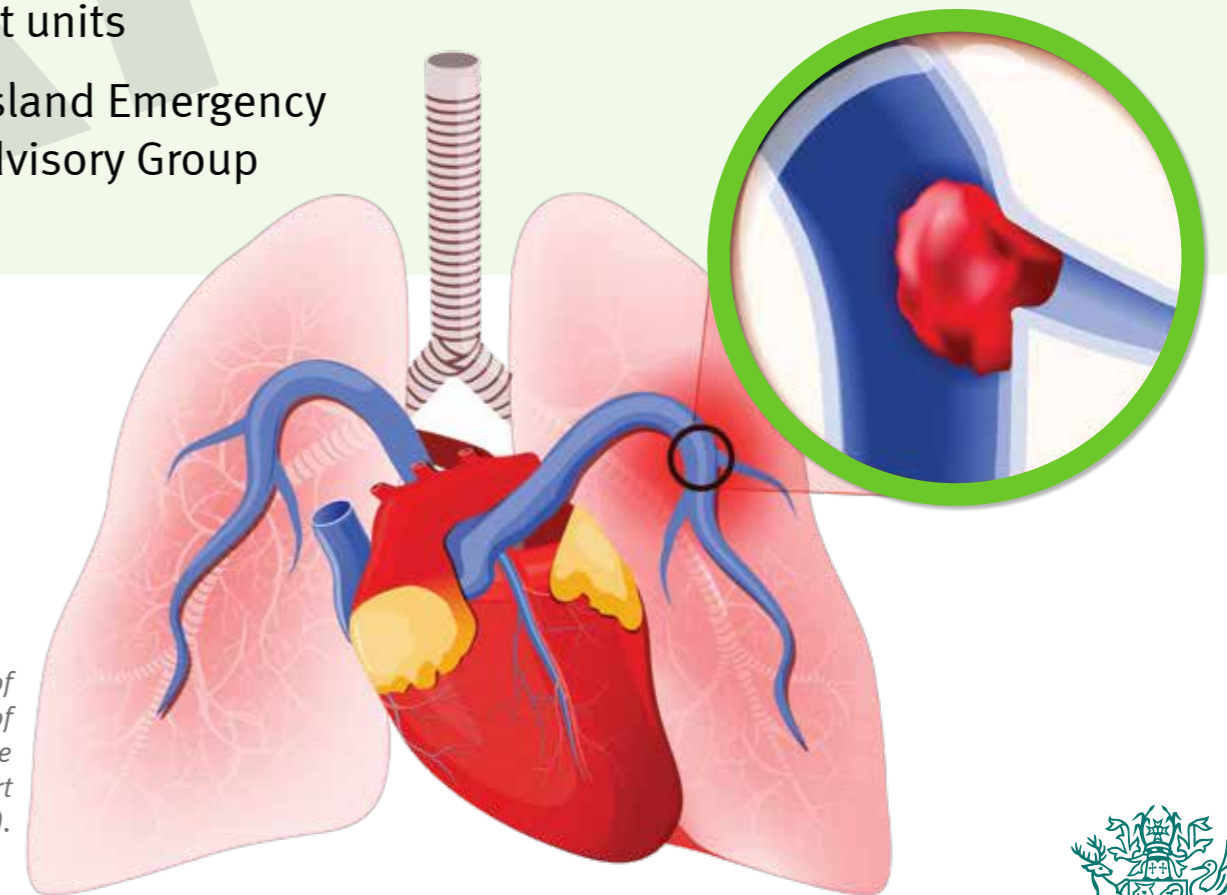


Suspected Pulmonary Embolus Diagnostic Pathway for non-pregnant adults

Suspected Pulmonary Embolus (PE) Diagnostic Pathway for non-pregnant adults

- An evidenced based pathway to aid clinicians in the evaluation of patients with suspected PE
- Provides a structured approach to PE evaluation
- Aims to rationalise investigations and improve care in patients with suspected PE
- Suitable for community and acute care settings including emergency departments and medical assessment units
- Endorsed by the Queensland Emergency Department Strategic Advisory Group (QEDSAP)



Pulmonary embolism: blockage of the main artery of the lung or one of its branches by a blood clot. image depicts the human lungs and heart with a blood clot in the vein (insert).

Pathway is available for download and print, or print copies can be ordered via WINC code: 1NY37272.

For more information regarding the 'Emergency Department Suspected Pulmonary Embolus (PE) Diagnostic Pathway for non-pregnant adults (SW1028)', please contact Clinical Excellence Queensland: Clinical_Pathways_Program@health.qld.gov.au



© State of Queensland (Queensland Health) 2020
 Licensed under: <http://www.queensland.gov.au>
 Contact: Clinical_Pathways_Program@health.qld.gov.au

Queensland Government
Emergency Department Suspected Pulmonary Embolism (PE) Diagnostic Pathway for Non-pregnant Adults

URN: _____ (Affix identification label here)
 Family name: _____
 Given name(s): _____
 Address: _____
 Date of birth: _____ Sex: M F I

Clinical pathways never replace clinical judgement
 Please discuss your patient with a senior clinician
 Care outlined in this pathway must be altered if not clinically appropriate for the individual patient

Date: DD / MM / YY Time: HH : MM

Wells Risk Assessment Score	Yes	No
PE more likely than an alternative diagnosis	<input type="checkbox"/> (3)	<input type="checkbox"/> (0)
Suspected DVT	<input type="checkbox"/> (3)	<input type="checkbox"/> (0)
Heart rate >100/min	<input type="checkbox"/> (1.5)	<input type="checkbox"/> (0)
Immobilisation or surgery within previous 4 weeks	<input type="checkbox"/> (1.5)	<input type="checkbox"/> (0)
Previous DVT/PE	<input type="checkbox"/> (1.5)	<input type="checkbox"/> (0)
Haemoptysis	<input type="checkbox"/> (1)	<input type="checkbox"/> (0)
Malignancy (on treatment, treated in past 6 months or palliative)	<input type="checkbox"/> (1)	<input type="checkbox"/> (0)
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

PE Rule-out Criteria (PERC):
 Age <50
 Heart rate <100
 SaO₂ ≥95%
 No haemoptysis
 No oestrogen use
 No surgery/trauma requiring hospitalisation in last 4 weeks
 No history of VTE
 No unilateral leg swelling

NO TO ANY → **STOP Risk of PE: 1.0%**

YES TO ALL → **STOP Risk of PE: 1-2%**

D-dimer test
 Result: _____ mg/L

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 age-adjusted ratio (0.01 x age = _____ mg/L)

NO → **Diagnostic imaging***

*Choice of imaging dependent on:
 • Department logistics
 • Clinician preference
 • Patient factors
 VQ Scan (if available and meets criteria)*
 CTPA
 Other: _____

Reason(s) for variance from PE diagnostic pathway:

Senior clinician name:

*VQ scan if **YES TO ALL**:
 • 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:10.1111/1742-6723.13125
 2. Peralzo 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, Kabrini 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/M16-0000
 5. RANZCR. Choosing Wisely Australia RANZCR Choosing Wisely Australia Recommendations 2015 <http://www.choosingwisely.org.au/getmedia/59b0d11f-af58-4abe-89e-19943168074/RANZCR-Clinical-Decision-Rules.pdf.aspx>

DO NOT WRITE IN THIS BINDING MARGIN

ED SUSPECTED PE DIAGNOSTIC PATHWAY FOR NON-PREGNANT ADULTS

SW1028

V1.00 - 08/2020
 WINC Code: 1NY37272

Page 1 of 1