Reducing the risk of venous thromboembolism in over 16s with COVID-19

Targeted peer consultation on draft guideline

Comments table

04/11/2020-05/11/2020

Stakeholder	Document	Recommendation number/section	Comments
Society for Acute Medicine	Guideline	Rec1.1	there does not seem to be any definition of intermediate dosage of lmwh
Chelsea and Westminster Hospital NHS Foundation Trust	Guideline	Rec1.1	Consider including 'assess the risk of bleeding and contraindications' Due to the lack of available evidence, consider a choice of offering standard or intermediate prophylactic thromboprophylaxis for patients with COVID19 in hospital, given patients are scattered around the hospital with additional VTE risk factors and known increased VTE complications in COVID19 Patients established on anticoagulation treatment, consider including an option for switch to LMWH during admission (due to a number of factors e.g. anti-inflammatory effects, drug-drug interactions, anti-Xa monitoring if indicated, absorption/NBM, interventions/deterioration during admission,, practicalities etc) - and not have this option only for critically ill and if current anticoagulation is not LMWH Include 'actual' body weight for clarity No recommendations to offer on mechanical thromboprophylaxis - would be helpful if included No recommendations on monitoring for coagulopathy - would be helpful if included No recommendations on monitoring for prophylactic LMWH (if clinically indicated) which would be helpful particularly anti-Xa level ranges No recommendations for follow up post discharge
RCOG	Guideline	Rec1.1	It maybe useful to consider what additional risk to thrombosis there would be if young women on the oral contraceptive pill (esp. if taking the newer generation COCs) were admitted to hospital with COVID-19. It would be worth mentioning that if a protracted stay is anticipated that oral contraception is stopped, or advice sought from an experienced clinician if this is required to continue. Women being treated with sex hormones should not stop treatment unless the risks of continuing treatment are clearly greater than cessation or until the evidence exists to advise otherwise.
Anticoagulation UK	Guideline	Rec1.1	Line 17 - continue thier current anticoagualtion if suitable ..... should it extend to . 'on the therapeutic dose for their specific condition unless otherwise directed?
The Intensive Care Society	Guideline	Rec1.1	The recommendations regarding dosing of LMWH are weak and unhelpful given there is no actual recommendation. Clinicians need more specific guidance on what to do, the joint FICM / ICS COVID guide (https://icmanaesthesiacovid-19.org/clinical-guide-for-the-management-of-critical-care-for-adults-with-covid-19-during-the-coronavirus-pandemic) is more specific (ie double dosing LMWH) which clinicians need.
British Society of Haematology	Guideline	Rec1.1	While we agree that patients admitted to hospital with COVID-19 should be offered standard dose thromboprophylaxis with LMWH, there are several points that we disagree with: The use of 7 days (p1, line 9) is arbitrary and not based on any evidence. It should be replaced by the duration of the in-patient stay. There is no evidence to support adjusting prophylactic doses for body weight (p1, line 12). This

			makes prescribing unnecessarily complicated increasing the risk of errors in dosing. The SPCs for different LMWHs provide simple dosing regimens for prophylaxis in medical patients that are not based on weight. There is no reason to deviate from these.
UKCPA/LTHT	Guideline	Rec1.1	Consider suggesting an enhanced dose of LMWH for those patients with Covid and other risk factors for VTE For any patients admitted on anticoagulation treatment, consider including an option for switch to LMWH during admission regardless of whether on critical care or not Is there a role for mechanical methods of prophylaxis? Monitoring coagulopathy advice (should ddimers guide prophylaxis for instance) and anti factor Xa levels for LMWH advice would be useful
Leeds Teaching Hospital	Guideline	Rec1.1	I think it should specify fondaparinux if renal function allows
Leeds Teaching Hospital	Guideline	Rec1.1	critically ill or deteriorating
Society for Acute Medicine	Guideline	Rec1.2	there does not seem to be any definition of intermediate dosage of lmwh
NHS England/Improvement National Clinical Director for Critical and Perioperative Care	Guideline	Rec1.3	Advanced respiratory support needs to be defined - i.e. is this > a certain percentage of FiO2, or NIV/CPAP/HFNO2 or full invasive mechanical ventilation? Intermediate dose also needs definition - i.e. is this the median of prophylactic and treatment dose?
Society for Acute Medicine	Guideline	Rec1.3	there does not seem to be any definition of intermediate dosage of lmwh
Chelsea and Westminster Hospital NHS Foundation Trust	Guideline	Rec1.3	'Advanced respiratory support' requires definition as unclear - a well-defined criteria would be helpful Line 5, page 2 - unclear if formal daily reassessment using VTE risk assessment form, or daily review of VTE and bleeding risks as part of ward rounds- please specify. Practical to rephrase to 'review and reassess VTE and bleeding risks daily as part of ward rounds, with appropriate management documented in medical records'
The Intensive Care Society	Guideline	Rec1.3	Clarity required on what constitutes advanced respiratory support. Does this include those patients receiving Non Invasive Ventilation or HiFlow Nasal Oxygen on a medical ward or is it specific to those patients residing in a Critical Care bed? VTe risk will be increased in both populations.
British Society	Guideline	Rec1.3	It us not clear what is meant by 'advanced respiratory support' (p1, line 26). This should be clearly

of Haematology			defined. If this refers to patients in ITU there are ongoing clinical trials that are due to report on this issue in the near future. At the moment it is unclear whether non-standard doses of anticoagulation are efficacious and safe in this setting.
Faculty of Intensive Care Medicine	Guideline	Rec1.3	The draft states (p2 line 1) 'consider increasing pharmacological VTE prophylaxis to an intermediate dose, adjusted for body weight and renal function'. I'm not sure what an 'intermediate' dose for prophylaxis is; although appreciate that rationale for increasing the dose as outlined on p5 line 25 'the panel agreed that consideration should be given to increasing the standard prophylactic dose of parenteral anticoagulation, such as LMWH, to an intermediate dose to mitigate the increased risk of VTE'. From a quick look in the BNF, enoxaparin has a single dose for prophylaxis of DVT (40mg every 24hrs), dalteparin similar (5000 units every 24hrs) so not sure what an intermediate dose would be, and whether a higher dose for prophylaxis would be off license. General feedback would be for more clarity around the dose of LMWH to be used as a 'standard' and an 'intermediate' dose and whether the 'intermediate' dose is off license. Recommendation 1.3 regarding consider increasing pharmacological prophylaxis to an intermediate dose in patients receiving advanced respiratory support should also apply to those receiving basic respiratory support (ie high flow oxygen or CPAP). NICE should define what is meant by intermediate dose treatment (I assume this is double dose prophylaxis). My own unit has already developed a local protocol for increased LMWH used based on D-dimer level moving to therapeutic treatment for d-dimer >20. Has NICE considered the role of monitoring markers such as D-dimer/Fibrinogen level as part of the risk assessment when considering the dose of thromboprophylaxis.
UKCPA/LTHT	Guideline	Rec1.3	What does enhanced respiratory support mean, needs an explanation, does it mean nasal specs, non-invasive or full ventilation
British Thoracic Society	Guideline	Rec1.3	We agree that patients with severe COVID-19 pneumonia requiring large amounts of oxygen or ventilatory support are at increased risk of VTE and so intermediate-dose anticoagulation is appropriate. Please could you define 'Advanced respiratory support'? Does this mean CPAP + NIV + invasive ventilation + high flow nasal oxygen? Or does it also include patients with very oxygen requirements (eg via a non-rebreathe mask?)
Leeds Teaching Hospital	Guideline	Rec1.3	Assessment of bleeding risk should take account of clinical factors and cpd results of laboratory coagulation parameters particularly when patients are in a critical care setting
Leeds Teaching Hospital	Guideline	Rec1.3	Are they specifying how this should be done. My own view is that this should be a simple clinical assessment on a ward tound and not necessarily completing the equivalent of a VTE risk assessment form every day but if the patient's condition changes then a VTE risk assessment should be formally

			completed
Anticoagulation UK	Guideline	Rec1.4	Are these already in place or proposed national standardised systems for continuity and accuracy of recording patient information across all secondary care settings going forward?
British Society of Haematology	Guideline	Rec1.4	While we agree with this recommendation (p2, lines 6-9), it should be acknowledged that hospitals do not currently have dedicated processes for collecting data on bleeding while on anticoagulation. Hospitals do have processes for collecting data on hospital-acquired thrombosis and bleeding could be incorporated if additional resources were made available. This will be even more challenging if patients are discharged on thromboprophylaxis which we disagree with in any case.
UKCPA/LTHT	Guideline	Rec1.4	What should happen with ED patients with highly suspected COVID19 and at increased VTE risk who do not require hospital admission, should they get prophylaxis? What should happen post discharge with regards to follow up
All Wales Therapeutics & Toxicology Centre	Guideline	Rec1.5	Please provide evidence for continuation of treatment post discharge. This section need to include wording to the effect that the risk:benefit of continuing after discharge should be assessed for individual patients. In addition, there are practicality issues regarding administration of LMWH in the community. Could DOACs be considered?
Society for Acute Medicine	Guideline	Rec1.5	there does not seem to be any definition of intermediate dosage of lmwh
Chelsea and Westminster Hospital NHS Foundation Trust	Guideline	Rec1.5	Would be helpful to include A&E patients with highly suspected COVID19 and at increased VTE risk who do not require hospital admission Most organisations offer 14 days extended thromboprophylaxis - noted NG89 minimum 7 days recommendation. Would be helpful if a LMWH or DOAC would be included in recommendation for 'pharmacological VTE prophylaxis' No recommendations for follow up post discharge
British Society of Haematology	Guideline	Rec1.5	P2, lines 10-13. We have previously expressed our opposition to extending thromboprophylaxis post-discharge for medical patients (Lester W et al. Br J Haematol. 2019 Sep;186(5):790-791). Recent data indicates that the incidence of thrombosis post discharge in COVID-19 patients is about 0.5% (Patell R et al. Blood. 2020 Sep 10;136(11):1342-1346 and Roberts L et al. Blood. 2020 Sep 10;136(11):1347-1350). Providing thromboprophylaxis to this group is of no proven benefit and will increase the bleeding risk. We are very concerned that district nurses will be placed at an increased risk of infection as they will be the ones charged with administering post-discharge injections.
UKCPA/LTHT	Guideline	Rec1.5	There are a number of issues for patients who cannot self inject and don't have anyone to help. Please consider whether an oral agent would be appropriate for these cases, district nurses are already under-

			pressure. If a patient has had an extended hospital stay or ICU admission a recommendation on extended prophylaxis in these patients would be helpful Clarification if this is for any patient with a positive swab for covid even if in hospital for something else
British Thoracic Society	Guideline	Rec1.5	Most patients are having an inpatient stay of 7 days. However, for patients who are discharged home
Leeds Teaching Hospital	Guideline	Rec1.5	Absolutely agree with that
NHS England/Improvement National Clinical Director for Critical and Perioperative Care	Guideline	Rec2.1	It is a shame that no guidance has been provided about indications for scanning patients who are hospitalised with COVID19 to look for evidence of VTE
Chelsea and Westminster Hospital NHS Foundation Trust	Guideline	Rec2.1	No formal embedded and/or established process for VTE risk assessment in community settings - will need guidance on tools, when to risk assess etc If pharmacological prophylaxis being considered, primary care unable to prescribe LMWH (on red list) so access to LMWH prescriptions and medications in community will be a challenge, unless recommendation includes off-license DOAC. Specific information on anticoagulant agent, dose, duration to support primary care with community pharmacological prophylaxis. Include reporting and monitoring of bleeding/adverse events if pharmacological prophylaxis offered in COVID19 group
Anticoagulation UK	Guideline	Rec2.1	An observation - these individuals may be vulnerable due to their age, health, exisitng co morbidities and decline in mental capacity and therefore be unaware or unable to understand that they are at an enhanced risk of VTE especially if immobile. We would hope that any risk assessment will be reviewed on a continuous basis as the patient's health state changes. We have been made aware that Covid related pneumonia increases clotting factors produced in the liver and therefore the risk is heightened for these patients (Let's Talk Clots virtual conference - Professor Beverley Hunt Oct 20)
British Society of Haematology	Guideline	Rec2.1	P2, line 18. This is not achievable for the simple reason that follow up of these patients will mostly be by telephone. In this setting how does the panel expect us to measure hypoxia in a patient's home? How can primary care physicians and nurses be expected to assess VTE and bleeding risks over the telephone?
UKCPA/LTHT	Guideline	Rec2.1	GPs do not use VTE risk assessments. How should they risk assess these patients, what tool should be

			used. How would they be trained What degree of hypoxia would warrant a risk assessment Is there an option for an oral agent, LMWH notoriously difficult to get in primary care, limited knowledge of the drugs by GP and practice pharmacists Capacity for injections to be given by district nurses if patients can't self inject needs to be balanced with risks if not given. The absence of structured guidance on the assessment of risk of VTE in patients with COVID-19 pneumonia in the community will introduce variance and increased risk to patients
British Thoracic Society	Guideline	Rec2.1	Community setting patients with hypoxaemia will represent a small number of patients; most hypoxaemic patients will be admitted and will benefit from steroids and enrolment into studies.
Leeds Teaching Hospital	Guideline	Rec2.1	Why would a patient with hypoxia be in a community setting. That would imply that a decision had been made they were for palliation in which case most important thing would be to manage them holistically and I think that needs to be said here
Chelsea and Westminster Hospital NHS Foundation Trust	Guideline	Rec3.1	Support RCOG recommendation
UKCPA/LTHT	Guideline	Rec3.1	The current link goes to a general page, can it go direct to the page for covid
Chelsea and Westminster Hospital NHS Foundation Trust	Guideline	Rec4.1	Would be helpful if NICE had a 'Prevention of blood clots in COVID-19' to support all with the provision of written patient information than each organization developing specific patient information leaflet for this patient population
Thrombosis UK	Guideline	Rec4.1	Despite guidance, we know that patient information is often not easily accessible or available. We are also aware that information shared can vary considerably. During COVID access and sharing is even more challenging as centres understandably work to reduce contamination risks, family members / carers are not permitted into the hospital and there are restrictions on households. Therefore we strongly recommend that when sharing information, an online link is included so that this is accessible 24/7 and by family/carers as well as the individual. Given the current variability of information provided, we suggest the guidance should provide examples of suitable patient information resources. We include links to relevant information that is medically approved, patient reviewed and available in print as well as online: ‘Lowering Your Risk of Blood Clots’ patient information booklet developed by a VTE Exemplar

			Centre & Thrombosis UK website link: https://thrombosisuk.org/admin/resources/downloads/tuk-lowering-your-risk-of-blood-clots.pdf We also suggest including a recommendation that a COVID patient discharged from hospital within the seven day prescribing of LMWH, is provided with a point of contact should they later have any queries or concerns about self-administering/continuing the remaining doses of VTE pharmacological prophylaxis. Given the associated risk of VTE in severely ill COVID-19 patients, along with information about prophylaxis, we think it would be very helpful to provide information on signs and symptoms of a VTE so that they are aware of the importance of: - medicine adherence - keeping mobile and well hydrated - and should symptoms develop, to urgently seek prompt medical investigation. Examples of information, which are medically and patient reviewed and available in print and online include: 'VTE General Information': https://thrombosisuk.org/admin/resources/downloads/tuk-a4-vte-general-leaflet-final.pdf 'Blood Clot Awareness Postcard': https://thrombosisuk.org/downloads/thrombosisuk-awareness-postcard.pdf
Anticoagulation UK	Guideline	Rec4.1	Aware that many trusts producetheir own information resources for this purpose. Standardising patient information resources across the NHS will promote best practice and hopefully reduce the burden on trusts to have to continually have to review and update in house versions for patient use.
UKCPA/LTHT	Guideline	Rec4.1	Can a standard national leaflet be produced
British Society of Haematology	Guideline	Rec4.3	P3, lines 14-15. This is the only useful recommendation in this document. It should be emphasised much more strongly.
All Wales Therapeutics & Toxicology Centre	Guideline	Rec5.1	Need to investigate risk:benefits of continuation after discharge.
Society for Acute Medicine	Guideline	Rec5.1	there does not seem to be any definition of intermediate dosage of lmwh
British Society of Haematology	Guideline	Rec5.1	P3, lines 17-20. Research in this area is of vital importance and we are disappointed that the panel has misunderstood the main issue. This is simply to assess the effectiveness and safety of standard dose compared with intermediate dose pharmacological thromboprophylaxis in hospital regardless of whether or not there are additional risk factors. Focusing on additional risk factors is an unnecessary distraction at this stage.
Leeds Teaching Hospital	Guideline	Rec5.1	The word clotting conditions is not meaningful. Do they mean a prothrombotic state ?
British Society	Guideline	Rec5.2	P4, lines 4-6. Again the research question has not been correctly formulated. Extended

of Haematology			thromboprophylaxis is only an issue for the post-discharge patients and the question should specify that.
British Society of Haematology	Guideline	Rationale	P5, line 7. The composition of the panel should be stated so that we can be clear how healthcare professionals providing anticoagulation in primary care and district general hospitals have been represented. Given the risks that recommendations 1.5 and 2.1 pose to district nurses, it is essential that these colleagues are adequately consulted.
Faculty of Intensive Care Medicine	Guideline	Rationale	The proposed NICE guidance is that 'consideration should be given to increasing the standard prophylactic dose of parenteral anticoagulation, such as LMWH, to an intermediate dose to mitigate the increased risk of VTE'. The updated COVID-19 Critical Care Clinical Guidance published by FICM / ICS on Oct 28th is more specific regarding thromboprophylaxis: • We recommend that low-molecular weight heparin be administered at twice the normal prophylactic dose. Thomboprophylaxis administration should be guided by careful consideration of the competing risks of thrombosis and bleeding. • Have a high index of suspicion for the presence of deep venous or pulmonary vascular thromboembolism and investigate urgently where clinical suspicion is raised, e.g. if a sudden deterioration in gas exchange occurs, or if D-dimers remain elevated or show a stepwise rise. Should there be a more explicit recommendation to use an increased dose of thromboprophylaxis in the critically ill rather than the rather vague statement 'consider'. Current practice in many ICUs is to use an increased dose.
British Thoracic Society	Guideline	Rationale	Throughout: we suggest using the word HYPOXAEMIA rather than hypoxia.
Society for Acute Medicine	Guideline	General	Society for Acute Medicine would like to support this
Chelsea and Westminster Hospital NHS Foundation Trust	Guideline	General	Would be useful to have specific recommendations to support local protocols and decision-making whilst awaiting evidence Guidance on COVID19 and suspected VTE with/without imaging would be welcomed Guidance on coagulopathy would be welcomed Guidance on mechanical thromboprophylaxis would be welcomed e.g. IPC, Geko in this population
Anticoagulation UK	Guideline	General	Reiterate the need for the production of standardised patient information produced by specialists which can be disseminated, reviewed and accessed by all relevent Trust, associated service providers and HCPs. Patient organisations are already assisting Trusts in compiling their own documentation for this purpose
The Intensive Care Society	Guideline	General	'I think the rapid guideline is reasonable given current knowledge, and has identified appropriate research questions.' 'A little out of my area of expertise , but I don't have any specific comments'
British Society	Guideline	General	The British Society of Haematology believes that this guideline should not be published at this moment

of Haematology			in time. It is deeply flawed because it is not based on evidence and simply reflects the personal opinions of the panel. The lack of evidence is only briefly acknowledged and should be much more prominently stated throughout the document. In fact NICE guidance should not be produced on this basis. A guideline is not necessary at this stage because there are several on-going clinical studies of anticoagulation in COVID-19 that are due to complete soon. NICE should consider a guideline when there is the evidence base to support it.
British Thoracic Society	Guideline	General	Throughout: we suggest using the word HYPOXAEMIA rather than hypoxia.
Vascular Surgical Society of Great Britain and Ireland	Guideline	Not specified	Overall advice seems reasonable given current knowledge
Vascular Surgical Society of Great Britain and Ireland	Guideline	Not specified	The wording of standard dose and intermediate dose is unclear. Whilst this gives wiggle room for clinical opinion, we would have thought that an aim of this document is to standardise practice. As a clinician we would prefer more clarity ie is intermediate dose a double dose?
Vascular Surgical Society of Great Britain and Ireland	Guideline	Not specified	The research recommendations need expanding. We do not know t the VTE rate of patients with current or recent (possibly unknown) Covid infection presenting with significant medical conditions or undergoing invasive procedures (including vascular and endovascular). I would like to see a recommendation for large studies to collect these data, we currently do not know the risks of the procedures we are counselling patients to consider!
Royal College of Anaesthetists	Guideline	Not specified	We are happy with the document and have two points for consideration: In relation to the ICU population, many units now put all COVID patients needing either CPAP or ventilation on intermediate dose Dalteparin due to the risk of thromboembolism. The guidance makes no mention of the need to consider/have a low threshold for CTPA for patients coming to critical care who may actually have PEs and need treatment dose Dalteparin. This hasn't been addressed.

Royal College of Anaesthetists	Guideline	Not specified	Similarly, they haven't considered the issue of discharge from critical care and what happens when patients go to the ward and have been on intermediate dose Dalteparin on critical care. Should they consider whether to go back to standard prophylaxis dose?