

Respiratory Surge in Children: National Programme – update webinar

17th November 2021



Webinar Agenda

Item No.	Agenda Item	Presented By	Timing
1.	Welcome and programme overview (10 mins)	Julie Combes	12:00
2.	Programme updates (10 mins)	Libby Thomas	12:10
3.	"You asked, we did..." - new resource and updated skills matrix (15 mins)	Francesca Wright Laura Lowndes Jennifer Broadbent Timothy Hunt	12:20
4.	Q&A and close (10 mins)	Lydia Lofton	12:35

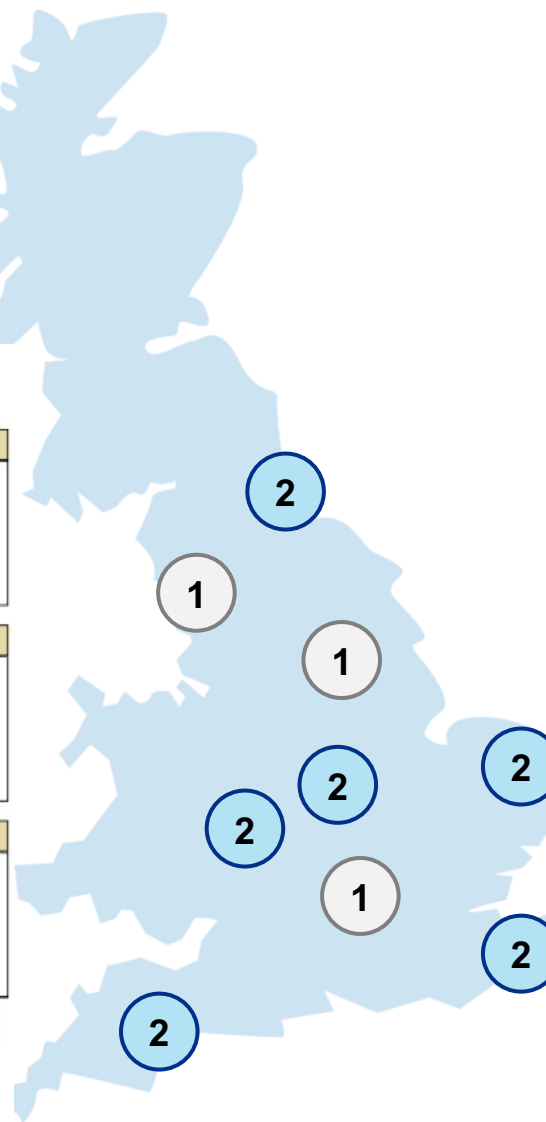
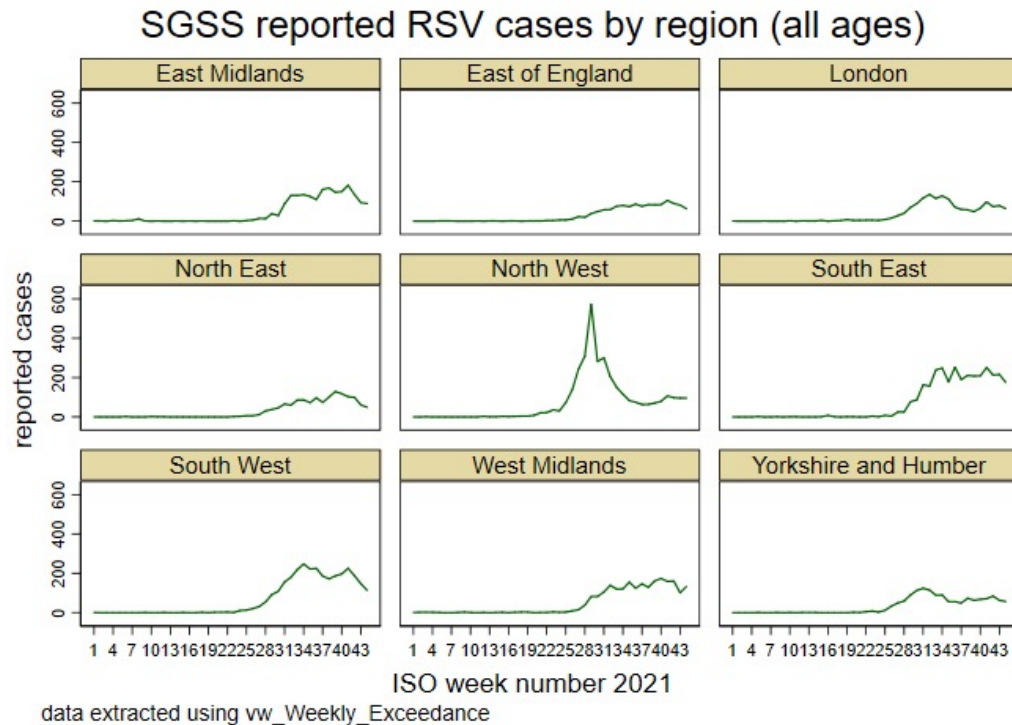


Programme Overview

Julie Combes



National Picture



Current RSV epidemiology^(a)

Two generic patterns are broadly persisting:

1. **N. West, London, York. & Humberside** – high initial peaks that have fallen back to lower level plateaus of continued significant activity
2. **E. England, E & W Midlands, N. East, S. East, S. West** – peaked more slowly and are maintaining relatively high levels of activity^(b)

Data provided by UKHSA Joint Modelling Team, correct as of 10 November 2021

Note:

(a) Caution should be exercised with short-term interpretation of case rates due to historical week-to-week volatility

(b) Evidence of recent decline in cases in some regions may be observed, but this may be linked to breaks in the school term or pooled activity across the region.

Aims and Objectives

Aim:

To support the cross-skilling of the National NHS workforce to manage:

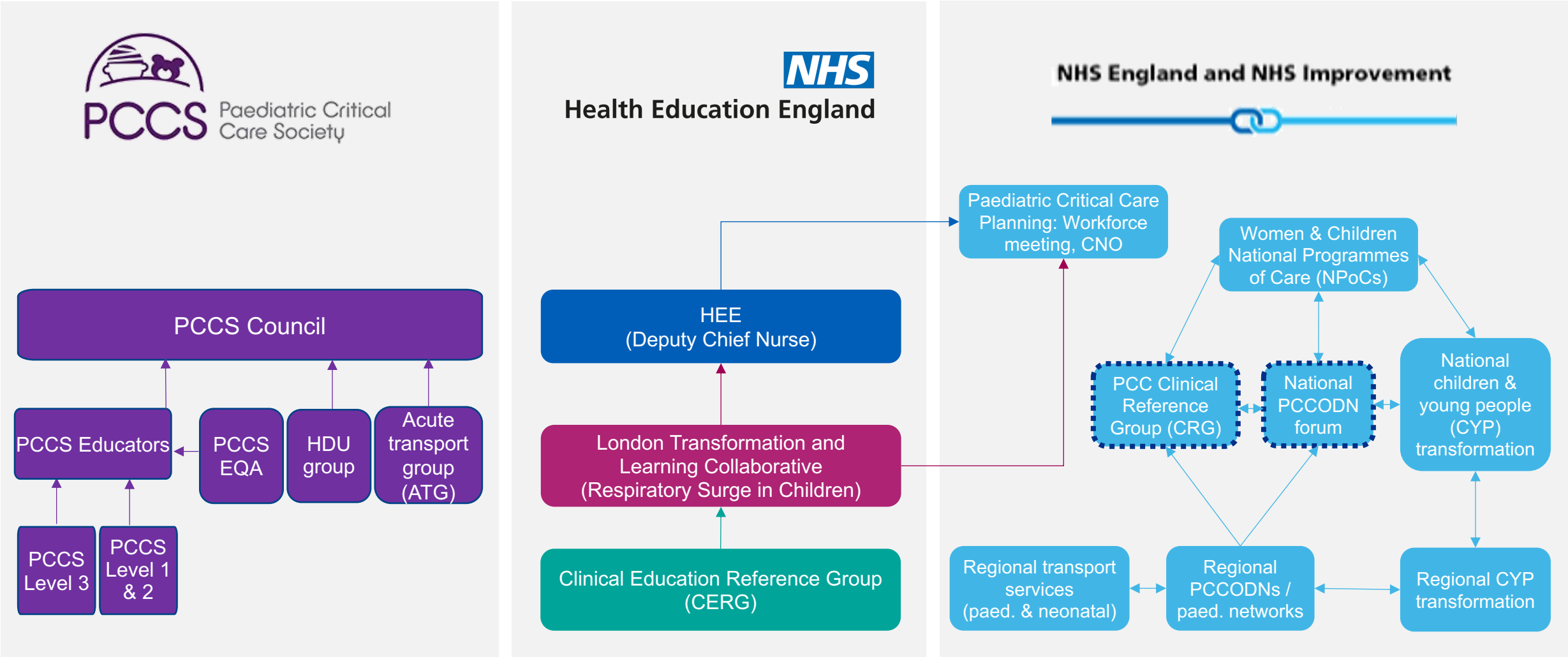
- Existing demand in children
- Potential future spikes in paediatric demand as a result of respiratory syncytial virus (RSV) and other respiratory illnesses in children
- Longer-term increasing paediatric acuity and demand in children

Objectives:

- Provide engaging and informative content through a digital modular education programme
- Promote wide-spread accessibility and inclusivity through multi-channel delivery
- Accommodate different skill requirements across all care settings (home, primary and community care and hospital care) through carefully curated content
- Optimise workforce and training innovations
- Summarise roles and essential skills required for the NHS Workforce to function in a surge model in paediatric care settings through a National digital skills passport



Governance and Interface



→ One-way flow of governance / reporting ↔ Two-way flow of governance / reporting [dashed box] Not a governing body, informs / provides comms only

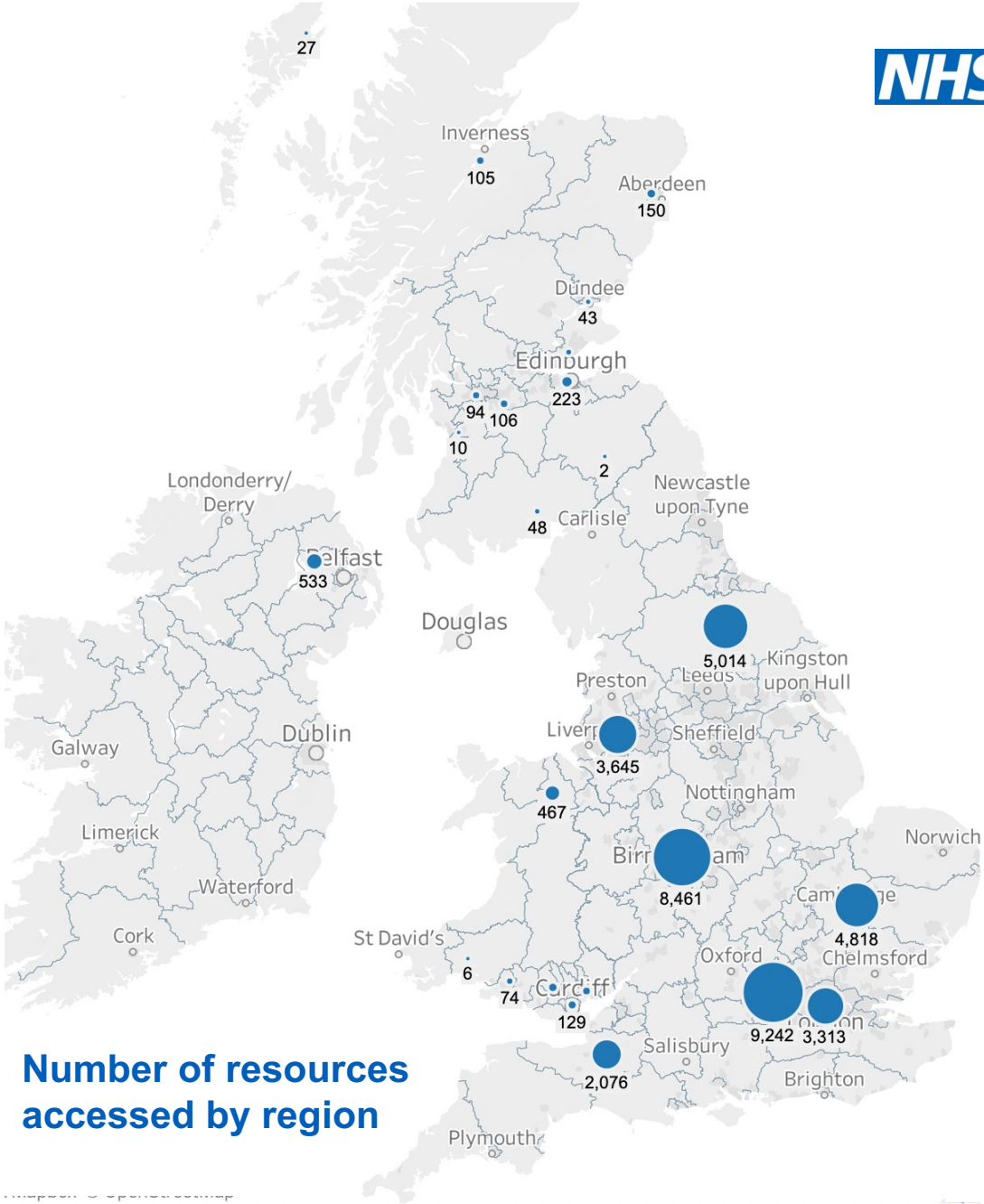
Summary of data



Note: (a) Programme launched 29th June 2021; (b) data correct as of 15th November 2021

Resource users and access

Country	Total resource users	Total resources accessed
England	2,111	36,569
N. Ireland	19	533
Scotland	98	895
Wales	83	932



Note: (a) Programme launched 29th June 2021; (b) data correct as of 15th November 2021

Programme update

Libby Thomas



Programme structure

210+ free open access educational resources available across multiple domains and levels of care



Levels of Care

- Primary & community care out of hospital
- Ward based / Level 1 care (Basic critical care)
- Level 2 (Intermediate critical care)
- Level 3 (Advanced critical care/PICU)

Staff Groups

- Doctors
- Nurses
- Physiotherapists
- Pharmacists
- Speech & language therapists
- Educators
- Support staff

https://www.e-lfh.org.uk/programmes/respiratory_surge_in_children/

Current resources

A wide variety of resources to support the learning of different users

Resource types



- Webinars
- Videos



- Webpage/website/web blog
- E-learning



- PDF
- PPT
- Infographic



- Podcasts

Learning Categories

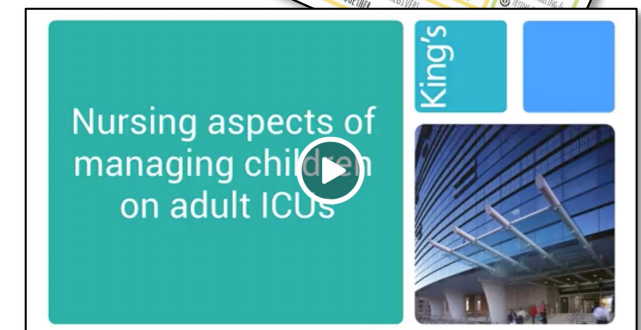
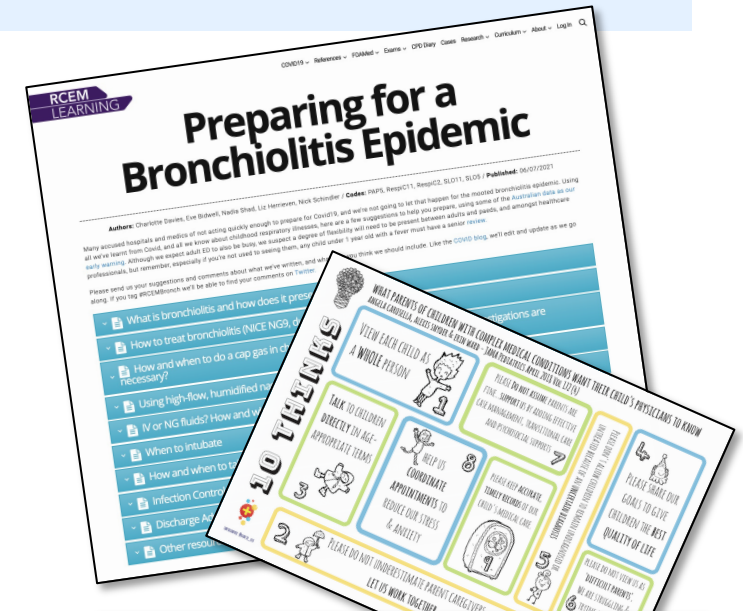


- 'At a glance' (≤ 5 mins)
- 'Bitesize learning' (5-30 mins)
- 'Time to think' (> 30 mins)

Accessibility



- Strive to meet AA level based on WCAG guidelines
- Review and improve accessibility of existing resources
- Create new accessible resources



Feedback cycle

Evidence-based

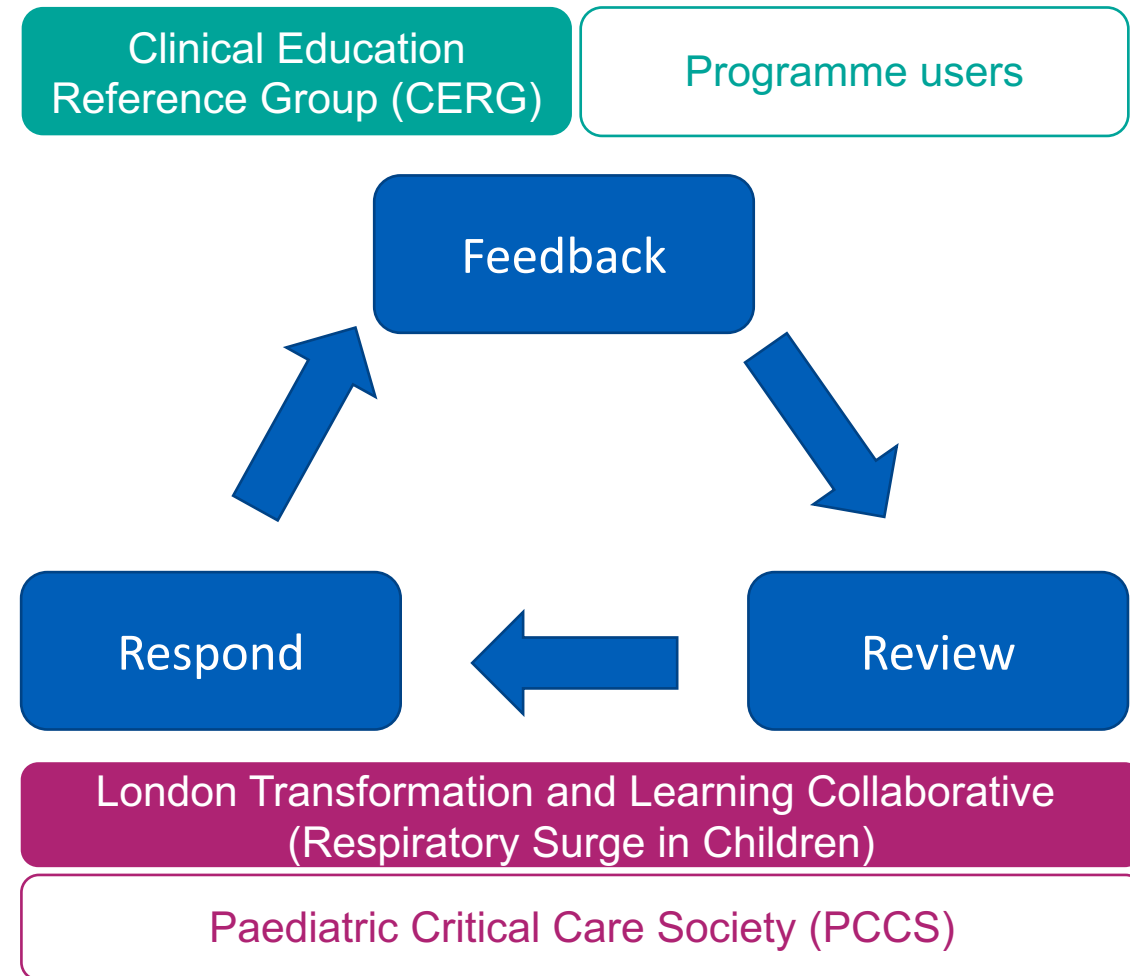
- Informed by care standards and competency frameworks

Co-developed

- Collaborative working with learners and systems

User-led

- Refine and evolve programme in response to feedback



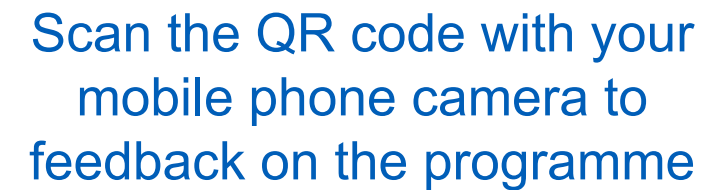
Evaluation: Respiratory Surge in Children Programme

1. What is your role?

- ☐ Text
- ☐ Video
- ☐ Audio
- ☐ Interactive
- ☐ Print
- ☐ Infographic
- ☐ Template

Strongly disagree Disagree Neutral Agree Strongly agree

It was easy finding content relevant to my context	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of programme content is high	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend this programme to a colleague	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



"You asked, we did..."

New resources and updated skills matrix

Francesca Wright
Laura Lowndes
Jennifer Broadbent
Timothy Hunt



New: Rapid Access Lists

Rapid Access Resource Lists

These lists have been designed as quick introductions to the content on the Respiratory Surge in Children programme with hyperlinks to resources on e-LfH, so you will need to be logged in to access them. If you have not already registered you can find guidance on how to do so at the bottom of this page.

Each list is designed to take no longer than 2 hours to complete, and some also have additional "Extension learning" you want to push yourself further.

In addition to these available lists, we have further lists in development. If you have suggestions for further rapid access created ones of your own you would like to share with others, please contact the team on LTLCE@hee.nhs.uk.

1. Adult Nurse to Paediatric ICU

Recognise, assess & care for a child with respiratory distress who requires intensive care interventions.

2. Adult Nurse to Ward and HDU

Learn about assessment and management of bronchiolitis.

3. Community Nurses – Bronchiolitis Revision

Revise bronchiolitis signs, symptoms assessment & management.

4. High Flow Oxygen Therapy – No Prior Knowledge

For Paediatric nurses learning about High Flow Therapy, with no prior knowledge.

5. High Flow Oxygen Therapy – Refresher

For Paediatric nurses – refresh knowledge about High Flow Oxygen Therapy.

6. Physiotherapists on Paediatric Wards

Assessment and management of child with bronchiolitis.

Key features

- Links to fundamental and extension learning resources
- Tailored to different staff groups and work contexts

Rapid Access List of Resources

Health Education England

Profile

I am an Adult Nurse, working in Ward/HDU

I want to learn about assessment and management of the child with bronchiolitis.

Time to complete

Fundamentals: 2 hrs, 3 min
+ competency document

Extension: 0 hrs, 50 min

Fundamentals:

- Paediatric Respiratory Surge Cross Skilling Competency Document for Ward Based Staff**

This cross-skilling document with competency signoffs included, can be used to guide training and preparation for managing the child with bronchiolitis. Including: bronchiolitis overview, made management, R/Audit, NOT, suctioning.

Competency document 60-120 min
- Lightning Learning Bronchiolitis**

An e-LfH resource describing mild bronchiolitis and management, ideal for prehospital and community or primary care practitioners.

Infographic 3 min
- Re-ACT Talks: Deterioration: How to Spot the Sick Child**

This NHS England video provides guidance about the presentation and identifying features of seriously ill children, presented by an Emergency Medicine consultant. This includes risk stratification, clarifying points for history taking, and examination. It also briefly discusses presentations with fever and signposts to additional resources. (NHS England)

Video 10 min
- National guidance for the management of children with bronchiolitis (2021)**

Recommendations on the management of children with bronchiolitis in hospital settings during COVID-19 (Royal College of Paediatrics and Child Health (RCPCH))

Web page 10 min
- Clips of abnormal breathing in infants and children**

Short video clips from Healthier Together showing grunting, recession, creps, head bobbing, abdominal breathing, and a quick guide to counting respirations in a child and baby. (Healthier Together)

Video 10 min
- Bronchiolitis case presentation: progressing through level 1, level 2 and level 3 care**

This presentation follows the case of a 17/40 ex-prem baby presenting with cough and coryza. It discusses the steps in escalation of care required from presentation to hospital to level 3 care.

Webinar 41 min
- High Flow Oxygen Therapy**

What is High Flow Oxygen Therapy? A narrated presentation covering how it works, when to start, flow and temperature, monitoring and documentation, nutrition and hydration, advantages and disadvantages, potential complications, and complex patients. (Partnership and Number PCC ODN)

Video 20 min
- Medication considerations in acute bronchiolitis: PCCS Bronchiolitis Webinar 2.5**

Pharmacology in bronchiolitis - review of the NICE guideline. Necessity of supportive management - oxygen & hydration. (PCCS)

Webinar 21 min
- Distraction in Action - Helping a Child During Medical Procedures**

A video showing different ways we can distract children and young people during painful or invasive procedures.

Video 3 min
- 10 Thinks: A Message from Parents**

Infographic outlining ten key messages from parents and caregivers to their child's treating team. This highlights the importance of maintaining a strong parent-clinician relationship and including family in all aspects of patient care. (Don't Forget The Bubbles)

Infographic 5 min

Extension Learning:

- Searchable Equipment Support Resource**

An interactive tool that allows you to search for quick reference guides, instructional videos, and manuals for a vast array of medical equipment allowing you to resolve or problem solve. Devices include high flow, high velocity oxygen delivery devices for babies with bronchiolitis and feeding pumps. (LTLCE)

Website 10 min
- Bronchiolitis Safety Netting**

This video from DFTB explores 'How to safety net for bronchiolitis' This includes: The role of the parent, when to discharge, feeding, wet nappies, High risk groups, Parental smoking, Come back if you're worried (Don't Forget The Bubbles)

Video 5 min
- Top tips for managing the deteriorating patient whilst awaiting the retrieval service**

This presentation discusses the medical and nursing management of a child who is deteriorating and requires level 3 care in the ED setting, what to think about, and how to manage the patient whilst awaiting retrieval.

Webinar 35 min

Developed by Health Education England and NHS England and Improvement initiative

Developed lists

- Adult Nurse to PICU
- Adult Nurse to ward / HDU
- Community Nurse – bronchiolitis revision
- High flow oxygen therapy (no prior knowledge)
- High flow oxygen therapy (refresher)
- Physiotherapists on paediatric wards

Proposed future lists

- Pharmacists
- GP (refresher)
- Speech and language therapists
- Support staff
- ODPs




New: AHP and community resources

Physiotherapy

2. The care and management of the child with respiratory illness

This domain outlines the pathophysiology, signs and symptoms, and recommended treatment for children with respiratory disease being cared for in various settings including viral bronchiolitis. Most cases of viral bronchiolitis are due to respiratory syncytial virus (RSV). While self-limiting, bronchiolitis can be life-threatening in infants who were premature or have underlying respiratory, cardiac, neuromuscular or immunological conditions.



Resources

Physiotherapy specific resources


These resources are designed to support respiratory illness from the domains and folders.

- Anatomical and Physiology (Webinar, 11 mins)
- RSV and other Viruses – (Webinar, 11 mins)
- The Intubated Infant with (Webinar, 39 mins)
- The Deteriorating Child (Webinar, 39 mins)
- Management of a Child (Webinar, 23 mins)
- Supportive Therapy for (Webinar, 23 mins)

Pharmacy

4. Medicines management and Differences between child and adult

This domain provides guides to support safe management of medications for sick children, including opportunities to practice calculations. This is relevant for both paediatric and adult trained staff across a variety of settings.



It also includes essential information on physical and psychological differences between adults and children, and critical variations in physiology which are important to understand in all contexts, including when prescribing.

Resources

Pharmacy specific resources

These resources are designed to support children with respiratory illness from the domains and folders.

Webinars:

- Paediatric Pharmacy Training Session 1: Introduction to Paediatric Clinical Pharmacy (Webinar, 45 mins)
- Paediatric Pharmacy Training Session 2: Paediatric Clinical Pharmacy COVID (Webinar, 60 mins)

Microsoft Teams

Paediatric Pharmacy Training Session 1: Introduction to Paediatric Clinical Pharmacy

2021-10-06 15:04 UTC

Presented by: HENRY, Viola (BARTS HEALTH NHS TRUST)

Co-presented by: HENRY, Viola (BARTS HEALTH NHS TRUST)

46:11

The Deteriorating Child with Complex Needs in the Community – A physiotherapy perspective

Laura Lowndes, Cambridge University Hospitals NHS Trust and Zoe Johnstone, Royal Hospital for Children and Young People, Edinburgh

September 2021

39:01

Speech & Language Therapy

The Impact of Respiratory Illness on Swallow Function in Children (Webinar, 20 mins)

Session Information

Title:
The Impact of Respiratory Illness on Swallow Function in Children (Webinar, 20 mins)

Description:
Webinar discussing how infants swallow and why it becomes a problem when they have a respiratory infection. (Webinar, 20 mins)

Hierarchy:
Respiratory Surge in Children > The assessment and management of the child with Respiratory Illness > The impact of respiratory illness on Swallow Function in Children

Created:
21 Oct 2021

Last Major Update:
21 Oct 2021

Keywords:
Speech and Language

The Impact of Respiratory Illness on Swallow Function in Children.

Together Safe Kind Excellent


Sophie Phillips

00:00

Parent / carer info leaflets

5. Family centred care

Family centred care is central to the provision of healthcare for any child in the UK. This domain describes how family centred care is practiced, what this means for those providing care, and essential communication techniques when working with a hospitalised child and their family. This section also explores key information about safely discharging patients, safety netting and approaching conversations about the COVID-19 vaccination in pregnancy.



Resources

Parent / Carer Information Leaflets

This section contains printable information leaflets for healthcare professionals to use with a child with respiratory illness both in primary care settings and in/on discharge from hospital.

- Healthier Together Poster for Parents "Worried about your child's health?" (PDF, 1 min)
- NHS cough cold in children under 1 year old advice sheet (PDF, 5 mins)
- NHS cough cold in children over 1 year old advice sheet (PDF, 5 mins)
- Wheeze and Breathing difficulties – Top Tips for Parents (PDF, 5 mins)
- Difficulty breathing and wheeze: Guidance for carers of children aged 3 months and over (PDF, 5 mins)
- Medicines for Children: Searchable webpage providing general or specific information

Worried about your child's health?

Do you need advice, a doctor or is it an emergency?
Healthier Together is a new website and app developed by local healthcare professionals for parents and carers. It provides information about what might be wrong, what to do and where to go for help.

Find us online at: what0-18.nhs.uk

Scan the QR code with a smart phone to view the website

Download the free app: Healthier Together

Healthier Together



New: Educator resources and competency docs

Educator Resources

This domain provides resources for educators and trainers to use in the local workplace. These include competency documents, guidelines, simulation scenarios, and presentation slide decks. They cover a wide variety of topics relating to the respiratory surge in children programme. Feel free to use them as they are or to inform and inspire your own resources. N.B. it is good practice and polite to retain the acknowledgements of the original authors who have shared these with us, so please do so.

We are still collating and creating resources and would appreciate you sharing any relevant resources; feedback on the resources already available is also most welcome (please see the 'How to give your feedback' section below).

Resources

Competency Documents

- High Flow/High Velocity Oxygen therapy competency document (PDF, 60+ mins)
- Medicines Management and IV Fluid Calculations Workbook (PDF, 60 mins)
- Nasogastric Tube Insertion and Management Workbook (PDF, 60 mins)
- Staff paediatric tracheostomy competency (GOSH) (PDF)

Clinical Guidelines

- Clinical Guideline: Paediatric Oxygen Therapy (University Hospitals Bristol & Western NHS Foundation Trust) (PDF, 10 mins)

Simulation Scenarios (please submit, we would love to share)

Slide Decks (please submit, we would love to share)

Unit Conversion

Every year medication errors occur, many of which are attributable to incorrect medication doses with unit conversion errors being the most common (Department for Education and Skills / Department of Health 2004, National Patient Safety Agency 2007). Care must be taken if a drug is prescribed in a different unit of measure to the dispensed unit. For example if 400 micrograms of a drug is prescribed and is only available in ampoules containing 4mg/mL, calculating the amount to be administered requires both the dose and drug strength to be converted to the same unit of measure.

Units of Measure and Converting Units of Measure

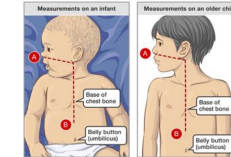
	Unit	Abbreviation	Conversion
Weight	kilogram	Kg	1000 grams
	gram	g	1000 milligrams
	milligram	mg	1000 micrograms
	microgram	Never abbreviate	1000 nanograms
Length	meter	M	100 centimeters
	centimeter	cm	100 millimeters
	millimeter	mm	
	milliliter	ml	1000 microlitres



September 2021

Procedure
If possible, tube should not be inserted immediately after a feed to avoid vomiting.

1. Obtain verbal informed consent
2. Select the appropriate size tube and prepare equipment, (NG Tube, pH strips, Duoderm and tape to secure, scissors, 20-50ml Syringe, PPE, working oxygen and suction)
3. Measure the length of the NGT (NEX measurement) from nostril to earlobe to xiphisternum – see below.



4. Wash hands and apply PPE, position patient- older children sitting, babies swaddled or being cuddled. Apply duoderm to face on side you will insert the tube (to prevent pressure mark)
5. Insert tip into patients nose
6. Slide the NGT backwards, if possible ask the patient to swallow
7. Insert the tube down until desired length is reached- if obstruction is felt, withdraw slightly and rotate and try again



September 2021

QUICK REFERENCE GUIDE FOR CHOOSING CORRECT OXYGEN ADMINISTRATION					
to be used in conjunction with the Oxygen guideline					
Method	Nasal cannula	Face mask Simple	Non Rebreather mask Reservoir bag	Head Box	Humidified Oxygen Bucket mask
Minimum flow	0.5 Litre	4 Litres	10 Litres	5 Litres Flow	5 Litres Flow 25%
Maximum flow	2 Litres	15 Litres	15 Litres	15 Litres flow	15 Litres flow
Duration	As long as required	Up to one hour if needed for longer need to convert to humidified oxygen	Up to one hour if needed for longer need to convert to humidified oxygen	As long as required	As long as required
Sizes available	Two sizes available – Paediatric and Adult	Child and adult	Child and adult	Three sizes available – up to 9 months	Child and adult mask plus bucket mask
% Oxygen delivered	25 – 30%	35 – 50%	>95%	30 – 60%	30 – 60%

EQUIPMENT USED IN THE DELIVERY OF OXYGEN

- Oxygen source (piped or cylinder)
- Flow meter
- Saturation monitor
- Oxygen delivery system

Resource suggestions

Email
LTLC@hee.nhs.uk



Updated: Interprofessional skills matrix

Original: downloadable excel

Maps educational content to key skills, by domain and level of paediatric care

Updated: searchable tool

Key features

- Ability to filter learning pathway based on:
 - Learner profile
 - Work context
 - Learning duration
 - Content type

I am a **Adult Nurse** and I need to

Work in a Paediatric ICU

Filter your learning pathway:

2 Care and Recognition

Maximum Time

20 minutes

Content Types

Text Video **Webinar**
Audio E-Learning Leaflet
Template

You will need to meet the following objectives:

2 Care and Recognition

2.1 learning objective text

Title of resource
Webinar, 11 minutes



Title of resource
Webinar, 11 minutes



3 Management

3.3 learning objective text

Title of resource
Webinar, 11 minutes



Q&A

Lydia Lofton



Stay up-to-date

Visit the programme homepage



How to use the Respiratory Surge in Children programme:

Step 1: Explore the multimedia resources
 Step 2: Share any new resources or feedback with our team
 Step 3: Tell your colleagues about the programme with this [downloadable poster / PDF](#)

**The 'Interprofessional Skills Matrix' has been temporarily moved to the bottom of this programme page as it is under revision whilst we improve the functionality.

[See further detail here](#)

Current updates in progress

Completed in update 17 November 2021:

- New Pulse Oximetry resources added in Domain 1
- New Rapid Access Lists launched for quick, guided access to resources
- New Simulation Training video for physiotherapists
- New CPAP competencies added to Educator Resources

Current updates in progress / ongoing work includes:

- Refinement of existing resources
- Development of pharmacy specific resources
- We are still seeking further input to develop learning objectives for community settings
- Ongoing review of the matrix by colleagues from various professional areas, including AHPs, ODPs, pharmacists and community teams and decisions about how to utilise the matrix effectively.

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Health Education England



#RespSurge



For any comments, feedback,
or resource suggestions, please email
LTLC@hee.nhs.uk