Pathway

Patient with cellulitis who is requiring IV antibiotic, referred from either GP or ED.

1. Refer to ACU for assessment via usual referral pathway.

2. During normal working hours: Patient must be seen by Acute Physician before discharge. Out-of-hours: Patient must be seen by a Middle Grade doctor and then reviewed by a Consultant within 24 hours. On AMU this will be the Acute Physician of the day (both weekdays and weekends). On ATC this would be the Acute Physician of the day on Monday to Friday and GIM Physician of the day during the weekends.

3. The Eligibility Form (see Appendix 1) and Initial Treatment Checklist (Appendix 2a) must be filled in at first attendance before discharge.

4. Administer first dose of antibiotics on ACU and arrange time for patient to return for next dose – as close to 24 hours as possible to make it within usual working hours.

5. The patient will be reviewed daily by either the Acute Physician or Middle Grade in the week and by the on-call Middle Grade at weekends.

6. The responsibility of the patient lies with the Acute Physician on duty on AMU or ATC that day or with the GIM On-call Physician at out-of-hours. Overall responsibility for the scheme lies with Dr Nicholas Mallaband.

7. All patients enrolled in the scheme will be audited on a 6- to 12-month basis.

Initial Assessment:

All patients must be assessed by a Middle Grade or Consultant before entering into the pathway. The assessment must include:

1. Baseline observations

2. Bloods – FBC, U&Es, LFTs, Glucose, CRP, blood cultures if T >38.0°C

3. MRSA swabs and swabs of any ulcers or weepy areas

4. Check for point of entry of infection, including web space fungal infections

5. Check previous microbiology on ICE for MRSA or swab results

6. Indelible marker used to clearly mark the affected area

7. Letter written and faxed to GP explaining patient is on the scheme
Follow up attendance:

1. All patients will be seen daily by a Middle Grade doctor or Consultant.
2. Bloods will be repeated 48 hours after first presentation and then as clinically indicated.
3. Patient will be assessed for clinical improvement on a daily basis and antibiotics changed to oral when deemed clinically appropriate.
4. Most patients will require IV antibiotics for only 2-3 days. However some will require prolonged course.
5. A further follow up appointment will be made in 3-day time (or as close as it can be, avoiding weekends) to ensure response to oral antibiotics.
6. A record of the consultation will be entered into the case notes, including completion of the daily attendance checklist (Appendix 3).
7. A check will be made against the indelible mark and the mark will be re-made if necessary.
8. Side effects of treatment will be screened.

Antibiotic regimes

1st line:
IV Ceftriaxone 2g OD
(If subsequently admitted switch to IV Flucloxacillin)

OR

2nd line:
(if age >70, residential/nursing care, previous C.diff, previous MRSA, serious Penicillin allergy)
IV Teicoplanin 400mg 12 hourly for the first 3 doses (loading), followed by once daily (24hr dosing)
Contact Pharmacist for dosing advice if CrCl < 80ml/min
(If subsequently admitted contact Microbiologist to discuss antibiotic choice)

Oral switch
Flucloxacillin 500mg QDS OR Clarithromycin 500mg BD (if allergic to Penicillin)

Antibiotics must be adjusted based on sensitivity results
Appendix 1 - Criteria for Home Intravenous Management

Eligibility Criteria

The patient must have a tick in all boxes below to be deemed suitable for home IV management treatment of uncomplicated cellulitis.

1. Telephone access
2. Responsible adult or responsible adult at home
3. Confirmed diagnosis of uncomplicated cellulitis
4. 18 years and over
5. Ability to manage at home

Exclusion criteria

If the patient has a tick in any of the boxes below they are not suitable for home IV management treatment of uncomplicated cellulitis.

1. Systemic sepsis syndrome
2. Under 18 years old
3. Hypersensitive (allergic) to any of the proposed antibiotics
4. Pregnant or actively breast feeding
5. Significant hepatic and/or renal disease
6. Neutropenia
7. Facial cellulitis
8. Known colonisation of ceftriaxone resistant organism e.g. MRSA
9. Known IV drug users
10. Any co-existing morbidity requiring admission
11. Likelihood of non-compliance
12. Risk factors for endocarditis e.g. prosthetic heart valve or any significant abnormalities
13. Diabetic foot infection
14. Severe disproportionate pain (potential necrotising fasciitis)
15. Past history of DVT in the infected limb
Appendix 2

a. Initial treatment checklist

- Diagnosis of cellulitis
- Consent documented in notes
- Suitability for OP management as per criteria
- Area marked with indelible pen

b. Discharge checklist

- Patient information leaflet given
- Area marked
- Venflon secured and flushed; insertion date documented
- VIP score documented
- Date for first returning to ward identified and communicated
- Discharge letter faxed to GP
- Patient booked in ‘Return to Ward’ diary
- Patient admitted on JAC with antibiotics prescribed
- Notes and chart left in ‘Return to Ward’ trolley

Name __________________  Signed________________  Date___________
Appendix 3 - Daily attendance checklist

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systemically better?</td>
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<tr>
<td>No side effects to antibiotics?</td>
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<tr>
<td>Cellulitic area improved?</td>
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<td>Venflon checked?</td>
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<tr>
<td>Normal observations?</td>
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<tr>
<td>Bloods done within last 48 hours and improved?</td>
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<tr>
<td>Site mark visible?</td>
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<tr>
<td>Apyrexial for 48 hours</td>
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<tr>
<td>Completed by: (sign/date)</td>
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</tbody>
</table>

- If **yes** to all the above, consider changing the therapy to oral antibiotics.
- If **no** to any, apart from ‘Apyrexial for 48hrs’, then consider admitting patient.
- If the patient is admitted, antibiotic therapy should be switched to IV Flucloxacillin 1-2g QDS. For patients with Penicillin allergy and/or prescribed Teicoplanin in accordance with this guideline, contact Microbiologist for advice on the choice of antibiotic on admission.