SIGN 167: Care of deteriorating patients consultation

COMMENTS RECEIVED FROM EXTERNAL REFEREES AND OTHERS

All reviewers submitted declarations of interests which were viewed prior to the addressing of comments.

Invited	reviewers		Type of response and declared interests
HD	Halima Durrani	Person with lived experience/Public Partner, Healthcare Improvement Scotland	Individual response.
			Nothing declared.
Open o	consultation		Type of response and declared interests
AH	Annabel Howell	Medical Director, Children's Hospices Across Scotland	Individual response.
			Nothing declared.
DH	Donna Hanlon	Lead Clinical Improvement Co-ordinator – commenting on behalf of NHS Greater Glasgow & Clyde	Group response.
			Nature and purpose of your group or organisation - Consultant Nephrologist & Physician.
ET	Elan Tsarfati	Microbiology Consultant, NHS Forth Valley	Individual response.
			Nothing declared.
GM	Gabriela Maxwell	Nurse Consultant Primary Care – commenting on behalf of Health and Social Care Partnership, South Lanarkshire	Group response.
			Nature and purpose of your group or organisation - Health and Social Care Partnership/ NHS
GaR	Gautamananda Ray	Consultant Physician in Acute & Stroke Medicine, Royal Alexandra Hospital, Paisley	Individual response.
			Nothing declared.
GF	Gillian Foster	Consultant in Palliative Medicine, Strathcarron Hospice	Individual response.
			Nothing declared.

GR	Gordon Riley	Consultant Paramedic, Clinical Directorate	Individual response.
			Nothing declared.
JS	Jeyakumar Selwyn	Consultant Physician, Forth Valley Royal Hospital	Individual response.
			Nothing declared.
JP	Joanna Prentice	Consultant and Lecturer in Palliative Care, University of Glasgow/Ayrshire Hospice	Individual response.
			Nothing declared.
KMcW	Kerry McWilliams	Consultant in Palliative Medicine, NHS Lanarkshire	Individual response.
			Nothing declared.
КВ	Kirsty Boyd	National Clinical Lead for Palliative Care, Scottish Government	Individual response.
			Nothing declared.
LF	Lynsey Fielden	Consultant in Ageing and Health & Movement Disorders, NHS Forth Valley	Individual response.
			Nothing declared.
МН	Mark Hazelwood	CEO – commenting on behalf of Scottish Partnership for Palliative Care	Group response.
			Nature and purpose of your group or organisation - The Scottish Partnership for Palliative Care (SPPC) brings together health and social care professionals from hospitals, social care services, primary care, hospices and other charities, to find ways of improving people's experiences of declining health, death, dying and bereavement. We also work to enable communities and individuals to support each other through the hard times which can come with death, dying and bereavement.
			SPPC was founded 30 years ago and has grown to be a collaboration of over 100 organisations involved in providing care towards the end of life. SPPC's

			membership includes all the territorial NHS Boards, all IJBs, all Local authorities, the hospices, a range of professional associations, many national charities, social care providers and universities. www.palliativecarescotland.org.uk
МС	Mhairi Coyle	Advanced Nurse Practitioner Primary Care, Kirkintilloch Health and Care Centre	Individual response.
			Nothing declared.
MB	Michael Basler	Consultant Anaesthetist, Glasgow Royal Infirmary, Glasgow	Individual response.
			Nothing declared.
PS	Prakash Shankar	Consultant Liaison Psychiatrist & Clinical Director MH IPS, Forth Valley Royal Hospital, Larbert	Individual response.
			Nothing declared.
RG	Rachel Green	GP Clinical Lead for Cancer and Palliative Care, NHS Forth Valley	Individual response.
			Nothing declared.
RT	Robin Taylor	Consultant Respiratory Physician, NHS Lothian, Grampian and Borders	Individual response.
		Deteriorating Patient Programme - Project Lead for Treatment Escalation Plans	<u>Personal non-financial interests</u> - NHS Lothian, Grampian, Borders: Project Lead for Treatment Escalation Plans – NHS Lothian.
			Publication of independent unfunded peer-reviewed studies and review articles on Treatment Escalation Plans - Honorary Clinical Fellow, University of Edinburgh
			Non-personal non-financial interests - Medical student project on medical decision-making in relation to Treatment Escalation Plans - University of Edinburgh.
YM	Yann Maidment	College Lead for Research(&Council member for East of Scotland) – commenting on behalf of the College of General	Group response.
		Dentistry	Nature and purpose of your group or organisation - Professional organisation bringing together the whole

	Primary Dental Care team creating guidelines and standards for improving patient care. How might the statements and recommendations in the draft SIGN guideline impact on your organisation's functions/status/productivity? - It is highly unusual for an acutely ill adult patient to present in a Primary Dental Care setting. If they do there are quite narrow
	circumstances when this may occur and guidance covering this is already available elsewhere.
	The one exception to this will be in a special needs section of the Public Dental Service. Dental team who work in these services receive special specific training that covers care for deteriorating patients -so it would appear that no dental-specific addition to the draft guidelines is required. They may be applied, as appropriate, as they stand.
Group members	

Section	C	omments received	Development group response
	YM	No comments have been made- as explained above.	Thank you. No action required.
	AH	Happy to support in any way.	Thank you.
		The policy currently speaks to deteriorating patients who only are offered active intervention and does not empower alternatives to be considered.	This guideline is an update to SIGN 139 from 2014, with a focus on timely planning, recognition and escalation of acute deterioration. The sections on TEP/ACP have been expanded from the previous version, reflecting your point. We have edited the remit within the introduction to make it clearer that palliative care is not included within the scope of this guideline. We have also included a more explicit reference to the Scottish Palliative Care Guidelines.
	MB	If this guideline is used as an absolute basis for implementing different staffing models and does not highlight the areas where evidence is lacking patients will be out at risk. Sign recommendations will be used as an absolute safety net when	We recognise that these are challenging times for healthcare systems. However, we hope that the guideline will highlight best clinical practice and provide a framework for how to achieve this. We hope the guideline will be used to support
		in fact they are an additional help to good clinical skills.	NHS boards with prioritisation, policy-making and decision-making. In the final publication it will be made clear (with a symbol) when the recommendations are consensus based, indicating that there was insufficient evidence.
	HD	This is my first review of a guideline. It was tricky in some parts to understand, but I put this down to my non-medical background which I mention in my comments. Despite this, I felt the guideline was mostly clear to read and understand and there was specific information which seems relevant to the purpose of the guideline topic of deteriorating patients. Where there was use of evidence, this was clearly mentioned alongside the studied undertaken to support the content of the guideline.	Thank you for your feedback. No action required.
	KMcW	No mention of palliative care or providing good symptom assessment and management in a deteriorating patient.	This guideline is an update to SIGN 139 from 2014, with a focus on timely planning, recognition and escalation of acute deterioration. We have edited the remit within the introduction to make it clearer that palliative care is not included within the scope of this guideline. We have also included a more explicit reference to the Scottish Palliative Care Guidelines, which covers this more comprehensively. However, we have made some additional references to palliative care throughout the guideline, and the guideline highlights when treatment goals

		should be reviewed. The guideline development group benefited from a representative of medicine for the elderly, who highlighted where it was appropriate to practise palliative care.
DH	The first recommendation regarding electronic recording of observations is quite strong - "should be electronically recorded etc etc". this is not the case with all the recommendations, most of which are "consider". this is despite a complete lack of evidence. furthermore, the round 1 consensus was fairly split on the need for electronic observations; round 2 the wording was changed to "ideally should have electronic observations" which was supported more strongly. I'm pretty keen on electronic observations and many sites already have this. but presumably this will incur huge cost and logistics issues for health boards, and I can't quite understand the process behind the strength of the recommendation.	The majority of recommendations, including this first recommendation, were agreed with a wide group of stakeholders using a formal, two-stage consensus method, as there was limited evidence on which to base a recommendation. The first iteration of this recommendation was edited to emphasise the importance of paper-based backups. 'Ideally' has been removed during editing as this is implicit in a guideline recommendation.
MH	We would be happy to comment on or contribute to any further refinement of the text relating to the suggestions we have made.	Thank you. No action required.
	Thank you for the opportunity to comment on this draft guideline.	
RT	The new Guideline reads very well. Two concepts are already woven into the Guideline but it would help in medical education to emphasize these two dimensions of Deteriorating Patient management - Recognition and Response. Using these words repeatedly in the document would reinforce the important messaging about these two key elements.	Thank you. We have added the concepts of 'recognition' and 'response' to sections 1.2.1, 3.1.1 and 9.2 to clarify these sections and emphasise these elements of deterioration.
КВ	Some of the wording does not reflect the language we would normally use in palliative care and in relation to the ReSPECT process. Palliative care is provided increasingly alongside acute interventions with a gradual or stepwise shift towards comfort care goals. 'End of life' is open to misunderstanding in terms of what time frame we mean so may I suggest using 'dying' instead. We always use the term 'cardiopulmonary resuscitation'.	Thank you. We have edited the wording where appropriate, as highlighted in responses to individual comments.
	As this guideline covers primary care, consideration of hospital admission is important to include in care planning. Anticipatory care planning is becoming a wider process relevant for more people and such plans help guide clinicians when a person is deteriorating (alongside a TEP for patients in hospital) – see HIS ACP toolkit	Thank you. A link to the HIS ACP toolkit has been added to paragraph 3 of section 2.1.

LF	Thank you for your inclusion of the ReSPECT process and also highlighting the importance of P&EOLC within the guidance. The recognition of the Deteriorating Patient and end of life care as often being two sides of the same coin, particularly in acute, felt very important to at least mention and signpost to PEOLC. Deteriorating patients are often dying and there can be an over-focus on medicalisation, reducing the likelihood of palliation of symptoms and honest discussions with NOK.	Thank you. No action required.
	In terms of ReSPECT, Emergency Care Planning would appear to be the more appropriate term as part of Future Care Planning. ACP can be synonymous with PEOLC. However, health boards including mine, will appreciate the specific mention of ReSPECT as this can also be used as a treatment escalation plan. The SIGN guideline is a public-facing document and thus provides reassurance with endorsement of ReSPECT as a tool for DP, in alignment with the most recent CMO report on Realistic Medicine.	Thank you. The following sentence has been added at the end of paragraph 3 in section 2.1: 'The latest Chief Medical Officer for Scotland's Realistic Medicine report endorses ReSPECT for emergency care planning.'
Al	Does not mention where appropriate to decide that it is not in the interests of the person to continue active management and observations, and where to signpost to other services such as palliative care. This needs to be explicit and guide clinicians to appropriate observations.	Thank you. We have added the following sentence to the first paragraph of section 3.1.1: 'taking full observations may not be appropriate for all patients, such as those receiving palliation at the end of life'.
E.	T Clear and concise.	Thank you. No action required.
H	Clearly broken down and easy to read and understand.	Thank you. No action required.
M	An estimated 56,416 people died with a palliative care need in Scotland in 2021. This accounted for 89% of all deaths in 2021. Studies have shown 1 in 3 acute inpatients in Scotland is in their last year of life, and 1 in 10 will die during their current admission. For very many patients therefore deterioration will be a natural and irreversible prelude to the end of their life. It is important that this context is reflected in the Guideline. The Guideline should be very clear that the scope of responses to deterioration includes conversations with patients and their families about risk of dying, end of life preferences and choices. The current draft of the guideline tends to imply that the response to deterioration will be escalation to more invasive interventions aimed at prolonging life. Other alternative responses to	This guideline is an update to SIGN 139 from 2014, with a focus on timely planning, recognition and escalation of acute deterioration. We have edited the remit within the introduction to make it clearer that palliative care is not included within the scope of this guideline. We have also included a more explicit reference to the Scottish Palliative Care Guidelines, which covers this more comprehensively. We have also referenced the NICE guideline on shared decision-making in section 2. However, we have made some additional references to palliative care throughout the guideline, and the guideline highlights when treatment goals should be reviewed. The guideline development group benefited from a representative of medicine for the elderly, who highlighted where it was appropriate to practise palliative care.

		deterioration might include rapid transfer to preferred place of care, spiritual care and/or specialist palliative care involvement, and other interventions aimed at comfort and quality of life. For patients in the community there may be a conversation to have and decision to make about whether the person should be conveyed to hospital.	We have also changed the order of the guideline, so that the planning section is now upfront ahead of recognition and escalation.
		Conceptualisations of avoidable harms in the context of deterioration should include: unwanted or unwarranted treatments and investigations at the end of life; insufficient open and honest communication with patients and families.	
		The Guideline should reflect the tenets of Realistic Medicine with its emphasis on shared decision making around what level of intervention is appropriate, balancing risks and benefits.	
		We would be happy to engage with SIGN to refine parts of the text to reflect this more nuanced and balanced framing.	
1.1	AH	As above.	No action required
	МВ	Absolutely given the delegation of care for the deterioration patients to non-doctor roles.	No action required
	ET	Clear and concise.	Thank you. No action required.
	HD	As a new reader to this particularly guideline, I appreciated the background and history around the development of the recommendations in line with NHS Scotland. This section allows the reader to understand the intent and objectives behind the guideline.	Thank you for your feedback. No action required.
	MH	This guideline is being revised to include community and primary care settings however, the content of guidance for primary and community settings is very limited with very little reference to either in many of the sections.	The guideline includes identification and escalation of care in a community setting, but by its nature there will be a greater focus on this in secondary care.
1.1.1	AH	As above.	No action required
	ET	Clear and concise.	Thank you. No action required.
	JS	Patients and relatives will appreciate it if we take time to explain from my experience.	Thank you. This point has been added to the Provision of Information section (section 8.3).

		These conversations should not be in the Admission Units.	
	HD	The inclusion of patients and recognising their importance is welcomed as this underpins the development of the guideline alongside healthcare professionals.	No action required
	МН	We would be keen to see the Plain Language Summary of the Guideline	The plain language summary is currently being developed and is scheduled for publication in August 2023.
1.2	GR	Could add Scottish Ambulance Service within pre-hospital setting.	"including ambulance services" has been added to the third bullet point in section 1.2.1 for clarification. "in all settings" has also been added to the first bullet point in 1.2.2 for clarification.
	АН	Many palliative patients do not require this as we know they are deteriorating but continuing to observe is not in their best interests and focus should be on other options - their preferences for making the most of the time they have left.	This guideline is an update to SIGN 139 from 2014, with a focus on timely planning, recognition and escalation of acute deterioration. We have edited the remit within the introduction to make it clearer that palliative care is not included within the scope of this guideline. We have also included a more explicit reference to the Scottish Palliative Care Guidelines, which covers this more comprehensively.
	MB	Good.	Thank you. No action required.
	ET	Clear and concise.	Thank you. No action required.
	HD	The remit explains what is and is not included in a clear manner.	Thank you. No action required.
1.2.1	AH	You keep using deteriorating patients throughout the document - this is confusing for those who are deteriorating but not for escalation.	Additional references to palliative care have now been included throughout the guideline.
	MB	Fair	No action required
	ET	Clear and concise.	Thank you. No action required.
	JS	Realistic Patient centred care and not dictated by numbers!	No action required
	HD	As above - The remit explains what is and is not included in a clear manner	Thank you. No action required.
	КВ	'End of life' is open to misunderstanding in terms of what time frame we mean so may I suggest using 'dying' instead. Suggested wording change:	Thank you for the suggested changes to wording. We have not changed the last bullet point to 'patients who are dying', as this could cause confusion in this context of

		It is acknowledged that many some people with life-limiting illness may have a different focus of care, with the overall aim of palliation of symptoms quality of life and comfort rather than disease recovery – symptom management this-is covered by the Scottish Palliative Care Guidelines. It excludes: • pregnant patients • children under 16 years • patients undergoing palliation at the end of life. • patients who are dying	deteriorating patients. For clarity, we have retained the term 'palliation'.
1.2.2	GR	Could add Scottish Ambulance Service within pre-hospital setting.	"including ambulance services" has been added to the third bullet point in section 1.2.1 for clarification. "in all settings" has also been added to the first bullet point in 1.2.2 for clarification.
	MB	Good	Thank you. No action required.
	ET	Clear and concise.	Thank you. No action required.
	HD	Clearly explained.	Thank you. No action required.
1.2.3	MB	Fair	No action required
	ET	I note there is a link to the plain language summary. It could be included here.	The plain language summary is currently being developed and is scheduled for publication in August 2023.
	HD	Clearly explained.	Thank you. No action required.
1.4	PS	The guideline development does not seem to have inputs from Liaison psychiatry. No wonder we have guidelines being developed in silos of 'physical' & 'mental' illnesses that does not capture the needs of our complex multimorbid patients who are the ones we see mostly as acutely deteriorating.	The guideline is intended to be more general, with a focus on timely planning, recognition and escalation of acute deterioration. It is outwith the scope to highlight specific specialties.
	ET	Clear and concise.	Thank you. No action required.
	HD	This section clearly explains the development of the guideline, where it is either evidence based or using clinical expertise. This forms an important part as it supports the guideline with the content used.	No action required

	MH	We are surprised and disappointed that there was no palliative care representation on the Guideline Development Group.	This guideline is an update to SIGN 139 from 2014, with a focus on timely planning, recognition and escalation of acute deterioration. We have edited the remit within the introduction to make it clearer that palliative care is not included within the scope of this guideline. We have also included a more explicit reference to the Scottish Palliative Care Guidelines, which covers this more comprehensively. The guideline development group benefited from a representative of medicine for the elderly, who highlighted where it was appropriate to practise palliative care.
		The Key Questions which form the basis of the guideline use outcomes which are of limited relevance to scenarios where the patient is in irreversible decline at the end of life. We recognise that "Rates of cardiac arrest within 28 days" in relation to ACPs, TEPs and SR tools is a measurable outcome which attempts to reflect avoidance of unwanted or unwarranted intervention at end of life. We think that this should be more accurately be described as "Rates of attempted CPRetc". There are other outcomes which could be used to reflect a "good death" as a good/important outcome.	We searched for evidence using the patient and intervention components of the key questions which would have captured studies with any outcomes. There was such a paucity of evidence that we did not sift out any studies based on outcomes.
1.5	ET	Clear and concise.	Thank you. No action required.
	HD	I found this section useful as I do not come from a medical background and the terms helped me understand the guideline better.	No action required
	RT	Treatment escalation plan (TEP) A TEP defines which interventions might benefit an individual when they present to acute care. This definition needs to be extended. Add " or should they deteriorate further during an episode of acute care"	Thank you. We have added this wording.
	КВ	Suggested wording change: Anticipatory care plan (ACP) An ACP documents a care plan with recommendations to guide treatment and that frames care decisions should a patient become acutely unwell at some point in the future.	Thank you. The definition has been amended here and in section 2.1.

	HD	Reference to previous guideline is helpful in explaining why observations should be taken.	No action required
3.1	MB	We are using nurse practitioners as a first line assessors to treat sick patients in the wards. We are using a NEWS system as a mechanism of highlighting patient deterioration and there was recently an FAI where a patient went to a ward in another hospital that was predominantly under Nurse practitioner care. Given that this guideline highlights that the NEWS system has not been validated in post op patients is there not an urgent imperative to undertake work validating that NEWS score in the perioperative period to see that is fit for purpose? Should this not be highlighted in the guidance? Otherwise the nurse practitioners (who have a less broad skill and knowledge base than medical doctors by the nature of their training) are relying on a scoring system that may be flawed to highlight a need for escalating care.	NEWS2 has been validated in perioperative patients – studies undertaken NEWS2 is an established scoring system, and studies have been undertaken to validate NEWS2 in perioperative patients. However, it is only one part of identifying deterioration. Clinical concern is a key component. We have added a sentence to this effect in the first paragraph of section 3.1.1.
	HD	As above - Reference to previous guideline is helpful in explaining why observations should be taken	No action required
	МН	There should be an acknowledgement that for people who have continued to deteriorate and have been identified as now dying, that observations may not be appropriate.	Thank you, we have added wording to this effect to the first paragraph of section 3.1.1.
3.1.1	ET	Wording change: [ORIGINAL] Observations should be performed by staff trained to undertake these procedures and who understand their clinical relevance. [SUGGESTED CHANGE]: Observations should be performed by staff trained to undertake these procedures and who understand their clinical significance, including when to seek urgent clinical	Thank you. We have amended this wording.
		assistance. [ORIGINAL]:	
		As a minimum, observations should include:	
		- pulse rate	Thank you. As these criteria are mapped to NEWS2, we are unable to change this wording.
		- respiratory rate	unable to change this wording.

		- systolic blood pressure	
		- level of consciousness or new confusion	
		- oxygen saturation including percentage/flow rate of administered oxygen therapy	
		- temperature	
		[SUGGESTED]: As a minimum, observations should include:	
		- pulse rate	
		- respiratory rate	
		- blood pressure [Systolic & diastolic]	
		- level of consciousness or new confusion	
		- oxygen saturation [including percentage] as well as flow rate of supplemental oxygen therapy	
		- temperature	
		- capillary blood glucose	
	HD	I think this section is clear and detailed enough to explain what observations are and who should undertake them and how.	No action required
	KB	Suggested wording change:	Thank you, this sentence has been edited in line with your
		Taking full observations may not be appropriate for all patients, such as those receiving palliation palliative care at the end of life.	suggestion.
3.1.2	ET	This is most helpful if done in a timely manner. Paper based systems & backup in the event IT goes down (particularly for ICU/high dependency/ED) where observations can change rapidly.	Thank you. This point is captured within the recommendation.
	HD	Based on my understanding, the "C" referenced here, was because this is a clinical expertise as opposed to evidenced.	Correct – 'C' indicates a recommendation that has been agreed via consensus, whereas 'E' indicates an evidence-based recommendation
	MC	In primary care setting, observations will be recorded on paper NEWS2 charts which will remain in patients houses, they will then be easily accessed by any health care professional reviewing the patient at home. They will also be updated in the patients online file, however this is	Thank you. Paper-based systems are included in the recommendation as a safeguard for IT failure.

		only accessible by those with access to Community Nursing System.	
3.2	AH	Need to have the option to redirect care to compassionate/best supportive care.	Palliative care is outwith the scope of this guideline.
	MB	See above If we use NEWS in our post op wards we are putting patients at risk if there is no back up	Thank you. Clinician concern has been reflected in the edits to this section.
	JS	1. End stage Renal Failure patients who are not for any form of Renal Replacement therapy are expected to deteriorate even with simple sepsis - patients may respond to antibiotic for few of the reversible infections. This should be the maximum care and it should be documented by the Renal Physicians at the time of decision.	We are unable to cover all possible scenarios and specialisms; these are best left to specialist clinical judgment. No action required.
		2. Those who are considered for RRT in the form of dialysis, it is a form of palliative/conservative approach, no false hope should be given to patients.	
		3. Like wise those who are considered for PALLIATIVE Chemo should not be given false hope and there should be a clear escalation plan at the time of consultation with oncologist	
		4. Those patient with severe Aortic Stenosis, not for invention should have clear plan discussed with, at the time of Consultation.	
		5. Likewise for those diagnosed to have End Stage COPD.	
		These decisions by the specialist will help the Acute Admission unit in a much better way.	
		These cohort of patients should have maximum ward level care if their NEWS warrant escalation.	
	HD	More information could be added around the challenges but this is explained upon reference of the studied which have been completed around automated escalation.	No action required
	RG	I find it remarkable and very concerning that there is no mention of TEP or ACP in the guidance. This is an absolutely vital part of the guidance to ensure principles of realistic medicine are followed and that patients are protected from the harms of unnecessary or	We have since changed the order of the guideline so that the section on planning (TEP/ACP) comes first, before recognition and escalation.

	potentially treatment.	
MB	See above	No action required
HD	This section was not fully clear to me in regards to what pre- hospital was and the link to deteriorating patients. More information could be given to explain it a little more.	A definition of 'prehospital' has been added to section 1.5 for clarification.
MC	The use of NEWS2 will be rolled out amongst all Community Nursing in the near future. As an Advanced Nurse Practitioner in Primary care NEWS2 is the scoring system of choice for recognising deteriorating patient.	No action required
AH	A good section and whilst I know ACPs in next section, one would not treat sepsis without the context of ACPs etc.	We have since changed the order of the guideline so that the section on planning (TEP/ACP) comes first, before recognition and escalation.
HD	This section is underpinned by endorsements by the AoMRC which supports the content and management of this specific guideline.	No action required
ET	There is no mention of collecting appropriate specimens (e.g. blood cultures; urine; sputum; pus/interoperative samples, blood for serology; viral respiratory panels; stool or CSF) in the initial management.	The remit of the guideline does not include individual aspects of sepsis 6, such as blood cultures, lactate or urine samples. No action required.
	Wording change:	
	[ORIGINAL]: For patients with possible, probable or definite infection, the administration of antimicrobials should be completed within 6, 3, or 1 hour(s) of recording a NEWS2 of 1–4, 5–6, or ≥7, respectively at time zero, defined as the time of the first NEWS2 assessment on presentation to the emergency department or ward deterioration.	
	[SUGGESTION]: For patients with possible, probable or definite infection, the administration of appropriate antimicrobial(s) should be completed within 6, 3, or 1 hour(s) of recording a NEWS2 of 1–4, 5–6, or ≥7, respectively at time zero, defined as the time of the first NEWS2 assessment on presentation to the emergency department or ward deterioration. Consult local antimicrobial policy for empirical therapy .	Thank you. This sentence has been edited in line with your suggestions.
	MC AH	HD This section was not fully clear to me in regards to what prehospital was and the link to deteriorating patients. More information could be given to explain it a little more. MC The use of NEWS2 will be rolled out amongst all Community Nursing in the near future. As an Advanced Nurse Practitioner in Primary care NEWS2 is the scoring system of choice for recognising deteriorating patient. AH A good section and whilst I know ACPs in next section, one would not treat sepsis without the context of ACPs etc. HD This section is underpinned by endorsements by the AoMRC which supports the content and management of this specific guideline. ET There is no mention of collecting appropriate specimens (e.g. blood cultures; urine; sputum; pus/interoperative samples, blood for serology; viral respiratory panels; stool or CSF) in the initial management. Wording change: [ORIGINAL]: For patients with possible, probable or definite infection, the administration of antimicrobials should be completed within 6, 3, or 1 hour(s) of recording a NEWS2 of 1–4, 5–6, or ≥7, respectively at time zero, defined as the time of the first NEWS2 assessment on presentation to the emergency department or ward deterioration. [SUGGESTION]: For patients with possible, probable or definite infection, the administration of appropriate antimicrobial(s) should be completed within 6, 3, or 1 hour(s) of recording a NEWS2 of 1–4, 5–6, or ≥7, respectively at time zero, defined as the time of the first NEWS2 assessment on presentation to the emergency department or ward deterioration. Consult local antimicrobial

	HD	This section is underpinned by endorsements by the AoMRC which supports the content and management of this specific guideline.	No action required
	RT	Sepsis 6 protocol is frequently invoked in secondary care settings in patients who are terminally ill. It may be detrimental, and out of keeping with the goals of treatment. Add this caveat: The context in which sepsis is occurring should be	The following sentence has been added after paragraph 2 of section 5.1: 'In patients who are documented to be actively dying, the
		considered carefully. In particular, in patients who are documented to be actively dying, the advent of sepsis may be a terminal event, and intervention has the potential to be non-beneficial or even harmful.	advent of sepsis may be a terminal event, and intervention has the potential to be of low benefit or harmful. Decisions for not treating will need to be documented in the medical notes and TEP.
5.2	GR	I wonder if current system wide pressures should be considered? Particularly with delays to Ambulance responses and prolonged waits at hospital where normally patient would be seen sooner in hospital.	We recognise that these are challenging times for healthcare systems. However, we hope that the guideline will highlight best clinical practice and provide a framework for how to achieve this. We hope the guideline will be used to support NHS boards with prioritisation, policy-making and decision-making.
	ET	Collecting samples should be part of initial management.	The remit of the guideline does not include individual aspects of sepsis 6, such as blood cultures, lactate or urine samples. No action required.
	HD	An evidence based section which is clear and to the point.	Thank you. No action required.
	MC	Use of AoMRC in primary care not always appropriate as patients scoring high / depending on clinical presentation may be conveyed to hospital for further investigations/assessment	No action required; this point is reflected in this section.
	ET	No concerns	No action required
	JP	Mention about the importance of communication with patient and family	No action required – this is already captured within the recommendation.
	KMcW	Does not mention Preferred place of death, and the presumption is for active management, which may not be in keeping with the wishes of all patients, or even be appropriate in the situation in expected deterioration and death from an underlying progressive illness.	Palliative care is outwith the scope of this guideline. We have included a reference to the Scottish Palliative Care Guidelines, which covers this more comprehensively, in section 1.2.1.
6.1 [now 2.1]	ET	No concerns	No action required
	HD	This seems like an important part of this guideline and references clinical expertise and studies which show minimum to no	No action required

	conclusion.	
RG	Needs this section expanded	No action required
JP	I would include information from Key information summary , previously stated wishes	Palliative care is outwith the scope of this guideline. We have included a reference to the Scottish Palliative Care Guidelines in section 1.2.1. In this section we have also emphasised that information needs to be shared.
GF	Anticipatory care plans can include references to wishes in the event that there is further deterioration and that death is a possibility. These may include transferring home for end of life care. See also comments in treatment escalation plans.	Palliative care is outwith the scope of this guideline. We have included a reference to the Scottish Palliative Care Guidelines in section 1.2.1.
MC	All patients with Rockwood Frailty score of 7 or above in District Nursing teams in KHCC have an ACP completed. This is recorded on Clinical Portal for access by healthcare professionals. These are useful in OOH periods when asked to review patients, knowing their wishes/ preferred place of care and resuscitation status prior to assessing guides decision making and ensures patients are not required to make difficult decisions once in a crisis situation.	No action required
MH	We welcome the refences to the anticipatory care plans. The description of the ACP could be broadened. Currently it talks about how an ACP will include decisions about escalation to critical care and resuscitation status. The text should also reference content in ACPs which will be about patient preferences. This may include preferred place of care, and statements of values (for example patient views on balancing extending life and maximising comfort and dignity).	Thank you Thank you, the description of ACPs has been amended.
	The Guideline should include reference to the ReSPECT tool (now widely used across Scotland) as another resource and effective tool to use in conjunction with the DNACPR certificate. Resources available at https://www.resus.org.uk/respect/respect-resources .	Thank you. We have added a reference to ReSPECT as an example of an ACP tool in section 8.2.
	The lit review appears to have been narrow and the evidence to support this section is very limited despite research into this being done in Scotland. A further broader search would enrich this section (particularly with current research from Scotland) in both	We conducted a systematic literature review within the remit of guideline, covering a 12-year period. Unfortunately we did

		the acute and community use of ACP.	not find evidence of sufficient robustness to support recommendations for many of the research questions.
	КВ	We always use the term 'cardiopulmonary resuscitation'. Suggested wording changes:	Thank you.
		An anticipatory care plan (ACP) frames includes recommendations to guide treatment and care decisions should a patient become acutely unwell at some point in the future. It will often include decisions around escalation to critical care, other interventions, and hospital admission. An ACP will also usually address decisions	The definition here now aligns with the definition in section 1.5.
		around cardiopulmonary resuscitation status. It may also define in what setting situations other treatment options such as institution of palliative care may be considered.	Thank you, the text in this sentence has been amended in line with your suggestions.
		The anticipatory care plan should include a decision on cardiopulmonary resuscitation in the event of cardiac or respiratory arrest. occurring. [C] Cardiopulmonary resuscitation status should not be the sole focus	Thank you. These recommendations have been edited in line
		of the anticipatory care plan. [C]	with your suggestions.
6.2 [now 2.2]	МВ	Important that this is clarified early but also with accurate scoring systems for prognosis. Currently the scoring systems used in a variety of settings are again unreliable with limited specificity and sensitivity thus meaning that inaccurate data may be used to base patients prognosis on and make clinical decisions. This complexity of the systems needs to be understood in relation to decision making.	Scoring systems are one tool but clinical judgement is also needed. We have added the following sentence to the first paragraph of section 4 to stress this point: "Any observation system should be used as an aid to clinical assessment and can never fully replace clinical judgement or concern."
	ET	No concerns	No action required
	HD	As above - This seems like an important part of this guideline and references clinical expertise and studies which show minimum to no conclusion.	No action required
	GaR	We all recognise that this is a key aspects to patient care in a deteriorating patient in an acute hospital. There is often a moral distress for junior staff to fill in these forms especially out of hours when all information about patient is not always available. Whilst the ward round is an alternative opportune time to address this, DNACPR and TEP sometimes cannot be completed on the ward round if no conversation had taken place with family or carer.	Thank you. Additional text has been added to the definitions of TEP and ACP to clarify this.
		These meetings with family and carers has to be organised which	

	often results in delay in the documents being completed.	
	TEP forms currently used are long and there are a lot of repetition of items that are usually documented in the case notes anyway. Can the guideline group acknowledge these real life issues with implementation of this important area of patient care and suggest use of shorter customised forms of TEP and highlight the fact that it is not a legal document?	
	This may help reduce anxiety of junior staff and improve compliance in use of these forms in local audits and QI projects. Discussion of TEP form/ DNA CPR much earlier in the patient journey while in primary care and seen by GP's / Practice Nurses may an alternative solution as in Section 6.1.	
RG	Needs expanded	No action required
JP	Statement about where escalation not appropriate given advanced disease. Does clinical frailty scoring have a role. Importance supportive measures, advice or involvement of palliative care.	The exact content of TEPs is outwith the scope of this guideline.
GF	Suggest that TEPs also include parallel planning for continuing deterioration and possibility of death despite further escalation. Suggest reference made to:	The exact content of TEPs is outwith the scope of this guideline.
	- symptom management at end-of-life	
	- anticipatory prescribing of medications for common symptoms - pain, agitation, anxiety, dyspnoea, nausea and vomiting	
	- involving palliative care teams	
	- addressing spiritual concerns/support for patient and family	
МН	A reference to ReSPECT would again be useful in this section.	Thank you. We have added a reference to ReSPECT as an example of an ACP in section 8.
RT	It would be helpful to reference the recently published narrative review which outlines the current evidence regarding clinical outcomes associated with the use of Treatment Escalation Plans. Taylor DR, Lightbody CJ, Venn R, Ireland AJ. Responding to the deteriorating patient: The rationale for treatment escalation plans. Journal of the Royal College of Physicians of Edinburgh. 2022;52(2):172-179. Doi:10.1177/14782715221103390.	Thank you, this reference has been added as level 4 evidence (expert opinion).
	Lastly, maybe a sentence that says: "Treatment Escalation	

		Plans should be reviewed regularly if the patient's clinical status is changing" should be added as an important practice point.	Thank you. We have added this as a good practice point.
	КВ	We always use the term 'cardiopulmonary resuscitation'. Suggested wording changes:	Thank you, the definition had been edited to align with the definition used in section 1.5.
		Treatment escalation plans (TEPs) define which interventions may benefit an individual patient when they present to acute care or if they deteriorate further during an episode of acute care. have presented to acute care.	
		The TEP should also include consideration of cardiopulmonary resuscitation status. It may also define when other treatment options, such as institution of palliative care, may be of benefit. commenced.	Thank you, this sentence has been edited in line with your suggestion.
		Cardiopulmonary resuscitation status should not be the sole focus of the treatment escalation plan. [C]	
		The treatment escalation plan should incorporate a decision around cardiopulmonary resuscitation in the event of cardiac or respiratory arrest. occurring. [C]	Thank you. These recommendations have been edited in line with your suggestions.
	AH	Again option to redirect care needs to be explicit.	We have edited section 6.1 to include a reference to goals of care.
	JP	Again appropriateness of escalation depending on patient clinical situation and medical history and their wishes.	We have edited section 6.1 to include a reference to goals of care.
7.1 [now 6.1]	HD	Content is clear and refers to systematic reviews and studies which I feel is important.	No action required
	GF	Suggest include reference to planning for end-of-life care if deterioration continues despite escalation of treatment - see ACP and TEPS	Thank you. A sentence has been added to the first paragraph to reflect this.
7.2 [now 6.2]	HD	This section is clear and detailed.	Thank you. No action required.
7.3 [now 6.3]	GR	I wonder if current system wide pressures should be considered? Particularly with delays to Ambulance responses and prolonged waits at hospital where normally patient would be seen sooner in hospital.	We recognise that these are challenging times for healthcare systems. However, we hope that the guideline will highlight best clinical practice and provide a framework for how to achieve this. We hope the guideline will be used to support

		NHS boards with prioritisation, policy-making and decision-making
HD	This section is clear and detailed.	Thank you. No action required.
MC	An appropriate escalation plan for use of NEWS2 in community nursing is currently being devised. This will stipulate frequency of obervations, escalation to ANP/GP or whether emergency response is required.	No action required
GR	This is an area where there is the potential for harm. Communicating concerns at handover from Ambulance staff to the receiving hospital staff can miss an opportunity for shared decision making around the management of the potential for deterioration.	This section has been edited for clarification.
AH	I note most of this section is about the SBAR type of communication to other HCPs. Communication about deterioration needs to be open honest also in terms of discussions had so that the whole perspective is captured.	Thank you. The section focuses on the structure, rather than the nature, of handovers.
ET	Suggest this section is renamed Communication at Handovers or words to that effect.	The section title has been edited to "Handover communication"
HD	This section is clear and detailed.	Thank you. No action required.
JP	Communication with relatives as well as support for clinicians about how to do this	Thank you. This has been added to the Provision of Information section (section 8.2).
	https://www.spict.org.uk/red-map/	
	https://www.spict.org.uk/the-spict/	
GF	Suggest adding in the importance of communication with patient and family. e.g. shared decision making and realistic medicine; giving "bad news"	The scope of this section is handovers between healthcare professionals. The section title has been amended to reflect this. The importance of communication with patients and families has been included in section 8, Provision of Information.
	Staff need to be trained in having these conversations.	This point has been added under 'Training' in section 9.2, Resource implications of key recommendations.
KMcW	No section on communication with patients and relatives, only within HCP teams. The importance of discussing that a patient is deteriorating and options for management (including a focus on	The scope of this section is handovers between healthcare professionals. The section title has been amended to reflect this. Communication with patients and families has been included in section 8, Provision of Information.

		symptom control) is essential.	
	МН	Despite the scope of the Guideline having been broadened to include community settings there is no discussion or guidance on communication (or handover) between primary and secondary care. It is noted in the recommendation that a tool should be used in all clinical areas but it is unclear whether this should also be used from a home environment. There is also an issue about the role of SAS should be and what tool they may use.	Thank you, we have added a sentence to the first paragraph in this section to clarify this.
		Palliative care meetings in primary care, MDTs in community and hospice settings are where what matters to patients and families is often discussed and recorded. In practice the eKIS is often used to as a vehicle for the "handover" of such information between settings. eKIS should be highlighted in the Guideline.	In section 2, we have emphasised that information needs to be shared.
	HD	This clearly explains the layout of the section and the points provided.	No action required
	МН	There are very useful structured conversation guides to support discussion of deterioration with patients at the Effective Communication for Healthcare website www.ec4h.org.uk	Thank you. This has been included in section 8.2.
9.2 [now 8.2]	HD	Clear and relevant	Thank you. No action required.
9.3 [now 8.3]	HD	Clear and relevant	Thank you. No action required.
	КВ	Suggested wording changes:	
		Explain how a treatment escalation plan and any anticipatory care plan can help guide decisions about treatment and care, including when a patient is deteriorating and dying. the importance of anticipatory care planning, including end-of-life care.	Thank you. This sentence has been edited in line with your suggestions.
		Where the patient is dying at the end of life, explain to them and families that intervention has the potential to be non-beneficial low benefit or even harmful.	Thank you. This sentence has been edited in line with your suggestions.
		Options for treatment and care management, including a focus on symptom management control, should be discussed with patients and	Thank you. This sentence has been edited in line with your

		families.	suggestions.
	МВ	Needs money Needs staffreliance on IT is useless - multiple hospital systems in use across various platforms which are subject to individual issues	We recognise that these are challenging times for healthcare systems. However, we hope that the guideline will highlight best clinical practice and provide a framework for how to achieve this. We hope the guideline will be used to support NHS boards with prioritisation, policy-making and decision-making This point is reflected in the recommendation in section 3.1.2,
			which includes the importance of fail-safes for IT systems.
	HD	Details the advice given and key points to deliver the implementation of the guideline.	No action required
10.1 [now 9.1]	AH	Implement alongside ACP training, and communication skills training for all so we really find out what is appropriate.	Thank you. We have added a specific reference to ACP/TEP training.
	PS	Critical care outreach teams must include liaison psychiatrists who are often called in to manage acutely deteriorating patients in ITU and other high intensity settings.	It is outwith the scope of the guideline to comment on the exact make-up of critical care outreach teams.
		https://rcem.ac.uk/side-by-side-a-uk-wide-consensus-statement-on-working-together-to-help-patients-with-mental-health-needs-in-acute-hospitals/	
	HD	The mention of the NHS board, SIGN and partnerships between health and social care, is important as a reader to understand the support behind the implementation. As a non-medical reader, this explains it in enough detail.	Thank you for your feedback. No action required.
10.2 [now 9.2]	PS	Resource implications to incorporate Liaison psychiatry into these key recommendations.	The guideline is intended to be more general, with a focus on timely planning, recognition and escalation of acute deterioration. It is outwith the scope to highlight specific specialties.
	HD	Clearly broken down and explained.	Thank you. No action required.
	МН	Training: there is evidence that many staff need training to build skills and confidence to undertake effective sensitive communication in the context of deterioration where the outcome is uncertain and includes end of life. The scale of need and the resource required is significant.	Thank you. A sentence has been added to the point on training in section 9.2.

10.3 [now 9.3]	AH	Should audit where futile or unwanted treatment is recognised, and supported - and see this as a positive.	This is covered by 'Appropriate use of TEP/ACP'.
	MB	Important - rarely acted upon	No action required
	HD	Auditing the process seems important, and the guideline refers to the audit tools which will be used in assisting this.	No action required
	МН	We would like to see documentation of conversations with patients and families included as part of audit of current practice.	This is covered by 'Appropriate use of TEP/ACP'.
11.2 [now 10.2]	HD	The recommendations are clear and refers back to previous sections. There is a level of transparency and detail to this section which I believe explains each recommendation well.	No action required
	GM	Following a conversation with the senior nurses in South Lanarkshire Health and Social Care Partnership and a review of the guideline, there is a dearth of evidence to support meaningful recommendations for the management of deteriorating patients in community care settings, primary care and social care. We would reflect the lack of research and substantial evidence base to support recommendations could possibly create a void. In this space, with lack of evidence, recognition, management and escalation of deteriorating adults could result in patient harm and missed opportunities for person-centred care planning. We think this consultation is an opportunity to include contributions from experts in long-term conditions, Hospital at home, social care and the Scottish ambulance service.	Agree; we have highlighted specific areas that would benefit from more evidence in section 10.2
	KB	 There are a couple of papers on the ReSPECT process that are relevant. Qualitative research comparing the use of ACP with DNACPR alone. Eli K, Hawkes CA, Ochieng C, Huxley CJ, Baldock C, Fortune PM, Fuld J, Perkins GD, Slowther AM, Griffiths F. Why, when and how do secondary-care clinicians have emergency care and treatment planning conversations? Qualitative findings from the ReSPECT Evaluation study. Resuscitation. 2021 May;162:343-350. doi: 10.1016/j.resuscitation.2021.01.013. NIHR Report. Recommended summary plan for emergency care and treatment: ReSPECT a mixed-methods study. 	Thank you. The research questions for ACP/TEP were around whether these should take place rather than which tool should be used. We did not include qualitative research, but having reviewed these studies the conclusions would have been same.

		https://www.journalslibrary.nihr.ac.uk/hsdr/LFPE3627/#/abst	
	AH	Disappointing that this is seen very much form the ICU point of view, and very intervention focussed. It is important these guidelines reach all who care for patients who are deteriorating and empower all the options available. Otherwise we risk more overtreatment as health, with more dying inappropriately in hospital. I am surprised no-one from oncology has been asked to be involved.	This guideline is an update to SIGN 139 from 2014, with a focus on timely planning, recognition and escalation of acute deterioration. We have edited the remit within the introduction to make it clearer that palliative care is not included within the scope of this guideline. We have also included a more explicit reference to the Scottish Palliative Care Guidelines, which covers this more comprehensively. The guideline development group benefited from a representative of medicine for the elderly, who highlighted where it was appropriate to practise palliative care. However, it is outwith the scope of this guideline to highlight specific specialties beyond the planning, recognition and escalation of acute deterioration.
	PS	As above- no liaison psychiatrists	It is outwith the scope of this guideline to highlight specific specialties beyond the planning, recognition and escalation of acute deterioration.
	HD	Explained clearly and articulated well. This section brings together the various different groups involved. The names of the people involved shows a level of transparency and acknowledges their input.	No action required
	МН	A palliative care representative on the guideline development group could have made a useful contribution.	Palliative care is outwith the scope of this guideline. The guideline development group benefited from a representative of medicine for the elderly, who highlighted where it was appropriate to practise palliative care.
12.3 [now 11.3]	HD	This process is explained well enough to clarify the content of the guideline and the development of it.	No action required
12.3.1 [now 11.3.1]	МВ	Not a good process	Noted, thank you. No action required
	HD	As above - This process is explained well enough to clarify the content of the guideline and the development of it.	No action required
12.3.2 [now 11.3.2]	АН	No input from palliative care or oncology - the latter constitute a lot of the sepsis seen and there cohort, from my experience in adult palliative care, often do not have discussions around ACP and TEP which is essential to ensure we are treating the right cohort. There	Palliative care is outwith the scope of this guideline. The guideline development group benefited from a representative of medicine for the elderly, who highlighted where it was appropriate to practise palliative care. In addition, we will

	were changes in this approach during covid where selection for treatment was more rigorous and TEPs were available for each should be the gold standard.	highlight the guideline to as many healthcare professionals as possible upon publication.
HD	Explained clearly and articulated well. This section brings together the various different groups involved. The names of the people involved shows a level of transparency and acknowledges their input.	
HD	I think the questions asked are detailed, specific and relevant. This essentially forms the guideline and underpins the research, studies and recommendations.	
MH	See earlier comments on outcomes	No action required
HD	Both the round 1 and round 2 consensus results seem clearly to understand and visually easy to read in a table format.	No action required
HD	Both the round 1 and round 2 consensus results seem clearly to understand and visually easy to read in a table format.	No action required