|  | <b>Queensland</b><br>Government |
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## **Emergency Department Suspected** Pulmonary Embolism (PE) Diagnostic **Pathway for Non-pregnant Adults**

| OTAN.          |  |
|----------------|--|
| Family name:   |  |
| Given name(s): |  |
| Address:       |  |

(Affix identification label here)

Date of birth: Sex: M F 

Yes

(3)

No

(0)

Clinical pathways never replace clinical judgement Please discuss your patient with a senior clinician

**Wells Risk Assessment Score** 

PE more likely than an alternative diagnosis

Care outlined in this pathway must be altered if not clinically appropriate for the individual patient

| Date: | DD / | MM | I YY | Time: HH : MM |  |
|-------|------|----|------|---------------|--|
|-------|------|----|------|---------------|--|

LIDN

| Suspected DVT   |   | ☐ (3) ☐ (0) ☐ (1) ☐ (1) ☐ (1) ☐ (1) ☐ (2) ☐ |  |  |  |
|---|---|---|--|--|--|
| Heart rate >100/min   |   | ☐ (1.5) ☐ (0)   |  |  |  |
| Immobilisation or surgery within prev   | vious 4 weeks   | ☐ (1.5) ☐ (0)   |  |  |  |
| Previous DVT/PE   |   | ☐ (1.5) ☐ (0)   |  |  |  |
| Haemoptysis   |   |   |  |  |  |
| Malignancy (on treatment, treated in  | n past 6 months or palliative)  |   |  |  |  |
|   |   | Total risk score for PE / 12.5  |  |  |  |
|   |   |   |  |  |  |
| ☐ Wells <2 or low risk senior clinician gestalt   | ☐ Wells 2–6 or moderate risk senior clinician gestalt   | ☐ Wells >6 or high risk senior clinician gestalt  |  |  |  |
| <b>—</b>  | <b>—</b>  | <u> </u>  |  |  |  |
| PE Rule-out Criteria (PERC):  Age <50  Heart rate <100  | D-dimer test Result: mg/L   | Diagnostic imaging*  *Choice of imaging dependent on:   |  |  |  |
| ☐ SaO <sub>2</sub> ≥95% ☐ No haemoptysis ☐ No oestrogen use ☐ No surgery/trauma requiring hospitalisation in last 4 weeks   | ☐ Patient younger than 50 years with D-dimer result LESS than 0.5mg/L  OR ☐ Patient 50 years or older with D-dimer result LESS than | Department logistics     Clinician preference     Patient factors  VQ Scan (if available and  |  |  |  |
| ☐ No history of VTE   | age-adjusted ratio  | CTPA  |  |  |  |
| ☐ No unilateral leg swelling  | (0.01 x age = mg/L)   | meets criteria)*  ☐ CTPA ☐ Other:   |  |  |  |
| YES TO ALL  | <b>₩</b> YES  |   |  |  |  |
| STOP  | STOP  | ן ד   |  |  |  |
| Risk of PE: 1.0%  | Risk of PE: 1–2%  |   |  |  |  |
|   |   |   |  |  |  |
| Reason(s) for variance from PE dia  | gnostic pathway:  |   |  |  |  |
|   |   |   |  |  |  |
|   |   |   |  |  |  |
|   |   | TAI IT WAY  |  |  |  |
|   |   |   |  |  |  |
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|   |   |   |  |  |  |
|   |   |   |  |  |  |
|   |   |   |  |  |  |
| Senior clinician name:  |   | C<br>   |  |  |  |
| #VQ scan if <b>YES TO ALL</b> : • Female • <55 years • Norma  | al CXR • Haemodynamically stable • No s   |   |  |  |  |
| *Female *<55 years *Normal CXR *Haemodynamically stable *No significant suspicion of pathology other than PE  REFERENCES  1. Buntine, P., Thien, F., Stewart, J., Woo, Y. P., Koolstra, M., Bridgford, L., Datta, M. and Gwini, S. M. (2019), Effect of a clinical flowchart incorporating Wells score, PERC rule and age-adjusted D-dimer on pulmonary embolism diagnosis, scan rates and diagnostic yield. Emergency Medicine Australasia, 31: 216-224. doi:10.1111/j.742-6723.13125  2. Penaloza A et al. Comparison of the unstructured clinician gestalt, the Wells Score, and the revised Geneva score to estimate pretest probability for suspected pulmonary embolism. Ann Emerg Med 2013 Feb 20; [e-pub ahead of print]. (http://dx.doi.org/10.1016/j.annemergmed.2012.11.002)  3. Kline JA, Courtney DM, Kabrehl C, et al. Prospective multicenter evaluation of the pulmonary embolism rule-out criteria. J Thromb Haemost. 2008;6(5):772-780. doi:10.1111/j.1538-7836.2008.02944.x  4. Van Es N, Van Der Hulle T, Van Es J, et al. Annals of Internal Medicine Review Wells Rule and D-Dimer Testing to Rule Out Pulmonary Embolism A Systematic Review and Individual-Patient Data Meta-analysis. 2016. doi:10.7326/M  5. RANZCR, Choosing Wisely Australia RANZCR Choosing Wisely Australia Recommendations 2015 http://www.choosingwisely.org.au/getmedia/59b0d1ff-afd8-4abe-8f9e-199431680f74/RANZCR-Clinical-Decision-Rules off asox |   |   |  |  |  |

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