

**Antimicrobial stewardship
Medicines practice guideline scope consultation
Wednesday March 5th – April 2nd 2014**

Medicines practice guideline scope consultation comments table

Ref No	Stakeholder organisation	Section No	Page No	Comments	Project team and GDG response
1	The Faculty of General Dental Practice (UK)	4.e	5	Prescribing data for urgent care should be collected and monitored. Evidence exists from dental out-of-hours services that antimicrobials are overused and misused. There is every likelihood that this is so for all primary care urgent services. Collection of robust data may in itself act as a trigger for behavioural change.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: urgent care and data collection when producing review protocols.
2	The Faculty of General Dental Practice (UK)	5.2a	6	Not sure whether the setting only includes publically funded health and social care. There is evidence of overuse in the private care setting and this should be included as antimicrobial resistance affects the community at large.	Thank you for your comment. The settings section of the scope states that the scope will cover 'All publicly funded health and social care commissioned or provided by NHS organisations, local authorities (in England), independent organisations or independent contractors.' and that 'This guideline may also be relevant to individual people and organisations delivering non-NHS healthcare services'.
3	The Faculty of General Dental Practice (UK)	5.3.1a	6	We wholeheartedly agree that behaviour change of prescribers in the main but also patient behaviours in relation to antimicrobial prescribing are the key issues.	Thank you for your comment. The Department of Health has referred a topic to develop NICE public health guidance 'Antimicrobial resistance – changing risk related behaviours'. Patient behaviour will be considered in this guidance.

4	The Faculty of General Dental Practice (UK)	5.3.2b	7	Whilst we agree that treatment of specific conditions is not within the scope of this guideline, we firmly believe that evidence based guidelines to signpost appropriate prescribing for clinical conditions are essential in reducing antimicrobial resistance and improving stewardship.	Thank you for your comment. NICE will provide links to relevant guidelines in the published guideline.
5	The Faculty of General Dental Practice (UK)	5.4.a	7	Clinical outcomes would better be described as “reduced” mortality and morbidity and likewise “reduced” time to clinical cure, “reduced” infection rates and reinfection rates	Thank you for your comment. Please note that the limiting of literature search clinical outcomes to only studies demonstrating a reduction would likely introduce bias into the papers included in the search. NICE include all studies using the clinical outcome of interest so that both positive and negative trials may be included and a balanced view of the effectiveness of interventions achieved by the GDG.
6	The Faculty of General Dental Practice (UK)	5.4	8	All the outcomes listed need to be specific (see for 5.4.a)	Thank you for your comment. Please note that the limiting of literature search clinical outcomes to only studies demonstrating a reduction would likely introduce bias into the papers included in the search. NICE include all studies using the clinical outcome of interest so that both positive and negative trials may be included and a balanced view of the effectiveness of interventions achieved by the GDG.
7	The Faculty of General Dental Practice (UK)	5.5a &b	8	These review questions seem appropriate taking into account the scope and the setting	Thank you for your comment.
8	The Faculty of General Dental Practice (UK)	5c	9	Whilst we understand this question is in draft form it needs rethinking – perhaps it should	Thank you for your comment. The review questions section of the scope has been

				read “what systems and processes (behaviours?) are more effective and cost effective at reducing the emergence of antimicrobial resistance? We don’t think it’s possible to define “usual” care.	amended to reflect your comment.
9	Milton Keynes Community Health Services	4	4-5	Our comments are as follows: There is no data or alternatively discussion on the lack of data from community health services, offender care or mental health settings where antimicrobials are regularly prescribed and administered.	Thank you for your comment. The data on resistance and antimicrobial use section of the scope has been amended to reflect your comment.
10	Milton Keynes Community Health Services	General		Our comments are as follows: The scope should clearly outline that community health services, offender care and mental health services are also included.	Thank you for your comment. The scope states that the guideline will cover ‘All publicly funded health and social care commissioned or provided by NHS organisations, local authorities (in England), independent organisations or independent contractors.’ This would include all those services specified in the comment.
11	Royal College of Paediatrics and Child Health	General		This is very comprehensive and there are only have a couple of minor comments. There are no concerns re: equal opportunities etc.	Thank you for your comment.
12	Royal College of Paediatrics and Child Health	3.f)	2	The route of administration should be included as well as dose, duration etc.	Thank you for your comment. Section 3f discusses key points from the Department of Health (2013) document ‘AMR strategy impact assessment’. Unfortunately as this is not a NICE publication, NICE does not have a remit to amend it. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: route of administration when producing review protocols.
13	Royal College of Paediatrics and Child	5.4	7	Other outcomes that could be included are critical incidents related to antibiotics, side	Thank you for your comment. The main outcomes section of the scope has been

	Health			effects & costs (although costs are mentioned elsewhere).	amended to reflect your comment. As stated cost (economic evaluation) is covered elsewhere in the scope.
14	NHS Trust Development Authority	5.3.1a	6	We would like to see reference not only to reducing unnecessary prescribing but also the impact of interventions on prescribing patterns eg. choice of antimicrobial agent	Thank you for your comment. The key issues section of the scope has been amended to reflect your comment.
15	NHS Trust Development Authority	5.5a	8	The phrase "...appropriate antimicrobial prescribing and use" implies that there is a definition of appropriateness – this should be considered by the GDG.	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.
16	NHS Trust Development Authority	5.5b, c	9	The phrase "...appropriate antimicrobial prescribing and use" implies that there is a definition of appropriateness – this should be considered by the GDG.	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.
17	Merck Sharp & Dohme	General		MSD recognises the need to reduce unnecessary prescribing of antimicrobials through changing prescriber and patient/carer behaviour and therefore welcomes this guidance. MSD believes that prescribers and commissioners of healthcare should be supported to choose the most appropriate antimicrobial agent, with decisions supported by the clinical evidence base, without undue constraint arising from considerations of cost – which may lead to inappropriate choices that contribute to increasing antimicrobial resistance.	Thank you for your comment.
18	Merck Sharp & Dohme	4b	5	In addition to antibiotic charts and prescription audits, MSD would like to highlight the Drug Resistance Index, a tool which aggregates information about antibiotic resistance and antibiotic use into a single composite index to improve understanding of epidemiological	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: the Drug Resistance Index when producing review protocols.

				resistance trends. The tool may be valuable in assessing outcomes to measure the implementation of AMS guidelines in a hospital.	
19	Merck Sharp & Dohme	5.2	6	MSD believes that any antimicrobial stewardship guideline should provide specific, measurable, and dynamic solutions which could be customised for a local setting based on the availability of resources for implementation.	Thank you for your comment.
20	Merck Sharp & Dohme	5.3	6	MSD believes that institution-specific treatment guidelines for the most common infections, based upon this guideline but incorporating recent, local microbiology data, would be valuable. Any guidelines should consider the 4 Ds: 'right Drug', 'right Dose', 'right Duration', and 'De-escalation'. Empiric therapy guidance would focus on 'right Drug' and 'right Dose' and could incorporate local, disease-specific antibiograms where available, characterisation of patients based on the risk for acquiring multi-drug resistant pathogens and clinical syndromes, and guidance on adequate dosing of specific antimicrobials based on pk-pd characteristics. Targeted treatment guidance would focus on 'right Duration' and 'De-escalation', providing guidance on when and how to de-escalate, appropriate selection of de-escalation agents based on their spectrum of coverage, and appropriate duration of therapy in different clinical scenarios.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: 4D's when producing review protocols.
21	Merck Sharp & Dohme	5.3	6	The importance of microbiology diagnostic facilities and rapid diagnostic methods should be highlighted. Such laboratory facilities not only ensure rapid and appropriate antimicrobial	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: diagnostics when producing review

				delivery to the patients but also save money and resources for the hospital by optimising antimicrobial utilisation.	protocols.
22	Merck Sharp & Dohme	5.4	7	Antimicrobial stewardship guidelines should potentially distinguish between structural/process outcomes measures which show change in trends quickly and are easier to measure, and clinical outcome measures which take longer to evaluate and need more robust data to highlight any significant impact.	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
23	Merck Sharp & Dohme	5.3.2.a)	7	MSD acknowledges that the guideline will not make recommendations on the use of specific named medicines, however, we believe that guidance relating to classes of medicines would be useful. For example, prescribers may benefit from recommendations which highlight instances in which it is inappropriate to prescribe broad-spectrum antibiotics and which alternative classes should be considered.	Thank you for your comment. The 'areas that will not be covered' section of the scope has been amended to reflect your comment.
24	Merck Sharp & Dohme	5.4.f)	8	MSD welcomes the inclusion of community-associated infections in the guidance which reflects that a considerable proportion of care for antimicrobial infections is administered in the community (i.e. care in the home), with associated costs that must be considered in any decision-making framework or guidance.	Thank you for your comment.
25	Merck Sharp & Dohme	5.6	9	In the consideration of economic aspects, MSD would encourage the inclusion of all relevant costs relating to the community setting in addition to the hospital setting, where evidence is available. Further, MSD would like to highlight the importance of applying a sufficiently long time horizon for the consideration of costs to ensure that the long-	Thank you for your comment. The decision on what aspect of the guidance will subject to economic analyses is yet to be determined by the GDG.

				term consequences of increasing antimicrobial resistance are adequately captured and balanced against any short-term cost reductions that may be achieved through the use of cheaper, and potentially clinically-inappropriate, antimicrobial agents.	
26	AstraZeneca	General		AstraZeneca welcomes the development of Antimicrobial stewardship guidelines and fully supports the draft scope.	Thank you for your comment.
27	AstraZeneca	5.3.1 (a)	6	Further to Section 5.3.1(a), we recommend the inclusion of an additional key area that looks specifically at the systems and processes that underpin the prescribing behaviour outlined in the aforementioned section.	Thank you for your comment. The key issues section of the scope has been amended to reflect your comment.
28	Pfizer Ltd	General		We welcome the development of a NICE Guideline for antimicrobial stewardship. This has the potential to promulgate a more uniform understanding of what good antibiotic stewardship and infection control means.	Thank you for your comment.
29	Pfizer Ltd	5.3.1	6	We would like to propose the inclusion of the following areas that will be covered: <ol style="list-style-type: none"> 1. Treatment of multidrug resistant organisms 2. Early hospital discharge as a method for reducing resistance 3. Ensuring the right drug, the right dose, at the right time and for the right duration 	Thank you for your comment. <ol style="list-style-type: none"> 1) The guideline will not cover specific clinical conditions or specific medicines. 2) and 3) The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: early hospital discharge and the 4R's when producing review protocols.
30	Royal College of Physicians (RCP)	General		The RCP is grateful for the opportunity to comment. Experts on our Healthcare Associated Infections Working Group would like to make the following comments.	Thank you for your comment.
31	Royal College of Physicians (RCP)	General		The scope and group would benefit from secondary care physician (particularly acute medicine or elderly care), dentist, intensivist,	Thank you for your comment. Your comment has been noted and added to the list of recommended Guideline Development Group

				and paediatrician. The infection consultant could be a consultant microbiologist with a strong stewardship remit or infectious diseases physician.	members from the NICE scoping workshop.
32	Royal College of Physicians (RCP)	General		It is important that primary and secondary care have equal attention in the development of the guidance, as advised by experts in each area on the guideline development group.	Thank you for your comment.
33	Royal College of Physicians (RCP)	General		The current brief focuses on interventions to reduce prescribing by practitioners or to modify demand from patients. Another question should focus on effective strategies for communication to reduce clinical risk of infection by alternative methods and the danger of adverse events of antimicrobial use, particularly adverse drug reactions related to antibiotics and Clostridium difficile infection.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: communication to reduce clinical risk of infection by alternative methods when producing review protocols. The main outcomes section of the scope has been amended to reflect your comment in relation to adverse events. However, unfortunately specific clinical conditions are out of scope for this guideline.
34	Royal College of Physicians (RCP)	3.e	2	Although the main goals of antimicrobial stewardship are defined, it is important to provide a definition of antimicrobial stewardship is clearly defined.	Thank you for your comment. The need for the guideline section of the scope has been amended to reflect your comment.
35	Royal College of Physicians (RCP)	5.1 plus general	6	The relationship of the following groups should be clearly associated with the review questions <ul style="list-style-type: none"> • Prescribers • Other Healthcare professionals, particularly those who dispense and administer antimicrobials • The public • Carers - especially for young children and the elderly • National bodies/Professional bodies • Local authorities/commissioners 	Thank you for your comment. The populations section of the scope has been amended to reflect your comment.

				<ul style="list-style-type: none"> • Out of hours practitioners 	
36	Royal College of Physicians (RCP)	3.b	1	<p>It is important to state clearly and specifically that the guidance will address all antimicrobials – antiviral, antifungal, antibacterial and antiparasitic medicines.</p> <p>The principles for stewardship and risk for resistance applies to all of these medications although focus has mainly been on antibacterial resistance</p> <p>Also important to state clearly that the guidance applies to all formulations of the medication ie including oral, parenteral and topical agents.</p>	Thank you for your comment. The guideline section of the scope has been amended to reflect your comment.
37	Royal College of Physicians (RCP)	5.1.1.b	6	Surgical and medical prophylaxis should also be included in the scope of this document, though additional points may reference other documents.	Thank you for your comment. Surgical and medical prophylaxis using antimicrobial treatments are included within the scope of the guideline.
38	Royal College of Physicians (RCP)	5.3.1	6	<p>The areas covered should not be narrowed to simply changing prescriber and patient behaviour</p> <ul style="list-style-type: none"> • For the section on changing behaviour, all healthcare professionals have a key role and this should be defined/highlighted by different groups: • Prescribers – all professions • Nurses (administering antimicrobials) • Pharmacists – dispensing and providing advice on use of antimicrobials <p>Rather than a focus on behaviour change only, it is important to explore attitudes and cultural</p>	<p>Thank you for your comment. The key issues section of the scope has been amended to reflect your comment.</p> <p>The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: attitudes and cultural differences when producing review protocols.</p>

				influences too. The systems and processes and effective antimicrobial stewardship programs should also be included as these are key to improving stewardship across primary and secondary care.	
39	Royal College of Physicians (RCP)	5.3.2. h	7	Reference should be given to guidance for care homes elsewhere, especially as they form part of the independent sector and local authority setting included in 5.1 Population. Managing antimicrobials in care homes should be covered under this remit as there is evidence from prevalence surveys in care homes that one in three residents receive an antimicrobial each year; many without significant clinical syndromes.	Thank you for your comment. The 'areas that will not be covered' section of the scope has been amended to reflect your comment.
40	Royal College of Physicians (RCP)	5.3.2.i	7	Acknowledgement of medicines adherence (covered elsewhere) and impact on clinical outcomes should be made. However, you then include patient-reported outcomes and adherence in 5.4.i	Thank you for your comment. The 'areas that will not be covered' section of the scope has been amended to reflect your comment.
41	Royal College of Physicians (RCP)	5.4	7	The following should be considered as additional outcomes: 1. Outbreaks of HCAI or AMR strains 2. Effective antimicrobial stewardship	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
42	Royal College of Physicians (RCP)	5.4.b	8	Stability of antimicrobial use – measured within statistical process control charts for organisations	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: statistical process control charts when producing review protocols.
43	Royal College of Physicians (RCP)	5.4.c	8	The presence and increased incidence of antimicrobial resistance rather than only emergence should be included.	Thank you for your comment. The main outcomes section of the scope has been amended to reflect your comment.
44	Royal College of Physicians (RCP)	5.5.a	9	Again, this section should be wider than behaviour to include attitudes, beliefs and	Thank you for your comment. The NICE project team will ask the Guideline

				<p>cultural differences.</p> <p>This should incorporate prescribing team and prescriber dynamics particularly in hospitals where prescribers are unlikely to challenge or alter others prescriptions. In addition, in secondary care this guideline should cover not just the prescribing start but also the prescribing review on a daily basis and how stopping antibiotics is safe and effective within this setting.</p> <p>There needs to be explicit sections on primary and secondary care.</p> <p>Clearly, there is a need to ensure that “appropriate” is defined - which may mean having a definition for each condition or clinical syndrome.</p>	<p>Development Group (GDG) to consider the topic: attitudes, beliefs and cultural differences when producing review protocols.</p>
45	Royal College of Physicians (RCP)	5.5.b	9	<p>The section on changing patient (or carer) behaviour needs to look at alternatives to antimicrobial prescribing including self-care, reducing primary care consultations and attendance.</p> <p>There needs to be explicit sections on primary and secondary care.</p>	<p>Thank you for your comment.</p> <p>The Department of Health has referred a topic to develop NICE public health guidance ‘Antimicrobial resistance – changing risk related behaviours’. Public education will be considered in this guidance.</p> <p>Interventions to reduce antimicrobial resistance will be considered when producing the review protocols.</p> <p>Your comment regarding explicit sections for primary and secondary care is noted.</p>
46	Royal College of Physicians (RCP)	5.5	9	<p>An additional / alternative question is the following</p> <p>What are the systems and processes that are effective and cost-effective in measuring effective antimicrobial stewardship programmes in primary and secondary care?</p>	<p>Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: a ‘systems and processes for measuring antimicrobial stewardship programmes’ when producing review protocols.</p>
47	UK Clinical Pharmacy			<p>It includes adults, young people and children</p>	<p>Thank you for your comment. The populations</p>

	Association (UKCPA) Pharmacy Infection Network			but does not mention neonates and the elderly.	section of the scope has been amended to reflect your comment. Please note the term 'adults' includes older people.
48	UK Clinical Pharmacy Association (UKCPA) Pharmacy Infection Network			There was a strong feeling that EPMA (electronic prescribing and medicines administration) should be included in the scope. It is going to be a major factor in the future regarding antimicrobial stewardship and should be discussed in this guideline. People felt it needs to be communicated to the companies who provide EPMA's the importance of ensuring their product can deliver good antimicrobial stewardship. It was also commented that EPMA is massively helpful when reporting consumption of antibiotics and also planning and undertaking audit of antibiotic prescribing. This should be reflected in the guideline.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: electronic prescribing and medicines administration in relation to antimicrobial stewardship when producing review protocols.
49	Royal College of General Practitioners	5.3.1	6	It is unclear if Point of care testing will be included in the scope as method of reducing antimicrobial prescribing (MH)	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: diagnostics when producing review protocols.
50	Royal College of General Practitioners	8.1	6	Veterinary and agricultural use of antimicrobials is driving resistance in organisms affecting human health, but the extent to which they are driving problems remains hotly debated. The principle of overuse of a scarce resource applies to this setting as much as to humans. (MH)	Thank you for your comment. The issue of antimicrobials use in animals is outside the remit of NICE (human health and social care) and unfortunately therefore out-of-scope.
51	Royal College of General Practitioners	5.3.1	6	Can the scope also look at identifying individual patients who are high users of	Thank you for your comment. This may be considered when producing review protocols.

				antibiotics across primary care, out of hours and secondary care? (MH)	Identifying individual patients or conditions is outside of the guideline scope.
52	Royal College of General Practitioners	8.2(b)	7	Treatment of Clostridium Difficile should require expert microbiological advice and should be considered in scope (MH)	Thank you for your comment. The treatment of specific clinical conditions (such as healthcare-associated infections) is out of scope for this guideline.
53	Royal College of General Practitioners	8.2(d)	7	Flu Immunisations can an important role in reducing the respiratory infections in vulnerable people and should be included in the scope (MH)	Thank you for your comment. The treatment of specific clinical conditions (such as influenza) and immunisation and vaccination are outside the scope of this guidance.
54	Royal College of General Practitioners	General	All	<p>One of my concerns is that reduced prescribing in primary care has been demonstrated to increase the risk (albeit low) of suppurative complications.</p> <p>So quinsy in acute sore throat and pneumonia in older adults.</p> <p>Although the previous CG69 (respiratory tract infection) dealt with potential strategies to reduce prescribing it did not explicitly address potential risks.</p> <p>I think there is a lack of evidence regarding mitigation or risk of reduced prescribing through enhanced communication skills and the use of safety net advice with adults/carers.</p> <p>We need the best evidence of how to communicate, and how to enhance safety net advice.</p> <p>The current brief focuses on interventions to reduce prescribing by practitioners or to modify demand from patients. (MM)</p>	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.

55	Royal College of General Practitioners			I think another question should focus on effective strategies for communication to reduce clinical risk and the danger of adverse events. (MM)	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: communication to reduce clinical risk when producing review protocols. The main outcomes section of the scope has been amended to reflect your comment in relation to adverse events.
56	ICNet International Ltd	general		The IDSA/SHEA guidelines have mentioned seven strategies in forming an effective antimicrobial stewardship team within the acute care setting. Highlight each of those strategies.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: the stated strategies when producing review protocols.
57	ICNet International Ltd	general		Incorporating computer surveillance software as a means of stratifying data quickly and efficiently.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: electronic surveillance software in relation to antimicrobial stewardship when producing review protocols.
58	ICNet International Ltd	5.4	7	Look at drug utilization via DDD//DOT and the correlation between decreased utilization and equal effectiveness in treatment.	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
59	ICNet International Ltd	5.3.1	6	Reducing the cost burden of inappropriate antimicrobial usage indirect/direct	Thank you for your comment. The decision on what aspect of the guidance will subject to economic analyses is yet to be determined by the GDG.
60	ICNet International Ltd	5.5	8	What systems or processes are in place to collect and analyse stewardship metric data.	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.
61	ICNet International Ltd			Changing prescriber and nursing behaviors on inserting invasive devices and lines	Thank you for your comment. Hand-hygiene, decolonisation and infection prevention and control measures are outside the scope of this guidance.
62	ICNet International Ltd	5.4	8	1) Ability to generate a real near time	Thank you for your comment. The main

				antibiogram a) across all body sites b) by site of infection c) to patient level 2) Ability to provide near real time patient level antimicrobial susceptibility profiles for each organism in an infection profile	outcomes section is to inform the literature search criteria only.
63	ICNet International Ltd			benchmarking use of first line vs. 'suppressed' agents by provider specialty Benchmark the use of first line agents in the guideline ... So percent guideline adherence vs. local practices (this a metric mentioned by IDSA/SHEA as well)	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: audit and benchmarking when producing review protocols.
64	ICNet International Ltd	3i	3	Drug utilisation data is essential to the collection and analysis of antimicrobial use, however, without technology, this is well understood to be an onerous task. Use of electronic systems is to be encouraged. Additionally, collection of this data on a national level is a clear requirement for understanding behaviour throughout the entire health service, much as MRSA and C difficile data collection has evidenced effective decreases in these terrible infections, a modern, national database of drug utilisation needs to be developed. For reference, in the united States, a national program for antimicrobial usage (AUR) has been established.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: drug utilisation data systems in relation to antimicrobial stewardship when producing review protocols.
65	ICNet International Ltd	General		In general, the guidelines aim to set out best practice in antimicrobial prescribing with an overarching objective of preventing inappropriate use of antimicrobials. The scope of the guidelines should include the	Thank you for your comment.

			<p>necessary information and data collection infrastructure to allow hospitals and national regulators to understand emerging trends in microbial resistance and prescribing patterns.</p> <p>Without this level of detail, how can possibly move the guidelines forward in the future, they will inevitably stay generalised and the key to stewardship is specifics.</p> <p>The existing “start smart, then focus guide lines” document best practice but the scope of the next guidance should include specific recommendations on how this should be achieved in various prescribing environments.</p> <p>Secondary care providers should be compelled to adopt the appropriate technology to support both safe medication prescribing but also the necessary prescribing support software to ensure that prescribers are in a position to make the most appropriate prescribing decision at the point of prescribing.</p> <p>Information systems still operate in isolations and prescribers are act based on the information available to them at the time. Often, this is limited to only the immediate set of patient observations. The guidelines should compel Trusts to integrate disparate data sources into a single coherent informatics system focus on ensure that prescribing is both appropriate for the patient and against the wider antimicrobial stewardship objective.</p> <p>Infections data and Antimicrobial prescribing</p>	
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				data should be joined in real time data systems to provide clinical decision support systems for best practice on antimicrobial stewardship.	
66	Royal College of Nursing	General	General	<p>The Royal College of Nursing welcomes proposals to develop this guideline. It is timely.</p> <p>The draft scope seems adequate and easy to follow.</p> <p>With respect to the question around promotion of equality of opportunity, it would be beneficial to provide information in a format that will be accessible to the groups specified under the equality protected characteristics.</p>	Thank you for your comment. Your comment regarding equality access to the guidance is noted.
67	Royal College of Nursing	General	General	Regarding the question on areas in the patient journey that would particularly need improving in relation to antimicrobial stewardship; we would suggest that health professional beliefs and attitudes - in particular the 'just in case' perceptions would need improving.	Thank you for your comment. The main outcomes section includes professional beliefs and attitudes.
68	Royal College of Nursing	General	General	Regarding the question on areas in the patient journey that would particularly need improving in relation to antimicrobial stewardship; we would suggest that patient beliefs and expectations of antimicrobials should also focus on 'just in case' perceptions.	Thank you for your comment. The Department of Health has referred a topic to develop NICE public health guidance 'Antimicrobial resistance – changing risk related behaviours'. Patient behaviour will be considered in this guidance.
69	Royal College of Nursing	5.4	7 - 8	We are unsure if a, d, e, f and g are appropriate outcomes to measure.	Thank you for your comment.
70	Royal College of Nursing	5.5	8	The review questions are appropriate however, we have concerns over how the guidance will be able to measure its effectiveness in terms of clinical outcomes and infection rates as the	Thank you for your comment. Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: surveillance systems when

				baseline data may be either non-existent or poor given the current state of surveillance.	producing review protocols.
71	Royal College of Nursing	5.5 a)	8	<p><i>What interventions are effective and cost-effective in changing prescriber behaviour to ensure appropriate antimicrobial prescribing and use?</i></p> <p>Public Health England (PHE) are investigating this currently, we would suggest that the developers should liaise closely with PHE on this issue. Enquiries should be made to Jo Wallace, the project lead at PHE.</p>	Thank you for your comment.
72	Royal College of Nursing	List of registered stakeholders	general	The Royal College of Nursing (RCN) is a registered stakeholder for this guideline but appears to be missing from the list. Please add the RCN to the list.	Thank you for your comment. RCN have now registered as a stakeholder.
73	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	3	1	Antimicrobial stewardship is important and urgent. There is still too much prolonged antibiotic prophylaxis of surgery ie beyond 24h. More direction to surgeons is needed.	Thank you for your comment.
74	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	3c	2	Statement inaccurate: Microbes are resistant NOT infections. Resistant microbes are MORE LIKELY to ...	Thank you for your comment. Section 3c discusses key points from the World Health Organisation definition of drug resistance ' WHO Drug resistance webpage '. Unfortunately as this is not a NICE publication, NICE does not have a remit to amend it.
75	ARHAI (Department of Health advisory committee on Antimicrobial	3e	2	Stewardship in other countries is poorly developed and influences UK by importation especially in private London hospitals.	Thank you for your comment. This is outside of the scope of the medicines practice guideline; NICE guidelines are written in the context of the NHS in England.

	Resistance and Healthcare Associated Infection)				Recommendations for private hospitals are outside the scope of this guideline.
76	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	3i	3	ESPAUR work needs referencing: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256479/ARHAI_Annual_Report_2012-2013.pdf	Thank you for your comment. The need for the guideline section of the scope has been amended to reflect your comment.
77	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	3h	3	For completeness as you have mentioned Start Smart Then Focus in (h) it would be good to mention TARGET antibiotic materials developed by PHE and RCGP for primary care prescribers. The TARGET toolkit is hosted on the RCGP website and is highlighted annually through European Antimicrobial Awareness Day (EAAD).	Thank you for your comment. The need for the guideline section of the scope has been amended to reflect your comment.
78	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	3 (new)	3	Lacks Mention PHE CPE toolkit http://www.hpa.org.uk/Publications/InfectiousDiseases/AntimicrobialAndHealthcareAssociatedInfections/1312Toolkitforcarbapenementero/	Thank you for your comment. The need for the guideline section of the scope has been amended to reflect your comment.
79	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	3k	4	CG69 last reviewed 2008 – needs review in light of findings re inappropriate prescribing in primary care	Thank you for your comment. NICE short clinical guidelines are updated in line with published processes; please see our website for information about updating of the guideline .
80	ARHAI (Department of Health advisory committee on			MUST highlight prevention as the most important factor	Thank you for your comment. Hand-hygiene and infection prevention and control measures are outside the scope of this guideline please

	Antimicrobial Resistance and Healthcare Associated Infection)				see ' Prevention and control of healthcare-associated infections NICE public health guidance 36 (2011)'.
81	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	4	4	Data on use is severely hampered by the lack of electronic prescribing in many hospitals – paper data collection is difficult.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: electronic prescribing and medicines administration in relation to antimicrobial stewardship when producing review protocols.
82	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	4	4	Restricted use of quinolones and cephalosporin's to prevent C difficile has resulted in rise in piptazobactam and meropenem use according to IMS data – this may drive more resistance. A diversity of antimicrobials should be maintained.	Thank you for your comment. The Health and Social Care Information Centre are reviewing the Quality Innovation Productivity and Prevention (QIPP) medicines and procurement work stream comparators. One of these comparators considers antimicrobial items/STAR-PU. More information about this work can be found here .
83	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	4d	5	Number of prescriptions in community significantly higher than in secondary care, however in secondary care the antimicrobials used are likely to be more expensive.	Thank you for your comment.
84	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	5.1	6	Scope is comprehensive. Antibiotic combinations and appropriate dosage based on pharmacodynamic data should be encouraged.	Thank you for your comment.
85	ARHAI (Department of Health advisory committee on	5.1.1b	6	Cover <u>all prescribers</u> including health and social care practitioners involved in the <u>prevention, management...</u>	Thank you for your comment. The populations section of the scope has been amended to reflect your comment.

	Antimicrobial Resistance and Healthcare Associated Infection)				
86	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	5.2b	6	Should this not be applicable to all prescribers for children, young people and adults?	Thank you for your comment. The final scope will be reviewed by NICE publishing team prior to publication.
87	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	5.3.1a	6	replace reducing unnecessary with 'optimising'	Thank you for your comment. The key issues section of the scope has been amended to reflect your comment.
88	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	5.3.2b	7	CG69 last reviewed 2008 – needs review in light of findings re inappropriate prescribing in primary care. RTIs will not be covered but you need to be careful not to exclude interventions that have been used for RTI eg delayed prescribing for sore throat (Descarte) communication skills (Cals BMJ) or leaflets (Francis BMJ) to reduce prescribing in RTI. These are important interventions to consider.	Thank you for your comment. NICE short clinical guidelines are updated in line with published processes; please see our website for information about updating of the guideline . The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: interventions that have been used for RTI when producing review protocols.
89	ARHAI (Department of Health advisory committee on Antimicrobial	5.3.2h	7	Managing medicines in care homes should be covered by principles of stewardship	Thank you for your comment. The 'areas that will not be covered' section of the scope has been amended to reflect your comment.

	Resistance and Healthcare Associated Infection)				
90	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	5.4b	8	Pushing a reduction in variation is potentially dangerous and will drive increased resistance. Should be looking for heterogeneity in prescribing and lower total prescribing	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
91	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	5.4b	8	Improvement is not always reduction in variation. It may be increase in antibiotic use in a guideline or reduction in total use of reduction in particular antibiotics or reduction for a particular condition.	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
92	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	5.4 e and f	8	If HAI and CAI are being used they should be defined as the terms potentially overlap with 5.4 g and h	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
93	ARHAI (Department of Health advisory committee on Antimicrobial Resistance and Healthcare Associated Infection)	5.4 q	8	Surgical infections are related to antibiotic prophylaxis rather than treatment	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
94	ARHAI (Department of Health advisory committee on Antimicrobial	5.5a	8	A thorough review of the literature concerning prescribing and behaviour change has recently been completed by the behavioural insights team at PHE	Thank you for your comment. NICE are aware of work by Public Health England and will continue to work on this guideline as it has been referred by the

	Resistance and Healthcare Associated Infection)				Department of Health to NICE. NICE will liaise with Public Health England.
95	Royal Pharmaceutical Society	General		<p>The Royal Pharmaceutical society welcomes guidance on antimicrobial stewardship; as the professional body for pharmacists and pharmacy we are committed to supporting AMS.</p> <p>The RPS is encouraged to see recognition of the importance of conserving available antibiotics by using them optimally. Pharmacists have a vital role to play in ensuring the optimal use of antibiotics. We have responded to the recent Government's report on Seven Key Areas for Future Action. Details of our response can be found at: http://www.rpharms.com/what-s-happening-/news_show.asp?id=948</p>	Thank you for your comment.
96	Oxford University Hospitals NHS Trust	1	1	Could add 'and prudent' e.g. systems & processes for effective & prudent antimicrobial use.	Thank you for your comment. The final scope will be reviewed by NICE publishing team prior to publication.
97	Oxford University Hospitals NHS Trust	3h)	3	BSAC published <u>NICHE: your 5 moments of prescribing to prevent antimicrobial resistance</u> . This is another key document to refer to.	Thank you for your comment. NICE are aware of the BSAC NICHE campaign. We will include any appropriate evaluation of the effectiveness or cost-effectiveness of this campaign as part of the literature review.
98	Oxford University Hospitals NHS Trust	5.1.1a)	6	Will sub-groups of people who are using antimicrobials also be covered e.g. older people, immunocompromised people?	Thank you for your comment. The NICE guideline will cover these sub-groups.
99	Oxford University Hospitals NHS Trust	5.3.1a)	6	Should cover 'optimising antimicrobial usage' (e.g. correct agent, correct timing, correct dosage, review of therapy at appropriate points), as well as reduce unnecessary usage.	Thank you for your comment. The key issues section of the scope has been amended to reflect your comment.
100	Oxford University Hospitals NHS Trust	5.4 b)	8	Antimicrobial usage should be measured in terms of quantity used e.g. Defined Daily Doses.	Thank you for your comment. The NICE project team will ask the Guideline

					Development Group (GDG) to consider the measures of antimicrobial prescribing when producing review protocols.
101	Oxford University Hospitals NHS Trust	5.4 b)	8	Should also measure the appropriateness of antimicrobial usage e.g. change of mean course duration over time?	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: a definition of appropriate usage when producing review protocols.
102	Oxford University Hospitals NHS Trust	5.5a)	8	Could expand this to say 'behaviour of health care professionals' instead of 'prescriber behaviour'. This would then include people such as pharmacists and nurses.	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.
103	University College London Hospitals NHS Foundation Trust	3	1	Antimicrobial stewardship is important and urgent. There is still too much prolonged antibiotic prophylaxis of surgery i.e. beyond 24 hours. More direction to surgeons is needed.	Thank you for your comment.
104	University College London Hospitals NHS Foundation Trust	3e	2	Stewardship in other countries is poorly developed and influences UK by importation especially in private London hospitals	Thank you for your comment. Unfortunately the point of your comment is unclear as the comment does not accurately match the content of the document under discussion in section 3e (Department of Health, UK five year antimicrobial resistance strategy 2013 to 2018).
105	University College London Hospitals NHS Foundation Trust	4	4	Data on use is severely hampered by the lack of electronic prescribing in many hospitals – paper data collection is difficult.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: electronic prescribing and medicines administration in relation to antimicrobial stewardship when producing review protocols.
106	University College London Hospitals NHS Foundation Trust	4	4	Restricted use of quinolones and cephalosporins to prevent <i>C. difficile</i> has resulted in rise in piperacillin/tazobactam and meropenem use according to IMS data – this may drive more resistance. A diversity of antimicrobials should be maintained.	Thank you for your comment.

107	University College London Hospitals NHS Foundation Trust	5.1	6	Scope is comprehensive. Antibiotic combinations and appropriate dosage based on pharmacodynamic data should be encouraged.	Thank you for your comment.
108	University College London Hospitals NHS Foundation Trust	5.4 a	8	Surgical infections are related to antibiotic prophylaxis rather than treatment	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
109	University College London Hospitals NHS Foundation Trust	General		How accurately can the clinical outcomes listed be linked directly as a result of antimicrobial use and prescriber/patient behaviours?	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
110	University College London Hospitals NHS Foundation Trust	General		How easily can the clinical outcomes listed be collected and measured at a local level?	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
111	University College London Hospitals NHS Foundation Trust	General		Who will be responsible for assessing changes in prescriber/patient behaviour? Will this be done at a national level or required at a local level?	Thank you for your comment. Guideline development has not yet started and therefore no recommendations have been made.
112	University College London Hospitals NHS Foundation Trust	General		Is there any interventions that have been shown to be clinically- and cost-effective, particularly in the financially strained NHS with all the added performance measures e.g. failed discharges, re-admission rates, etc	Thank you for your comment. As yet the literature searches have not been conducted for this guideline; the scoping consultation will inform the literature review questions.
113	Public Health England	General		The scope and group would benefit from secondary care physician (particularly acute medicine or elderly care), dentist, intensivist, and paediatrician input. The infection consultant could be a consultant microbiologist with a strong stewardship remit or infectious diseases physician.	Thank you for your comment. Your comment has been noted and added to the list of recommended Guideline Development Group members from the NICE scoping workshop.
114	Public Health England	General		It is important that primary and secondary care have equal attention in the development of the guidance, as advised by experts in each area.	Thank you for your comment.
115	Public Health England	General		One concern is that reduced prescribing in	Thank you for your comment. The review

				<p>primary care has been demonstrated to increase the risk (albeit low) of suppurative complications e.g. quinsy in acute sore throat and pneumonia in older adults.</p> <p>Although the previous CG69 (respiratory tract infection) dealt with potential strategies to reduce prescribing it did not explicitly address potential risks and the potential risk for the individual versus the global risk for the population with more widespread resistance.</p> <p>There seems to be a lack of evidence regarding mitigation of risk of reduced prescribing through enhanced communication skills and the use of safety net advice with adults/carers. We need the best evidence of how to communicate, and how to enhance safety net advice.</p> <p>The current brief focuses on interventions to reduce prescribing by practitioners or to modify demand from patients. Another question should focus on effective strategies for communication to reduce clinical risk of infection by alternative methods and the danger of adverse events of antimicrobial use, particularly adverse drug reactions related to antibiotics and <i>Clostridium difficile</i> infection.</p>	<p>questions section of the scope has been amended to reflect your comment.</p> <p>The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: communication to reduce clinical risk and safety net advice when producing review protocols.</p> <p>The main outcomes section of the scope has been amended to reflect your comment in relation to adverse events. However, unfortunately specific clinical conditions are out of scope for this guideline.</p>
116	Public Health England	General		The focus of the guideline should be the promotion of optimal prescribing, hence cover both 'safe prescribing' as well as 'inappropriate prescribing'.	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.
117	Public Health England	General		It should be noted that infection prevention and control, and advice provided on this, is integral	Thank you for your comment. Hand-hygiene and infection prevention and control measures

				to the approach of preventing the infection in the first place. Hence this contributes to optimisation of prescribing.	are outside the scope of this guideline please see ' Prevention and control of healthcare-associated infections NICE public health guidance 36 (2011) '.
118	Public Health England	3.e	2	<p>Although the main goals of antimicrobial stewardship are defined, it is important to provide a definition of antimicrobial stewardship which then incorporates the goals</p> <p>It will be important to include a glossary in the final guideline.</p>	<p>Thank you for your comment. The need for the guideline section of the scope has been amended to reflect your comment.</p> <p>Format of the guideline will follow NICE style.</p>
119	Public Health England	5.1 plus general	6	<p>It is important that the audience for the guidance is clearer.</p> <p>There should be a dedicated section highlighting the roles and responsibilities for different groups including service/agency interfaces including:</p> <ul style="list-style-type: none"> • Prescribers • Pharmacists • Other Healthcare professionals, particularly those who dispense and administer antimicrobials • Microbiologists, in relation to their role providing advice on prescribing • The public • Carers - especially for young children and the elderly • National bodies/Professional bodies • Local authorities/commissioners of Out of hours practitioners – this is particularly important as there is no data available and anecdotal evidence suggests that antibiotics make up a significant proportion of prescribed 	<p>Thank you for your comment. Section 5.3.1 does not define the audience for the guideline, this will be set out in the guideline when published.</p> <p>The populations section of the scope sets out the population of interest for the review questions and has been amended to reflect your comment. Formatting of the guideline will follow NICE style.</p>

				medicines by this professional group. Additionally, as the ratio of urgent care: general practice prescribing differs across England, this needs to be taken into account.	
120	Public Health England	3.b	1	<p>It is important to state clearly and specifically that the guidance will address all antimicrobials – antiviral, antifungal, antibacterial and antiparasitic medicines.</p> <p>The principles for stewardship and risk for resistance applies to all of these medications although focus has mainly been on antibacterial resistance.</p> <p>It is also important to state clearly that the guidance applies to all formulations of the medication i.e. including oral, parenteral and topical agents.</p>	Thank you for your comment. The guideline section of the scope has been amended to reflect your comment.
121	Public Health England	5.1.1.b	6	It is not made clear that the statement ‘Health and social care practitioners involved in the management and control of infection’ covers prophylaxis.	Thank you for your comment. Surgical and medical prophylaxis using antimicrobial treatments are included within the scope of the guideline.
122	Public Health England	5.3.1	6	<p>The areas covered should not be narrowed to simply changing prescriber and patient behaviour:</p> <ul style="list-style-type: none"> • For the section on changing behaviour, all healthcare professionals have a key role and this should be defined/highlighted by different groups: • Prescribers – all professions • Nurses (administering antimicrobials) • Pharmacists – dispensing and providing advice on use of 	<p>Thank you for your comment. The ‘areas that will be covered’ section of the scope has been amended to reflect your comment.</p> <p>The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: attitudes and cultural differences when producing review protocols.</p> <p>The review questions section of the scope has been amended to reflect your comment on systems and processes.</p>

				<p>antimicrobials</p> <ul style="list-style-type: none"> • Microbiologists <p>Rather than a focus on behaviour change only, it is important to explore attitudes and cultural influences too.</p> <p>The systems, processes and effective antimicrobial stewardship programmes that provide support for an important function should also be included. They are key to improving stewardship across primary and secondary care.</p>	
123	Public Health England	5.3.2.f	7	<p>Although antimicrobial use in animals will not be covered, it is important that there is a statement of responsible use of antimicrobials by pet owners or that the principles of antimicrobials use (by the public) also applies to pets – e.g. finish course, do not use left-over medications, use only for infection etc.</p>	<p>Thank you for your comment. The issue of antimicrobials use in animals is outside the remit of NICE (human health and social care) and unfortunately therefore out-of-scope.</p>
124	Public Health England	5.3.2. h	7	<p>Reference should be given to guidance for care homes elsewhere, especially as they form part of the independent sector and local authority setting included in 5.1 Population. Managing antimicrobials in care homes should be covered under this remit as there is evidence from prevalence surveys in care homes that one in three residents receive an antimicrobial each year; many without significant clinical syndromes.</p>	<p>Thank you for your comment. The ‘areas that will not be covered’ section of the scope has been amended to reflect your comment.</p>
125	Public Health England	5.3.2.i	7	<p>Acknowledgement of medicines adherence (covered elsewhere) and impact on clinical outcomes should be made, particularly as patient-reported outcomes and adherence are referred to in 5.4.i</p>	<p>Thank you for your comment. The ‘areas that will not be covered’ section of the scope has been amended to reflect your comment.</p>

126	Public Health England	5.4	7	The following should be considered as additional outcomes: 3. Outbreaks of HCAI's and in particular those with persistent pathogens 4. Effective antimicrobial stewardship	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
127	Public Health England	5.4.b	8	Stability of antimicrobial use – measured within statistical process control charts for organisations	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: statistical process control charts when producing review protocols.
128	Public Health England	5.4.c	8	The presence and continued incidence of antimicrobial resistance rather than only emergence should be included.	Thank you for your comment. The main outcomes section of the scope has been amended to reflect your comment.
129	Public Health England	5.5.a	9	Again, this section should be wider than behaviour to include attitudes, beliefs and cultural differences. This should incorporate prescribing team and prescriber dynamics particularly in hospitals where prescribers are unlikely to challenge or alter others prescriptions. In addition, in secondary care this guideline should cover not just the prescribing start but also the prescribing review on a daily basis and how stopping antibiotics is safe and effective within this setting. There needs to be explicit sections on primary and secondary care.	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: attitudes, beliefs and cultural differences when producing review protocols. Your comments regarding prescribing review, stopping antibiotics and explicit sections for primary and secondary care are noted.
130	Public Health England	5.5.b	9	The section on changing patient (or carer) behaviour needs to look at alternatives to antimicrobial prescribing including infection prevention, self-care, reducing primary care consultations and attendance. There needs to be explicit sections on primary	Thank you for your comment. NICE are aware of work by Public Health England and will continue to work on this guideline as it has been referred by the Department of Health to NICE. NICE will liaise with Public Health England.

				and secondary care.	Your comment regarding explicit sections for primary and secondary care will be considered, however formatting of the guideline will follow NICE style.
131	Public Health England	5.5.c	9	<p>“... compared to usual care”</p> <p>Should this be “compared to usual systems and processes” as all may not be directly related to ‘care’ provided.</p>	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.
132	Public Health England	5.5	9	<p>An additional / alternative question is the following:</p> <p>What are the systems and processes that are effective and cost-effective in measuring effective antimicrobial stewardship programmes in primary and secondary care?</p>	Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: a ‘systems and processes for measuring antimicrobial stewardship programmes’ when producing review protocols.
133	Public Health England	5.5	9	<p>Suggested additions:</p> <ul style="list-style-type: none"> • What minimum set of information should be provided to patients by healthcare professionals e.g. finish the course, do not take left over antibiotics etc.? • What key messages to healthcare professionals (and public) have been/will be effective in changing practice? 	<p>Thank you for your comment. The NICE project team will ask the Guideline Development Group (GDG) to consider the topic: a ‘minimum information set’ when producing review protocols.</p> <p>Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.</p>
134	Department of Health	General		The Department of Health welcomes this guideline which will be important in helping to deliver the five year UK antimicrobial resistance strategy.	Thank you for your comment.
135	Department of Health	General		Can NICE please consider including antimicrobial stewardship in any relevant clinical guideline that provides advice on the	Thank you for your comment. NICE pathways will link relevant guidelines to this guideline when published.

				use of antimicrobials? For example, this could be part of the guideline being developed on antibiotics for neonatal infection.	
136	Department of Health	3c)	1	We think it is helpful that the guideline will encompass all antimicrobial agents. Whilst antibiotic resistance is the focus of many antimicrobial stewardship programmes, the principles of stewardship should apply to all antimicrobials.	Thank you for your comment.
137	Department of Health	5.1.1a)	6	Can it be made clear that the guideline include neonates and babies?	Thank you for your comment. The populations section of the scope has been amended to reflect your comment.
138	Department of Health	5.1.1b)	6	Remove the text that states 'involved in the management and control of infection' as this gives the impression that the guideline only applies to specialist staff. We want all health and social care workers to understand how they can contribute to antimicrobial stewardship.	Thank you for your comment. The populations section of the scope has been amended to reflect your comment.
139	Department of Health	5.2 a)	6	Can commissioners, Directors of Public Health and Health and Wellbeing Boards to this list to ensure the antimicrobial stewardship is embedded across health and social care?	Thank you for your comment. The populations section of the scope has been amended to reflect your comment.
140	Department of Health	5.3.1 a)	6	Whilst it is important to change the behaviour of prescribers, non-prescribers also need to understand how they can contribute to antimicrobial stewardship.	Thank you for your comment. The key issues section of the scope has been amended to reflect your comment.
141	Department of Health	5.4a)	8	Why are only the rates of surgical site infections being considered? Public Health England has good bacteraemia data, as well as the 2011 point prevalence study data.	Thank you for your comment. The main outcomes section is to inform the literature search criteria only.
142	Department of Health	5.5	8	Will the review include Decolonisation regimens eg: for MRSA colonisation? Surgical and medical prophylaxis?	Thank you for your comment. Hand-hygiene and infection prevention and control measures are outside the scope of this guideline please see Prevention and control of healthcare-

				The use of topical agents?	<p>associated infections NICE public health guidance 36 (2011)'. Surgical and medical prophylaxis using antimicrobial treatments are included within the scope of the guideline. Regarding topical agents the guideline section (5) of the scope has been amended to reflect your comment.</p>
143	Department of Health	5.5	8	Will the review include interventions that have been shown to improve prescribing?	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.
144	Department of Health	5.5	8	Will the review include at looking at the unintended consequences of reduced prescribing and avoiding patient harm?	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.
145	Department of Health	5.5a)	8	Will the review also look at how behaviour change can be reviewed?	Thank you for your comment. The Department of Health has referred a topic to develop NICE public health guidance 'Antimicrobial resistance – changing risk related behaviours'. Patient behaviour will be considered in this guidance.
146	Department of Health	5.5c)	9	It would be helpful if the review could include systems and processes that are clinically effective.	Thank you for your comment. The review questions section of the scope has been amended to reflect your comment.