NUH ED pathway for all adult patient presenting with hot/swollen joint (s)

History and examination suggests hot and/or swollen joint
Investigation: X-Ray, blood culture x 2, CRP, UE, FBC, VBG (see IAT).
Blood tests can not be used to exclude septic arthritis.

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Severe sepsis present?

- yes → Sepsis bundle +/- follow rest of pathway dependent on clinical assessment
- no → Hip / Prosthetic joint / Any other joints

Hip → Immediate Orthopaedic referral – do not admit LJU

Prosthetic joint → Immediate Orthopaedic referral – do not admit LJU

Any other joints → Senior Review + Aspirate Joint (knee in ED, other joints in LJU).
Send to lab but do not wait for result before next action

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Is it between 0800-1800 M-F and 11-1500 S-S?

- yes → refer to Rheumatology SpR (switch) who may review in ED, admit to Rheum ward, or L J U if no bed available
- no → Admit LJU - Medical <24hrs (B3 if no bed). Patient becomes responsibility of Acute medicine.

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On LJU the joint is aspirated, if not done already, by Rheum SpR or Ortho SpR (if OOH). LJU Senior decision maker reviews patient and aspirate result and makes the following diagnosis

- Unlikely septic arthritis or alternative diagnosis made → Assess for Safe discharge?
- Possible septic arthritis – start antibiotics → Rheumatology or Orthopaedic (OOH) review as soon as possible → Assess for Safe discharge?

Assess for Safe discharge?

- no → Home with GP or specialist follow-up and written discharge advice
- yes → Admit Medicine or Rheum or T&O dependent on diagnosis

Version 3 -Developed by Adrian Jones (Rheum) and Jaimie Coleman (ED) 29/4/14 review date 29/4/14
Agreed between Dr Weston (Microbiology), Dr Le Jeune (AM), Mr Hunter (T&O)

Septic joint comments

- 30% patients will have no fever
- 20% will have little pain
- 30% will have a normal WCC and ESR
- CRP most sensitive blood test to exclude , although can be negative if on tocilizumab therapy
- Gram stain only positive in 50%
- Crystals can be found in 3%
- Rare in the wrist, common in knee, hip, shoulder
- Unless severe sepsis aim for aspiration before antibiotics
- Pitfalls – 1. trauma increases risk. 2. usually a 1-2 day history
- Outcomes – 1/3 will have lasting joint problems, 40% will make full recovery, 10% will die.