NHS 111 Clinical Assessment Services: paediatric consultations

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ABSTRACT

Around the UK, commissioners have different models for delivering NHS 111, General Practice (GP) out-of-hours and urgent care services, focusing on telephony to help deliver urgent and emergency care. During the (early phases of the) COVID-19 pandemic, NHS 111 experienced an unprecedented volume of calls. At any time, 25%–30% of calls relate to children and young people (CYP). In response, the CYP's Transformation and Integrated Urgent Care teams at NHS England and NHS Improvement (NHSE/I) assisted in redeploying volunteer paediatricians into the integrated urgent care NHS 111 Clinical Assessment Services (CAS), taking calls about CYP. From this work, key stakeholders developed a paediatric 111 consultation framework, as well as learning outcomes, key capabilities and illustrations mapped against the Royal College of Paediatrics and Child Health (RCPCH) Progress curriculum domains, to aid paediatricians in training to undertake NHS 111 activities. These learning outcomes and key capabilities have been endorsed by the RCPCH Curriculum Review Group and are recommended to form part of the integrated urgent care service specification and workforce blueprint to improve outcomes for CYP.

BACKGROUND

Integrated urgent care (IUC) Clinical Assessment Services (CAS) are clinician-delivered services aimed at providing care closer to home, as well as helping to tackle the increasing demand on urgent care services (primary and hospital) and decreasing emergency department attendance and subsequent admissions. IUC CAS incorporates NHS 111 and out-of-hours services; the 2017 IUC service specification outlined the steps required to transform services from an ‘assess and refer’ to a ‘consult and complete’ model of service delivery,1 hence the development of the IUC CAS. IUC is commissioned on a local basis and is provided by different organisational types, including National Health Service (NHS) trusts, social enterprises and private companies. Subsequently there are variations in the way this nationally specified service has been applied.

Opportunities to improve clinical outcomes and the experiences of children and young people (CYP) presenting to urgent care are numerous. The global COVID-19 pandemic presented the opportunity for NHS England and NHS Improvement (NHSE/I) CYP and Urgent and Emergency Care (UEC) to pilot and evaluate the integration of paediatric expertise into NHS 111’s CAS.

Context

During the COVID-19 pandemic, NHS 111 experienced an unprecedented volume of calls. At any time, 25%–30% of calls relate to CYP.2 As a result of the government’s shielding guidance, some front-line paediatric clinicians (doctors and advanced nurse practitioners) were advised to step back from face-to-face clinical work. In parallel, NHSE/I’s ‘Bring Back Staff’ campaign3 identified retired paediatric clinicians who were willing to return to the NHS to assist national efforts in managing COVID-19 demands on the NHS.

The Royal College of Paediatrics and Child Health’s (RCPCH) ‘call’ to paediatric clinicians identified a cohort of volunteers. The CYP and UEC teams at NHSE/I helped to re/deploy these clinicians into the IUC CAS to assist with the management of calls related to CYP. The results of this pilot, its impact on patient flows, satisfaction and experiences of volunteer paediatric clinicians are reported in a parallel paper.

Aims

There are unique challenges in working with NHS 111. Identifying these, in turn, led to the development of learning outcomes and key capabilities required to assist paediatric trainees joining NHS 111. These will help optimise future paediatric-led 111 consultations so that they address the needs of children more effectively.

METHODS

Representatives from the paediatric NHS 111 pilot cohort, general practice, the CYP and the UEC teams at NHSE/I and RCPCH Education initially evaluated difficulties that might be encountered in undertaking remote assessment by NHS 111.

This group was then able to develop learning outcomes and key capabilities to guide paediatric clinicians in managing their 111 consultations. These were mapped to the RCPCH’s Progress curriculum domains.4 Illustrations of what the key capabilities could look like in practice were identified and potential modes of assessment of the capabilities are noted (table 1). The learning outcomes, key capabilities, illustration, assessment modes and framework for consultations...
# Table 1  Key capabilities for consultations regarding management of CYP in the IUC CAS, mapped to the RCPCH Progress curriculum for paediatricians in training

<table>
<thead>
<tr>
<th>RCPCH Progress domain/s</th>
<th>Learning outcome</th>
<th>Key capabilities</th>
<th>Illustrations</th>
<th>Examples of assessment</th>
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</table>
| Professional values, behaviour and knowledge | To conduct an effective and safe consultation for CYP in NHS 111 | ▶ Takes practical steps to ensure privacy during a remote consultation.  
▶ Reviews all available information, noting and taking account of any conflicting, confusing or unusual aspects.  
▶ Recognises accurately and promptly the differentiating features of commonly occurring conditions presenting in overall CYP.  
▶ Forms an accurate and justifiable identification of the nature and severity of the child/young person’s condition, likely causes of the individual’s health problems, implications of pre-existing and other medical problems, prognosis and related needs.  
▶ Uses the NHS 111 telephony systems and video links (where available).  
▶ Accesses and navigates the Directory of Services. | ▶ Accesses the paediatric CAS queue or identifies paediatric patients requiring a call back.  
▶ Reviews patients’ General Practice (GP) records, where available.  
▶ Reviews patients' outpatient/secondary care records, where available.  
▶ Reviews patients’ previous 111 consultation records, where available.  
▶ Calls a patient, confirming two patient identifiers and, where required, the caller’s relationship to the patient before proceeding with consultation.  
▶ Takes the clinical history and documents this in the appropriate place in the patient’s 111 records.  
▶ Performs a remote examination which may include observing the child undertake different activities, or looking at a rash, via a video link (if available).  
▶ Maintains full, accurate and legible records.  
▶ Adapts approach for families with difficulty accepting advice or accessing NHS systems.  
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▶ CBD*.  
▶ Reflection.  
▶ Mini-CEX*.  
▶ CBD*.  
▶ Reflection.  |
| Professional skills: communication | To communicate effectively with CYP or carers during an NHS 111 consultation | ▶ Obtains a complete and accurate history of the presenting child or young person.  
▶ Adapts approach for families with difficulty accepting advice or accessing NHS systems.  
▶ Accurately and promptly identifies the additional information needed to make a differential diagnosis.  
▶ Communicates an appropriate plan.  
▶ Provides appropriate safety netting advice. | ▶ Introduces self, explaining own role.  
▶ Explains what the consultation will involve.  
▶ Adapts approach for families with difficulty accepting advice or accessing NHS systems.  
▶ Accurately and promptly identifies the additional information needed to make a differential diagnosis.  
▶ Communicates an appropriate plan.  
▶ Provides appropriate safety netting advice. | ▶ Mini-CEX*.  
▶ CBD*.  
▶ DDC*.  
▶ Reflection.  |
| Professional skills: patient management | To make an appropriate and safe management plan for NHS 111 CYP. | ▶ Uses all available information to develop a differential diagnosis which is justifiable given the information available at the time and likely to result in the optimum outcome for the child/young person.  
▶ Synthesises available information and formulates an appropriate management plan that can be communicated over the phone.  
▶ Follows appropriate procedures and protocols to arrange for any investigations or observations needed.  
▶ Re-evaluates the initial diagnosis in light of emerging symptoms/signs. | ▶ Combines information from history and previous notes with objective assessments of current status.  
▶ Notes current observations from family, both volunteered and obtained by direct questioning.  
▶ Makes own observations of sounds from child and family heard on the call.  
▶ Uses video inspection of child and surroundings when available and appropriate.  
▶ Uses this information in full clinical assessment.  
▶ Selects the appropriate disposition to code the patient’s end pathway correctly, where this is possible.  
▶ Documents the management plan and appropriate disposition on the patient’s records.  
▶ Arranges an ambulance callout, when required.  
▶ Advises on which out-of-hours GP or other service they may attend, including providing practical information, for example, about opening hours.  
▶ Books a patient directly into an out-of-hours GP appointment using the direct appointment booking system, where available.  
▶ Books a patient directly into an emergency department slot, where available.  
▶ Checks that carers know how to get to the chosen facility.  
▶ Initiates symptomatic treatment at the earliest opportunity, in line with national, local and organisational guidelines and protocols.  
▶ Initiates action to provide the best possible outcome for CYP. | ▶ Mini-CEX*.  
▶ CBD*.  
▶ ACAF$.  
▶ Reflection.  |
| Health promotion and illness prevention | To identify and use opportunities to promote healthy behaviour through the NHS 111 consultation. | ▶ Considers the impact of social factors on health.  
▶ Increases the family’s confidence to manage minor illnesses at home.  
▶ Screens for potential mental health and social difficulties. | ▶ Provides sensitive advice about common problems of infancy.  
▶ Provides smoking cessation advice, if appropriate.  
▶ Enquires about weight and signposts to local weight management resources.  
▶ Signposts to appropriate self-care resources.  
▶ Advises to see GP for access psychological services, if required.  
▶ Note: There may not always be sufficient time to explore these in an acute consultation so this must be done based on sound clinical and professional judgement. | ▶ Mini-CEX*.  
▶ CBD*.  
▶ Reflection.  |
| Leadership and team working | To manage the team effectively during an NHS 111 shift to ensure optimum outcomes for CYP. | ▶ Demonstrates awareness of other clinicians and professionals on shift, supporting where appropriate.  
▶ Involves the multidisciplinary team, where required. | ▶ Uses internal communication systems, for example, ‘Webex’, to communicate with other clinicians/colleagues on shift and give paediatric advice when appropriate.  
▶ Involves appropriate team members, where the patient could benefit from additional expertise. | ▶ CBD*.  

*Mini-CEX = Mini Clinical Evaluation Exercise; CBD = Care Bundle Observation; DDC = Decision Document Checklist; ACAF = Assessment of Care for Families; Reflection.† Not previously published.
were approved by the RCPCH Curriculum Review Group in October 2020.

A framework aligned with the Royal College of General Practitioners’ (RCGP) toolkit,3 often used to audit urgent primary care consultations in England, was subsequently developed.

OUTCOMES
Identifying challenges unique to NHS 111 consultations

Challenges unique to IUC CAS consultations for paediatric clinicians (most of whom are originally hospital-based) include remote consultations in an acute setting at the primary secondary care interface, variable access to patients’ records, not knowing the patient/parent/carer, managing raised levels of parental/carer anxiety, patients’ incomplete understanding about the urgent care system and frustration (eg. parental/carer perceptions of not being able to readily access face-to-face appointments). For the clinician, there may be considerable willingness to meet parental/carer expectations, to be able to influence subsequent behaviour and determine optimal outcomes for each child. In addition, clinicians are expected to work with numerous new information technology, telephony and video systems. They also need to be able to form interprofessional relationships with other members of the IUC workforce, remotely.

Key priorities for IUC CAS consultations are to:
- Explore why healthcare is being sought.
- Identify those needing urgent or emergency care and those who would benefit from non-urgent face-to-face consultation.
- Align patient management with best evidence-based practice and with local/national guidelines, where available.
- Ensure appropriate safety netting advice is provided.

Development of learning outcomes and key capabilities for paediatricians in NHS 111 CAS

In order to deal with the challenges unique to NHS 111, learning outcomes and key capabilities were identified. These learning outcomes and key capabilities should facilitate paediatric clinicians in delivering high-quality consultations. They are mapped to the existing RCPCH’s Progress curriculum domains.

In summary, the relevant RCPCH domain has been linked to accompanying learning outcomes and key capabilities, outlined, along with illustrations/examples and potential modes of assessment, in table 1. Many of these may have wider relevance to remote primary care settings (for paediatric consultations).

Development of a framework to optimise paediatric NHS 111 consultations

Many UEC providers audit their clinicians’ consultations using the RCGP toolkit. Feedback may be given directly to the clinician. Reflecting on this feedback should contribute to clinicians’ continuous professional development. Opportunities for development can also be arranged via a colleague or clinical supervisor ‘shadowing’ a paediatric clinician’s shift to enable assessments such as workplace-based assessments (this may need to be done remotely, in accordance with local NHS 111 providers’ information governance policies). Reflective practice can be kept in the trainee’s portfolio for further reference.

Based on the RCGP toolkit, CYP-specific guidance has been added along with examples to assist paediatric clinicians in delivering high-quality consultations at every encounter, and subsequently secure high audit outcomes and also achieve their key capabilities listed under the RCPCH Progress curriculum’s ‘communication’ domain (table 2).

DISCUSSION

This paper outlines the learning outcomes and key capabilities, mapped to the RCPCH Progress curriculum domains, to support paediatric clinicians working in IUC CAS. Illustrations and modes of assessment are also given. A framework with examples of how the capabilities might play out in a consultation is presented, with guidance and examples to optimise individual NHS 111 consultations for CYP in line with the RCGP toolkit.

Paediatric input within the IUC CAS is an example of integrated healthcare delivery, where specialist advice is brought further forward in the patient pathway. The impact of this on patient care and process, patient experiences, and paediatrician satisfaction through the IUC will be presented in a parallel paper. The opportunity to work for NHS 111 provides paediatric clinicians with a broader understanding of the system in which they work and the opportunity to widen those clinicians’ skill set. The framework for consultations in NHS 111 for paediatric clinicians, including the key capabilities, enables the structured development of trainees in undertaking remote telephonic working.

Table 1  Continued

<table>
<thead>
<tr>
<th>RCPCH Progress domain/s</th>
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<th>Key capabilities</th>
<th>Illustrations</th>
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</thead>
<tbody>
<tr>
<td>Patient safety, including safe prescribing</td>
<td>To prescribe safely within the NHS 111 consultation and to ensure patient safety at all times in NHS 111.</td>
<td>▶ Recognises when a prescription is indicated and when it is safe to prescribe remotely.</td>
<td>▶ Documents need for a prescription.</td>
<td>▶ Mini-CEX*.</td>
</tr>
<tr>
<td>Quality improvement</td>
<td>To identify and evaluate possible improvements to the NHS 111 service for CYP</td>
<td>▶ Collects data to demonstrate where there would be scope for service improvements.</td>
<td>▶ Carries out a close-loop feedback/quality improvement project in NHS 111.</td>
<td>▶ Reflection.</td>
</tr>
<tr>
<td>Safeguarding</td>
<td>To look for and be able to identify safeguarding concerns during an NHS 111 consultation.</td>
<td>▶ Recognises signs of abuse/other safeguarding concerns.</td>
<td>▶ Completes level 3 safeguarding training.</td>
<td>▶ Mini-CEX*.</td>
</tr>
</tbody>
</table>

*Definitions of supervised learning events: Mini-Clinical Evaluation Exercise (Mini-CEX) is a formative assessment tool designed to generate useful feedback on essential skills in a paediatric setting.
†Case-based discussion (CBD) is a formative assessment tool designed to develop and assess clinical reasoning and decision making.
§Acute care assessment tool (ACAT) is a supervised learning event that assesses acute paediatric care.
¶Safeguarding case-based discussion (CBD) is a case-based discussion with a focus on managing safeguarding.
CAS, clinical assessment tool; CYP, children and young people; IAC, integrated urgent care; NHS, National Health Service; RCPCH, Royal College of Paediatrics and Child Health.
Table 2  Suggested guidance and examples to use during NHS 111 audio consultations for paediatricians in training

<table>
<thead>
<tr>
<th>Context</th>
<th>Area</th>
<th>Guidance and examples</th>
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<tbody>
<tr>
<td>Consultation introduction</td>
<td>Introduces self and establishes the identity of the caller(s), ensuring confidentiality and consent.</td>
<td>“Good Morning, my name is Dr X. I am a children’s doctor working with the 111 service.”</td>
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<td></td>
<td>Establishes rapport.</td>
<td>“Before we start, may I confirm your child/young person’s name, date of birth and address?”</td>
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<tr>
<td>Information gathering</td>
<td>Identifies reason(s) for telephone call and excludes the need for emergency response in a timely manner (when appropriate), demonstrating safe and effective prioritisation skills.</td>
<td>“Yes, I understand. It was about a sore throat you’re concerned about?”</td>
</tr>
<tr>
<td></td>
<td>Encourages the caller’s and/or the patient’s contribution using appropriate open and closed questions, demonstrating active listening and responding to auditory cues.</td>
<td>“I understand, from my colleague that you spoke to earlier, that you rang NHS 111 to discuss … I was now hoping to go into a bit more detail.”</td>
</tr>
<tr>
<td>Defining the clinical problem</td>
<td>Takes an appropriately thorough and focused history to allow a safe assessment (includes/excludes likely relevant significant condition).</td>
<td>“Since you spoke to the call handler/my colleague, has there been any change in your child’s condition that you would like to bring to my attention?”</td>
</tr>
<tr>
<td></td>
<td>Makes an appropriate working diagnosis.</td>
<td>“Are you more worried about your child now than you were when you called NHS 111 and spoke to my colleague earlier… if so, can you tell me what’s most worrying you…?”</td>
</tr>
<tr>
<td>Constructing the management plan</td>
<td>Creates an appropriate, effective and mutually acceptable treatment plan (including medication guidance) and management outcome.</td>
<td>“Open questions, such as “Tell me what’s been going on?” or “How can I help?”</td>
</tr>
<tr>
<td>Emergency management</td>
<td>Determines the need for an emergency admission and appropriately asks questions to cover emergency conditions.</td>
<td>“I understand, from my colleague that you spoke to earlier, that you rang NHS 111 to discuss … I was now hoping to go into a bit more detail.”</td>
</tr>
<tr>
<td>Prescribing</td>
<td>Able to generate a prescription and to send to an appropriate pharmacy in consultation with the patient. Adherence to local antibiotic and prescribing guidelines.</td>
<td>“Your daughter has a history of eczema. Remember to ask everyone if they have contact with social services. Do you have a social worker who will look after your other children?”</td>
</tr>
<tr>
<td>Closing the consultation</td>
<td>Seeks to confirm the patient’s understanding.</td>
<td>“Is there anything you haven’t already covered that you would like to tell me or that you are worried about?”</td>
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<tr>
<td></td>
<td>Provides appropriate safety netting and follow-up instructions.</td>
<td>“Is there something else you would like to discuss with me?”</td>
</tr>
<tr>
<td>Effective use of the consultation</td>
<td>Manages and communicates risk and uncertainty appropriately.</td>
<td>“Do you have a social worker who will look after your other children?”</td>
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<tr>
<td></td>
<td>Appropriate consultation time to clinical context (effective use of time, taking into account the needs of other patients), with effective use of available resources.</td>
<td>“I am going to send a prescription to … Pharmacy which I can see is open 24 hours. You will need to collect the medication from there.”</td>
</tr>
<tr>
<td>Addressing safeguarding</td>
<td>Consider safeguarding with every child.</td>
<td>“If your child does not improve by … then please seek further help by…”</td>
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<tr>
<td></td>
<td>Is there contact with social services? Who is at home? Is this appropriate?</td>
<td>“If your child becomes short of breath or unable to speak in sentences, please call 999.”</td>
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<tr>
<td></td>
<td>“We ask everyone if they have contact with social services. Do you have a social worker or have you ever had contact with social care?”</td>
<td>“This infection is most often caused by a virus and it will usually go away by itself. Signs of a bacterial infection which would mean you may need antibiotics include…”</td>
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<tr>
<td></td>
<td>“Who is with you at home at the moment?”</td>
<td>“The consultation is succinct but thorough in the use of time for both the caller and the paediatrician.”</td>
</tr>
<tr>
<td></td>
<td>“If you need to bring your child to hospital, who will look after your other children?”</td>
<td>“The paediatrician should be aware of the children’s queue and the prioritisation of cases in the queue, as would happen when the paediatrician would be working on in an emergency department.”</td>
</tr>
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</table>

NHS, National Health Service.

CONCLUSION
This paper outlines learning outcomes, key capabilities and illustrations to support paediatric clinicians undertaking IUC consultations for CYP. They are mapped to the RCPCH Progress curriculum domains. This will allow paediatric trainees undertaking NHS 111 shifts as part of their training to track and...
evidence their own progress and development. These capabilities sit at the interface between primary and secondary paediatric care. Endorsement has been granted by the RCPCH’s Curriculum Review Group. We recommend that they form part of the IUC service specification and workforce blueprint.

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