Healthcare Improvement Scotland

Deteriorating Patient and COVID-19: alert no.2

Evidence and Evaluation for Improvement Team (EEvIT) 25 March 2021

This is the second of a planned series of quarterly alerts for new publications on the topic of patient deterioration and COVID-19. The citation and full-text links for these publications are listed below in the following themes: general, identification, management, and treatment. This list contains literature published between December 2020 and March 2021.

Deterioration (general)

BMJ Best Practice. Coronavirus disease 2019 (COVID-19). 2020 [cited 2021 Mar 25]; Available from: https://bestpractice.bmj.com/topics/en-gb/3000201

National Institute for Health and Care Excellence. COVID-19 rapid guideline: managing COVID-19 [online]. 2021 [cited 2021 Mar 25]; Available from: <u>https://www.nice.org.uk/guidance/ng191</u>

Identification

Adamuz J, González-Samartino M, Jiménez-Martínez E, Tapia-Pérez M, López-Jiménez M-M, Rodríguez-Fernández H, *et al.* <u>Risk of acute deterioration and care complexity individual factors associated with health outcomes in</u> <u>hospitalised patients with COVID-19: a multicentre cohort study</u>. BMJ Open. 2021;11(2):e041726-e.

Baker KF, Hanrath AT, Schim van der Loeff I, Kay LJ, Back J, Duncan CJ. <u>National Early Warning Score 2 (NEWS2) to</u> <u>identify inpatient COVID-19 deterioration: a retrospective analysis</u>. Clin Med. 2021;21(2):84-9.

Chen S-L, Feng H-Y, Xu H, Huang S-S, Sun J-F, Zhou L, *et al.* <u>Patterns of Deterioration in Moderate Patients With</u> <u>COVID-19 From Jan 2020 to Mar 2020: A Multi-Center, Retrospective Cohort Study in China</u>. Front Med. 2020;7:567296-.

Galassi L, Schena D. <u>The Modified National Early Warning Score (m-NEWS) for COVID-19-Infected Patient</u> <u>Evaluation: a Proof-of-Concept</u>. SN Compr Clin Med. 2021:1-2.

Gupta RK, Harrison EM, Ho A, Docherty AB, Knight SR, van Smeden M, *et al.* <u>Development and validation of the</u> <u>ISARIC 4C Deterioration model for adults hospitalised with COVID-19: a prospective cohort study</u>. Lancet Respir Med. 2021.

Paranjape N, Staples LL, Stradwick CY, Ray HG, Saldanha IJ. <u>Development and validation of a predictive model for</u> <u>critical illness in adult patients requiring hospitalization for COVID-19</u>. PLoS One. 2021;16(3):e0248891.

Richardson D, Faisal M, Fiori M, Beatson K, Mohammed M. <u>Use of the first National Early Warning Score recorded</u> within 24 hours of admission to estimate the risk of in-hospital mortality in unplanned COVID-19 patients: a retrospective cohort study. BMJ Open. 2021;11(2):e043721. Su Y, Ju M-J, Xie R-C, Yu S-J, Zheng J-L, Ma G-G, *et al.* <u>Prognostic Accuracy of Early Warning Scores for Clinical</u> <u>Deterioration in Patients With COVID-19</u>. Front Med. 2021;7:624255-.

Yitao Z, Mu C, Ling Z, Shiyao C, Jiaojie X, Zhichong C, *et al.* <u>Predictors of clinical deterioration in non-severe</u> <u>patients with COVID-19: a retrospective cohort study</u>. Curr Med Res Opin. 2021;37(3):385-91.

Management

Hajjar LA, Costa I, Rizk SI, Biselli B, Gomes BR, Bittar CS, *et al.* <u>Intensive care management of patients with COVID-</u><u>19: a practical approach</u>. Ann Intensive Care. 2021;11(1):36.

Treatment

Kaptein FHJ, Stals MAM, Huisman MV, Klok FA. <u>Prophylaxis and treatment of COVID-19 related venous</u> thromboembolism. Postgrad Med. 2021:1-9.

Our other quarterly reports can be found here:

Deteriorating Patient and COVID-19 Quarterly Update 1

Deteriorating Patient and COVID-19 Quarterly Update 3

Deteriorating Patient and COVID-19 Quarterly Update 4