephrotic syndrome, and appreciates the role of the paediatric nephrologist in the "shared care" of complicated cases such as frequently relapsing and steroid resistant nephrotic syndrome cases.
- 5. Investigates the cause of hypertension in a young person and as part of management, explains about the renal and non-renal causes, pathophysiology leading to secondary hypertension, and role of health education in prevention of long term hypertensive complications.
- Assesses the management of an inpatient admitted with severe hypertension, demonstrating knowledge of complications such as hypertensive crises, encephalopathy and cardiac failure; appreciates the different medications used in management, and role of

- a paediatric nephrologist in complex cases.
- 7. Manages or follows an investigative pathway towards diagnosis of glomerulonephritic disease in a child or young person who presents with relevant symptoms and signs; recognises the variable acute, rapidly progressive and chronic presentations, knows the indications for referral to a paediatric nephrologist, and acknowledges the role of other specialties in management of some cases.
- 8. Reviews or contributes to a clinic consultation on a child diagnosed with interstitial nephritis or tubulo-interstitial disease, recognising the disease association with systemic illness, treatment modalities and need for surveillance of kidney function.
- 9. Assesses a child or young person with diagnosis of renal tubular disorder, and demonstrates a good knowledge of the physiology and role of the renal tubule in fluid, electrolyte and acid-base homeostasis, and appreciates the principles of pharmacological treatment.
- 10. Appropriately investigates or contributes to follow up management of a child diagnosed with a condition such as renal tubular acidosis, X-linked hypophosphatemic rickets, and Bartter syndrome; understands the clinical and biochemical presentations of these patients, and appreciates the role of genetic screening and counselling.
- 11. Discusses a case to demonstrate knowledge of drug pharmacokinetics in renal disorders; and works with pharmacists and nursing staff to promote safe prescribing by other health professionals.

Demonstrates expertise in fluid, electrolyte and acid-base management,	GPC 1, 2, 3, 4, 5, 6
and assesses or leads on the acute and long term management of children	
and young people with acute kidney injury (AKI).	

Key Capabilities

Identifies children at risk of fluid, electrolyte and acid-base imbalance, and initiates appropriate proactive management through knowledge of pathophysiology.	GPC 2, 3, 4
Leads or coordinates the management of children with acute kidney injury (AKI) from a wide range of aetiologies and liaises with tertiary renal specialists in all severe cases.	GPC 1, 2, 3, 5
Screens and manages children of all age groups at risk or with history of acute kidney disease, and formulates surveillance plans for those at risk of chronic kidney disease.	GPC 2, 3, 4, 6

- 1. Applies knowledge of normal body fluid regulation in children of all age groups, including neonates, to appropriately manage children that present with fluid imbalance.
- 2. Assesses a neonate or child with electrolyte and acid-base abnormality, conducts appropriate investigations to rule out differentials, including metabolic and endocrine diseases, and co-ordinates referral or follow up by relevant specialist.
- 3. Understands acute kidney injury (AKI) staging and the important role of a warning score. Acutely manages AKI in a child or young person and its complications, and demonstrates knowledge of emergency treatment of hyperkalaemia and fluid overload.
- 4. Manages an inpatient at risk of AKI such as a child with sepsis, cardiac or liver function impairment, underlined nephro-urological disease, malignancy or bone marrow transplant, and those dependent on others for access to fluids; in the process, the trainee initiates appropriate fluid management and steps to optimise use of medication.
- 5. Manages a child diagnosed with haemolytic uraemic syndrome (HUS) and demonstrates knowledge of complications; and is able to explain and investigate cases of atypical HUS.
- 6. Manages or follows up in clinic a child diagnosed with acute tubular necrosis or acute tubulointerstitial nephritis; demonstrates knowledge of pathophysiology, and initiates or discusses relevant investigations.
- Understands the normal adaptive response of kidneys to AKI in children, including neonates
 diagnosed with hypoxic ischaemic encephalopathy (HIE); and manages appropriate follow
 up of such children.
- 8. Recognises the role of paediatric nephrologists in the management of severe cases of AKI, and understands indications to escalate care for consideration of dialysis and renal replacement therapy.
- 9. Initiates or supports the management of a child or neonate admitted with AKI in a local paediatric high dependency or neonatal unit.

Recognises and leads on the acute and long term management of children and young people with chronic kidney disease (CKD), and liaises with tertiary care specialists and primary care physicians to deliver appropriate	GPC 1, 2, 3, 4, 5, 6, 7, 8	
non-hospital treatments.		

Key Capabilities

Recognises, assesses and manages children and young people with chronic kidney disease (CKD), and undertakes relevant investigations depending on stage of CKD.	GPC 2, 3
Recognises the problems associated with CKD, including bone metabolic disease, anaemia, growth and pubertal delay, and cardiovascular disease.	GPC 2, 3, 4, 6
Understands the impact of CKD on the emotional, psychological and educational development of children and young people; develops individualised child care plans to support patients and families cope with educational, physical and mental health challenges.	GPC 1, 2, 4, 7, 8
Leads and supports the local multi-disciplinary team required to manage children and young people with chronic kidney disease, and liaises with tertiary renal centres for patients at later stages of CKD.	GPC 1, 2, 3, 4, 5

- Identifies and manages a child or young person in early stages of chronic kidney disease, applies knowledge of disease progression to plan surveillance and follow up plans, and demonstrate skills at interpreting investigations appropriately to detect declining kidney function.
- Understands the importance of cardiovascular risk factors including metabolic bone disease, hyperlipidaemia, and hypertension in chronic kidney disease. Reviews a relevant case to explain or discuss the pathophysiology and principles of management of these complications, including impaired growth and role of growth hormone, significance of proteinuria and management of anaemia.
- 3. In a clinic setting or during the process of a referral, the SPIN trainee reviews or discusses the management of a child or young person in later stages of chronic kidney disease. Demonstrates knowledge of dietary restrictions, indications and choice of renal replacement therapies, and identifies role and contributions of multidisciplinary teams including dietitians.
- 4. Reviews a patient on peritoneal dialysis, haemodialysis or plasmapheresis, demonstrating knowledge on indication for that specific therapy, and identifies the role of a SPIN doctor in secondary care in management of such patients.
- 5. Initiates or contributes to counselling of a family or young person about renal replacement therapy, and understands the principles of the pre-transplantation "work-up" of patients.
- 6. Assesses a child or young person with a kidney transplant in a shared care clinic;

- recognises good clinical practice in all aspects including dosage and compliance with immunosuppressive medication, puberty and growth monitoring, attention to educational development, and transition arrangements.
- 7. Recognises the possible impact of renal disease on the emotional and physical well-being of the child and family, and on their later life, including the potential for reduced independence, educational and employment opportunities.
- 8. Identifies a relevant case to discuss on the emotional impact of interventions such as intermittent catheterisation in a young person or supplemental feeding on parents of an infant; and be able to demonstrate or contribute to skills and strategies used to ameliorate this impact.
- 9. Understands that experimental adolescent behaviour can lead to clinical problems in renal disease, including an increase in transplant rejection and loss. The trainee discusses a relevant case to identify management strategies that can be used to minimise such issues, including the importance of an effective transition process.

Contributes and improves local nephrology services through	GPC 1, 2, 3, 4, 5, 6,
standardisation of clinical practice using evidence based approaches	7, 8, 9
development of nephrology educational activities at local hospital, a	nd
engagement in all clinical governance activities at regional and natio	nal
levels.	

Key Capabilities

Recognises local and regional multidisciplinary professionals and their roles in the care of infants and children with different types of kidney disease and bladder disorders.	GPC 1, 3, 4, 6
Develops, supervises and leads local nephrology services such as transition for young people with chronic kidney disease, antenatal counselling for CAKUT cases, and continence service for children and young people with disorders of micturition.	GPC 1, 2, 3, 4, 5, 6, 7
Engages and contributes to regional and national research projects and educational opportunities that promote standard of care in management of children and young people with kidney diseases.	GPC 1, 3, 6, 8, 9

- 1. Attends a regional or national nephrology meeting, and understands the range and diversity of tertiary renal services available across the UK, and appreciates that different local nephrology service models operate within regional networks.
- 2. Delivers a presentation or teaches fellow paediatric colleagues on a nephrology topic at a local/departmental educational meeting, aiming to promote best clinical practice in paediatric nephrology conditions.
- Manages or contributes to the care of a child with a transplant kidney, and acknowledges
 examples of good communication skills and collaborative work between local hospital and
 tertiary renal units, and identifies benefits of care delivery closer to home.
- 4. Identifies the range of professionals involved in delivery of local nephrology services, including renal, continence, and urology specialist nurses, transition trained professionals, dietitians, and youth workers skilled in working with young people with chronic diseases; and engages with one of such professionals to manage a complex nephrology case.
- 5. Participates in discussions with a young person, parent or a family about a complex, chronic or relapsing kidney condition that requires a multidisciplinary approach to management, explaining roles of professionals and the communication channels involved between the local hospital and tertiary renal unit.
- Through management of a child or young person with a nephrology condition, the SPIN trainee demonstrates understanding of the interdependence between major specialties and its influence on the quality of care provided to that patient.
- 7. Initiates or participates on a quality improvement project that develops or strengthens standards of care within a renal clinical network.
- 8. Recognises and or contributes in a research role to support regional and national projects that have impact on patient care, safety and collaboration.
- 9. Contributes to the organisation of an educational or scientific meeting, and or presents at a regional or national nephrology educational meeting.

Section 3

Assessment Strategy

How to assess the Paediatric Nephrology SPIN

The assessment strategy for this SPIN module is aligned with the RCPCH Progress Programme of Assessment, utilising a range of different formative and summative assessment tools.

The Programme of Assessment comprises a wide range of assessment tools which must be used in conjunction with the Blueprint to develop skills and assess capability. The assessments are knowledge, skills and capability-based, capturing a wide range of evidence which can be integrated to reach a judgement as to the trainee's achievement of the SPIN module learning outcomes. The assessments also provide trainees with the opportunity to obtain developmental feedback. Further information on all assessment instruments can be found within the RCPCH Progress Programme of Assessment.

The key aspect of the assessment strategy for this SPIN module is the Blueprint on the following page. This grid indicates the assessment requirements to support and demonstrate achievement of the Learning Outcomes and, where appropriate, the minimum number of assessments required. Please note, not all assessments are mandated or their use prescribed, such that trainees may use other assessment types from the list within the Programme of Assessment, where they and their supervisors feel this is appropriate.

- 1. Evidence through reflection of experience and learning from:
 - · Participation at local nephrology and joint/shared care clinics
 - · Participation at transition clinics designed for young people on transition pathway
 - Participation at CAKUT or antenatal counselling clinic
 - Attendance at renal MDT meeting at tertiary hospital
 - Attendance at paediatric urology clinic
- 2. At least one work based assessment each showing involvement in management of a child with the following conditions:
 - · Recurrent urinary tract infection
 - Abnormalities of the urinary tract including CAKUT, renal stones, renal cystic disease
 - CKD including a child in early stages of the condition
 - AKI
 - Glomerular disorder including haematuria, proteinuria, glomerulonephritis and vasculitis
 - · Tubulo-interstitial disease
 - Disorder of micturition daytime wetting and enuresis
- Discussions of Correspondence (DOCs) showing evidence of involvement in communication regarding referral and transfer of patients to tertiary centres and communication of management details with referring centres.
- 4. Leader Case-based Discussions (CBDs) to evidence leadership of a ward round or covering a day's management of admission and ward work.

- 5. At least 1 safeguarding CBD involving a nephrology condition.
- 6. Evidence of communication with patients/families regarding investigation and or diagnosis of a urinary tract condition.

All evidence for the SPIN module Learning Outcomes, including assessment outcomes, should be recorded within the trainee's ePortfolio.

Assessment blueprint

This table suggests assessment tools which may be used to assess the Key Capabilities for these Learning Outcomes.

This is not an exhaustive list, and trainees are permitted to use other methods within the RCPCH Assessment Strategy to demonstrate achievement of the Learning Outcome where they can demonstrate these are suitable.

Key Capabilities	Assessment / Supervised Learning Event suggestions									
	Paediatric Mini Clinical Evaluation (ePaed Mini-CEX)	Paediatric Case-based Discussion (ePaeds CbD)	Directly Observed Procedure / Assessment of Performance (DOP/AoP)	Acute Care Assessment Tool (ACAT)	Discussion of Correspondence (DOC)	Clinical Leadership Assessment Skills (LEADER)	Handover Assessment Tool (HAT)	Paediatric Multi Source Feedback (ePaed MSF)	Paediatric Carers for Children Feedback (Paed CCF)	Other
Demonstrates understanding of normal development and physiology of kidneys, recognises range of congenital abnormalities of the kidney and urinary tract (CAKUT), and requirement for long term management.	~	✓		✓	~				√	
Understands the diagnostic criteria, complications, and management of urinary tract infections in children of all age groups, recognising the role of nephro-urological imaging techniques, and the indications for involvement of a paediatric urologist and nephrologist.	√	√		✓	✓				✓	
Assesses children and young people with renal stone disease and initiates treatment, recognising the involvement of multi-disciplinary teams where necessary.	✓	✓		√	✓		✓			
Demonstrates understanding of the different disorders of micturition and their impact on childhood development, and initiates management with relevant investigations and treatment using pharmacological and non-pharmacological approaches.	✓	✓		√	√					✓
Recognises and assesses children and young people that present with haematuria and proteinuria, and manages children with nephrotic syndrome.	✓	✓		✓						✓
Manages children and young people with hypertension, including investigations and treatment with antihypertensive medication.	✓	✓	✓	✓			✓			
Demonstrates knowledge of glomerulonephritic diseases, including connective tissue disorders and vasculitis, and undertakes relevant investigations.	✓	✓		✓	✓	✓				✓
Identifies and manages children with diagnosis of a renal tubular disorder, and collaborates with a renal tertiary specialist or multidisciplinary team where appropriate.	✓	✓		✓		✓		✓		√

Key Capabilities	Assessment / Supervised Learning Event suggestions									
	Paediatric Mini Clinical Evaluation (ePaed Mini-CEX)	Paediatric Case-based Discussion (ePaeds CbD)	Directly Observed Procedure / Assessment of Performance (DOP/AoP)	Acute Care Assessment Tool (ACAT)	Discussion of Correspondence (DOC)	Clinical Leadership Assessment Skills (LEADER)	Handover Assessment Tool (HAT)	Paediatric Multi Source Feedback (ePaed MSF)	Paediatric Carers for Children Feedback (Paed CCF)	Other
Understands the pharmacology and range of side-effects of medications used to manage glomerulonephritic diseases, including diuretics, anti-hypertensives and immunosuppressant medications.	~	✓		√		1				√
Identifies children at risk of fluid, electrolyte and acid-base imbalance, and initiates appropriate proactive management through knowledge of pathophysiology.	✓	✓		√			√			✓
Leads or coordinates the management of children with acute kidney injury (AKI) from a wide range of aetiologies, and liaises with tertiary renal specialists in all severe cases.	✓	✓		✓		✓		✓		✓
Screens and manages children of all age groups at risk or with history of acute kidney disease, and formulates surveillance plans for those at risk of chronic kidney disease.	✓	✓		√		√	✓	√		✓
Recognises, assesses and manages children and young people with chronic kidney disease (CKD), and undertakes relevant investigations depending on stage of CKD.	✓	✓		✓	✓	√	✓		✓	✓
Recognises the problems associated with CKD, including bone metabolic disease, anaemia, growth and pubertal delay, and cardiovascular disease.	✓	✓		✓			✓			✓
Understands the impact of CKD on the emotional, psychological and educational development of children and young people.; develops individualised child care plans to support patients and families cope with educational, physical and mental health challenges.		✓		√	✓	✓	√	✓	✓	✓
Leads and supports the local multi-disciplinary team required to manage children and young people with chronic kidney disease, and liaises with tertiary renal centres for patients at later stages of CKD.		✓		✓	✓	✓		✓	✓	✓
Recognises local and regional multidisciplinary professionals and their roles in the care of infants and children with different types of kidney disease and bladder disorders.		✓				✓		✓	✓	✓
Develops, supervises and leads local nephrology services such as transition for young people with chronic kidney disease, antenatal counselling for CAKUT cases, and continence service for children and young people with disorders of micturition.		✓			✓	✓		✓	✓	✓
Engages and contributes to regional and national research projects and educational opportunities that promote standard of care in management of children and young people with kidney diseases.		✓	✓			✓		✓	✓	✓

Appendices

Appendix A: Further guidance and resources

Doctors completing this SPIN module may find the following resources useful to support their training. Please note, there is no mandatory requirement to use any or all of these resources, and RCPCH cannot be held responsible for the quality or content of any external materials.

Assessment

RCPCH Assessment web pages <u>www.rcpch.ac.uk/assessment</u>
RCPCH Assessment Strategy <u>www.rcpch.ac.uk/progress</u>

Recommended reading

- · Relevant Textbooks on Paediatric Nephrology
- Relevant Journals including Archives of Disease of Childhood, Paediatric Nephrology Journal (IPNA)
- Published Guidelines including those from NICE, Think Kidneys, Renal Association (RA), and Kidney Disease Improving Global Outcomes (KDIGO)
- Websites for relevant organisations such as BAPN, EMESSY, Infokid, Think Kidneys, Renal Association (RA), and KDIGO

Training events or courses

- British Association for Paediatric Nephrology (BAPN): Sponsored training and education programmes, annual winter meetings and other additional benefits for members.
- SPIN and GRID trainees Study days
- Great Ormond Street Hospital (GOSH) Nephro-urology Course
- Regional Network Study days such as EMESSY
- Renal Conditions: Moving on up together
- RCPCH: Annual conference
- European Society for Paediatric Nephrology (ESPN): Annual conference and Best Clinical Practice Webinars

Other useful resources

- https://www.infokid.org.uk
- https://kdigo.org
- https://www.thinkkidneys.nhs.uk
- https://www.kidneycareuk.org/about-kidney-health

For more information

More information regarding SPIN modules, and all current SPIN curricula and supporting forms, can be found at www.rcpch.ac.uk/spin

For general queries regarding SPIN modules, including eligibility to undertake a SPIN or how to apply, please contact spin@rcpch.ac.uk.

For queries relating to the SPIN curriculum, please contact qualityandstandards@rcpch.ac.uk

The SPIN Lead is a member of the Nephrology CSAC. See the RCPCH website for the contact details of the current SPIN Lead: https://www.rcpch.ac.uk/membership/committees/general-paediatrics-csac

Appendix B: Criteria for SPIN delivery

The following requirements should be met when designing a training programme for a SPIN module trainee. Adherence to these criteria will help ensure the trainee will have the necessary support and access to experiences which they will require in order to successfully complete this SPIN module. These criteria are framed against the standards set out in Excellence by Design: standards for post graduate curricula (GMC 2017).

Purpose

- Access to regular supervised clinics
- Service specific requirements to enable achievement of the curriculum e.g. Day case facilities, imaging.
- Opportunities to work with shared care networks in primary and secondary care.
- Opportunities to work with shared care clinical guidelines and protocols.
- The learning environment is safe for patients and supportive for learners and educators. The culture is caring, compassionate and provides a good standard of care and experience for patients, carers and families. (Taken from GMC Promoting Excellence)

CSAC specific requirements:

- At least six months training post in a Paediatric Renal Unit.
- At least another six months training post in a secondary level hospital (DGH) with local nephrology lead or nephrology interest paediatrician.
- The posts are in units which participate in a Paediatric Critical Care Clinical Network

Governance and strategic support

- The Site must ensure that Supervisors and trainers can effectively deliver the RCPCH Assessment Strategy.
- The trainee will be able to participate in leadership and management activities.

CSAC specific requirements:

- Supervisor at tertiary renal hospital should be a paediatric Nephrologist.
- Supervisor during secondary care hospital rotation should be a paediatrician with nephrology interest or paediatric nephrologist from renal unit within network.
- Trainee should be offered opportunities to lead clinical management with adequate supervision

Programme of learning

- Specific requirements for structured learning opportunities.
- Exposure within the clinical environment will provide sufficient learning opportunities to meet the requirements of the curriculum.
- Access to multidisciplinary teams consisting of a minimum of nurses, physiotherapists, occupational therapists.
- The post should provide a training experience that enables completion of the trainees' PDP.

CSAC specific requirements:

- Access to local and tertiary Paediatric nephrology and urology clinics.
- Opportunities to access MDT team meetings, regional network study days and transitional clinics.

Programme of assessment

- The site has adequate levels of Educational Supervisors.
- Consultants with either General Paediatric or Sub Specialty expertise can be matched to the requirements of the trainee. It is important that Educational supervisors can provide supervision and have the required remission to facilitate this, i.e. 1 PA per week per 4 trainees.
- Supervision must ensure patient safety. Support for trainers and supervisors must be available within the Trust.

CSAC specific requirements:

None - as in line with generic

Quality assurance and improvement

- The post will allow the trainee to participate in audits and clinical improvement projects.
- The post will allow the trainee to actively engage with the teaching, assessing and appraising of junior staff
- The post will allow opportunity for the trainee to engage in research activities.

CSAC specific requirements:

None - as in line with generic

