

RCGP Sepsis Clinical Spotlight and Clinical Priority Overview and Impact Report 2016-17

Introduction

Sepsis has been identified as a major killer around the world accounting for 123,000 cases in England with 37,000 deaths annually¹ In 2015 the RCGP colleagues from the NHS England Cross Systems Sepsis Prevention Programme Board started to scope the role and needs of GPs in reducing this burden. 2016 saw the publication of an RCGP Scoping report into the educational needs of GPs around sepsis and with support from Health Education England and NHS England we were able to first create a 1 year Clinical Spotlight on Sepsis, which has since been extended for a further 2 years.

The Scoping document identified several gaps and key educational learning outcomes which the 2016 Spotlight started to address. It was also anticipated that 2016 would see the publication of the NICE Guidance on Sepsis² and the new International Definitions for Sepsis³ both of which would have implications for GP learning needs and clinical practice.

Gaps Identified by Scoping Paper

- A mechanism to ensure maximum exposure for all the relevant clinicians.
- An educational resource that covers the breadth of sepsis and a condition in its own right.
- Recognition of the gaps in our clinical knowledge, particularly for out of hospital environments
- Recognition of the role immunisation can play in reducing mortality and morbidity.
- A recognition of the ethical responsibilities (and/or legal issues) in the management of sepsis: e.g. an elderly person with possible sepsis who wishes to undergo home treatment; end-of life care; advanced decisions for refusal of treatment.
- Appropriate channels to support electronic distribution of educational and clinical management resources.

Anticipated Learning Outcomes

- Increased awareness of mortality associated with sepsis.
- Increased awareness of at risks groups such as post op/procedure, children, immunosuppressed and the elderly.
- Increased awareness of important physiological changes associated with sepsis, such as:
 - Tachycardia
 - Elevated Respiratory rate
 - Altered cognition
 - Reduced BP and or Capillary refill
- Increased awareness of priority for urgent admission (mortality increasing 13% by each hour) and good communication of concerns to senior clinicians.
- Increased awareness of NEWS Scoring.
- Increased awareness of the potential value from early systemic antibiotics and oxygen.
- Understanding steps that GPs can take to reduce sepsis
 - Immunisation
 - Education of patients (and carers) at risk-safety netting?

RCGP Spotlight Programme

The RCGP Spotlight programme selects key areas of medical interest for GPs, identifies a key individual to develop educational and operational goals and supports the practical delivery of them over a one year period. Dr Simon Stockley was appointed to the post of RCGP Clinical Lead for Sepsis and was supported by the Clinical Priorities Project Manager Imke Jahner within the college.

Principal Goals of Spotlight Project

- 4 Regional Educational Workshops
- Creation of an online RCGP Sepsis Resource Centre (RCGP Sepsis Toolkit)
- RCGP Multiagency Sepsis Summit
- Pre- and post-project evaluation

In addition to these items the Clinical Lead acted as a focus for college response and enquiries to the publication of the new guidance, with articles in a variety of GP publications and lecturing at educational events. 2016 also saw the publication of an RCGP HEE set of e-learning materials on sepsis, which although not directly linked to this project had Dr Stockley as the Lead author with Drs Larcombe and Tavaré.

Evaluation

Pre and Post Project surveys were conducted as to GPs exposure to training and attitudes to Sepsis; these were promoted to the RCGPs 55,000 members. The encounter rate on the RCGP Sepsis Toolkit was also monitored.

Surveys 2016&17

Both surveys were circulated to the membership of the RCGP electronically, and were well supported (2016 n=555; 2017 n=404).

Replies came from a range of GPs and GPs in training with ~70:30 split

How long have you been working as a GP?				
Answer Options	2016		2017	
	Response Percent	Response Count	Response Percent	Response Count
Less than 5 years	27.0%	114	28.0%	78
5 to 10 years	13.0%	55	18.6%	52
10 to 15 years	15.2%	64	13.6%	38
More than 15 years	44.8%	189	39.8%	111
<i>answered question</i>		422		279

Have you received any training in the recognition and management of sepsis?				
Answer Options	2016		2017	
	Response Percent	Response Count	Response Percent	Response Count
Yes	63.3%	349	72.6%	273
No	36.7%	202	27.4%	103
<i>answered question</i>		551		376

When did you most recently receive this training?

Answer Options	2016		2017	
	Response Percent	Response Count	Response Percent	Response Count
Within the last year	36.7%	126	50.9%	138
1-2 years ago	26.5%	91	29.9%	81
3-5 years ago	21.9%	75	11.8%	32
More than 5 years ago	14.9%	51	7.4%	20
<i>answered question</i>		343	271	
<i>skipped question</i>		212	133	

How did you receive this training?

Answer Options	2016		2017	
	Response Percent	Response Count	Response Percent	Response Count
Local / national conferences	9.3%	32	19.2%	52
Study day	23.6%	81	31.0%	84
Journal article	10.8%	37	12.2%	33
Online / distance learning	20.1%	69	25.5%	69
Undergraduate medical training	12.5%	43	6.3%	17
Postgraduate medical training	39.7%	136	31.4%	85
Other (please specify)	23.0%	79	17.0%	46
<i>answered question</i>		343	273	
<i>skipped question</i>		212	133	

It would appear that there has been a significant increase in the number of respondents who received training in sepsis within the year. It was difficult to attach particular significance to the route of training as it may simply represent an increase in the inclusion of sepsis within the content of study days and conferences.

The RCGP Toolkit went live in July to coincide with the launch of the NICE Sepsis Guidance. It continues to be a well-used resource outperforming the equivalent college webpages for other specialities. Current data from April - Sept 2017 showed 5,768 page hits on the Toolkit

The survey sought to gauge whether the respondents felt their behaviour was changing, with most replying positively.

Has the sepsis awareness campaign changed your decisions to refer patients for further assessment?

Answer Options	Response Percent	Response Count
Yes	55.6%	203
No	29.3%	107
Unsure	15.1%	55
<i>answered question</i>		365

The four workshops were held in London, Birmingham, Oxford and Wakefield and were fully subscribed. The Summit was held in January 2017 and produced its report which identified various areas for development including educational needs.



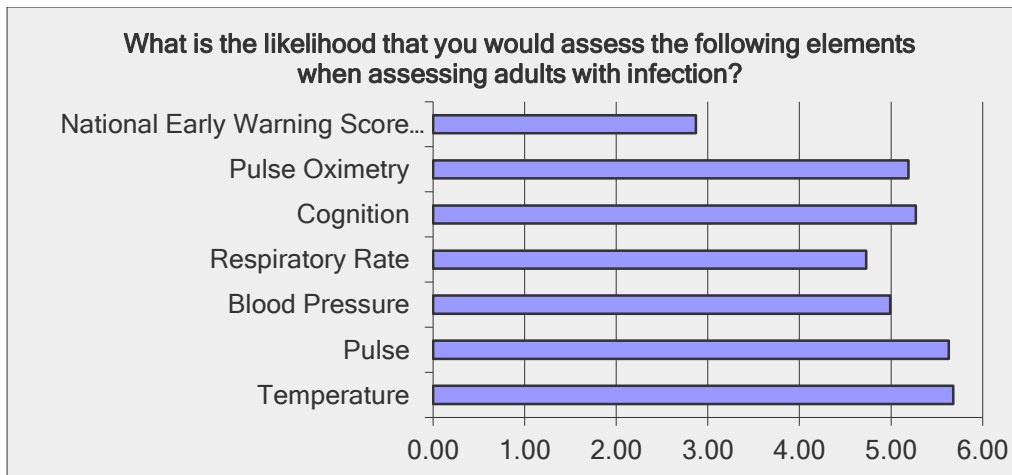
RCGP Sepsis Summit
2017 Consensus Rep

Further Development

The RCGP has been grateful to Health Education England for the continued support of the college’s sepsis efforts and the extension of the one year programme.

The 2017 survey tried to establish some measures by which we can assess changes in behaviour rather than just the undertaking of training. A baseline indication of which physiological variables were most commonly used in assessing infection was sought from survey users. That NEWS is used at all in this group is interesting, but with nearly half responding that they never use it one wonders if the uptake is not homogeneous but perhaps that NEWS not used by those who haven’t had training or are longer qualified. It is notable that the survey shows respiratory rate isn’t assessed as regularly (and with wider variance) as other variables is notable too given its ability to predict how sick a patient is, despite its probable greater predictive value. This is in line with other reports such as NCEPOD⁴.

What is the likelihood that you would assess the following elements when assessing adults with infection?									
Answer Options	Never	Rarely (< 10%)	Sometimes (< 50%)	Commonly (50-89%)	Mostly (>90%)	Always	Not sure	Rating Average	Response Count
Temperature	1	1	9	11	58	285	0	5.68	365
Pulse	1	0	7	21	65	270	0	5.63	364
Blood Pressure	2	1	42	68	93	156	1	4.99	363
Respiratory Rate	1	13	54	72	98	126	0	4.73	364
Cognition	2	7	27	37	78	206	6	5.27	363
Pulse Oximetry	2	7	22	44	104	184	1	5.19	364
National Early Warning Score (NEWS)	144	56	43	27	29	36	26	2.87	361
<i>answered question</i>									365
<i>skipped question</i>									39



It is also recognised that to embed change in behaviour we need to develop tools to support evaluation of individuals or practice's performance when assessing the sick patient with infection.

Have you ever undertaken audit of your assessment of patients with presumed infection against criteria for excluding sepsis?

Answer Options	Yes	No	Unsure	Rating Average	Response Count
In adults	16	344	3	1.96	363
In children	22	333	4	1.95	359
<i>answered question</i>					365
<i>skipped question</i>					39

If the right tool were available to support such an audit, is it something that you are likely to consider doing within the next 48 months?

Answer Options	Response Percent	Response Count
Definitely	18.4%	67
Highly likely	22.7%	83
Likely	39.5%	144
Unlikely	14.5%	53
No	4.9%	18
<i>answered question</i>		365
<i>skipped question</i>		39

The workshops identified that challenges in communicating concern and the prioritisation to ambulance colleagues was a particular area of concern and probable gap. This was in part a concern about how ambulances were prioritised to GP urgent calls but also how the message between a highly trained professional GP and non-clinical call ambulance call taker with minimal training was conducted. The survey confirmed what the workshop suggested that most GPs had never had training in this key area.

Have you ever had training in how ambulance services prioritise GP urgent transportation and 999 ambulance requests?		
Answer Options	Response Percent	Response Count
Yes	16.2%	59
No	81.6%	297
Unsure	2.2%	8
<i>answered question</i>		364
<i>skipped question</i>		40

When have you received such training ?		
Answer Options	Response Percent	Response Count
Within the last year	59.3%	35
1-2 years ago	22.0%	13
3-5 years ago	11.9%	7
More than 5 years ago	6.8%	4
<i>answered question</i>		59

Would you find (further) information / training in this area helpful in your management of sick patients?		
Answer Options	Response Percent	Response Count
Yes	87.1%	316
No	12.9%	47
<i>answered question</i>		363
<i>skipped question</i>		41

What would your preferred medium for receiving this be?		
Answer Options	Response Percent	Response Count
On-line learning	58.4%	212
Brief Handout from my local service	35.8%	130
Webinar with experts	12.1%	44
RCGP/Ambulance service - web page/online toolkit	27.0%	98
Other (please specify)	10.2%	37
<i>answered question</i>		363
<i>skipped question</i>		41

Conclusion

The Sepsis Spotlight delivered its goals and occurred at a time when the role of GPs in identifying and managing sepsis has been increasingly examined. During the one year of the project there appears to have been an increased uptake of training and the RCGP web pages appear to be an increasingly well used resource. The workshops and the summit in addition to being educational have been useful in developing new material and identifying new areas of endeavour.

We are grateful to Health Education England for their continuing support.

1. Health & Social Care Information Centre. Hospital Episodes Statistics. 2015.
2. Excellence NifHaC. Sepsis: recognition , diagnosis and early management. In: Excellence NifHaC, editor.: NICE; 2016.
3. Singer M, Deutschman CS, Seymour CW, et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *Jama* 2016; **315**(8): 801-10.
4. NCEPOD. Just Say Sepsis. In: National Confidential Enquiry into Patient Outcomes and Death, editor. London: NCEPOD; 2015.