Annex B - Clostridium difficile case checklist

The purpose of this checklist is to guide your local assessment of *Clostridium difficile* cases so that the minimum information needed to determine the learning required to prevent *Clostridium difficile* cases can be captured. It should ensure a consistent approach to information contained in *Clostridium difficile* case assessments across the whole health economy to identify recurring themes and reduce HCAI. It will also help you to understand what your local co-ordinating commissioners will be looking for should you wish to discuss cases you consider to have occurred despite no lapse in care, as outlined in this guidance.

This checklist was developed by the Public Health England CDI 'Lapse in Care' subgroup

- 1.0 Local C. difficile infection assessment what to include
- 1.1 HDCS Case Number.
- 1.2 Date of Birth.
- 1.3 Male/Female.
- 1.4 Date of current admission during which *C. difficile* infection (CDI) was diagnosed.
- 1.5 Initial reason for this admission, underlying conditions, and whether diarrhoea was present when admitted.
- 1.6 The patient pathway should be clearly stated.
- 1.7 Were any of the following risk factors for developing diarrhoea identified on admission or at the time when the specimen was taken, including:
 - Recent laxatives / enemas / anti-emetics / protein pump inhibitors
 - Enteral nutrition
 - Inflammatory bowel disease
 - Previous gastrointestinal surgery
 - Gastrointestinal malignancy
 - Ileostomy / colostomy
 - Other gastrointestinal infection e.g. norovirus
 - Chemotherapy / graft versus host disease
 - Other immunosuppressive illness or therapies e.g. steroids
- 1.8 Was bowel habit recorded on admission? Was the Bristol Stool Chart (BSC) used? Was it used immediately when symptoms began? Summarise the BSC results. Were other measures used to monitor for the presence of diarrhoea in this patient?
- 1.9 On what date were diarrhoeal symptoms first documented in relation to the current episode of CDI? Was the patient source isolated at the time? If no, how soon after onset of diarrhoeal symptoms was the patient source isolated? What was/were the

- reasons for delay in source-isolation? If there is insufficient information available to determine the timeliness of interventions then this is a potentially important short-coming.
- 1.10 On what date and in which location was sample taken? Was there a delay in sampling according to your local guidance? As a minimum, national guidance should have been followed.
- 1.11 On what date and at what time was the sample received in the laboratory? On what date and at what time was the result reported to the sender?
- 1.12 Were the sampling, testing and reporting arrangements in this case clearly compliant with the 2012 Department of Health guidance 'Updated guidance on the diagnosis and reporting of *Clostridium difficile*'?
- 1.13 How long did the patient remain under appropriate source-isolation after the CDI diagnosis? If the patient was removed from source isolation what was the rationale? Was this consistent with your local guidance?
- 1.14 If there was any non-compliance above explain why.

2.0 Chronology of patient pathway

- 2.1 <u>Provide an outline</u> timeline where the patient was in the three months prior to the latest CDI diagnosis e.g. Home, hospital, care home, etc. Ideally, identify if they had any contact with known CDI cases or carriers of *C. difficile* (e.g. GDH-positive, toxin-negative cases) in these locations and, if so, any relevant ribotyping/MLVA results that are available.
- 2.2 Had the patient had any previous confirmed episodes of CDI? If yes, when did they occur? If performed, what are/were the ribotyping/MLVA typing results of the current and any past episodes of CDI? Had the patient been told of the CDI diagnosis and understood the condition?
- 2.3 If you suspect that the latest case is a 'recurrence', outline if the previous episode(s) were correctly treated as per your local CDI treatment guideline. Was the patient treated with any other antimicrobials between this and the previous episode(s)? Was this treatment in line with local guidelines?
- 2.4 Has the patient received other treatment (e.g. enteral feeding) and/or medication (e.g. PPIs) possibly relevant to the development of this episode of CDI? Were these in line with local guidelines?
- 2.5 If there was any non-compliance above explain why.

3.0 Antimicrobial Therapy

- 3.1 List all antimicrobial therapy (antibiotic, dose, duration) in the previous 3 months.
- 3.2 Concerning the current episode/admission, were the indication(s) for antimicrobial treatment duration and the review date written in the patient's notes or drug chart? Was the indication(s) for this treatment appropriate at the point it was prescribed?
- 3.3 Was initial empiric therapy appropriately modified in response to microbiological results?
- 3.4 Were all antimicrobials prescribed compliant with local guidelines? If not, were they still clinically justified (please provide an explanation)?
- 3.5 If there was any non-compliance above, explain why.

4.0 Treatment of CDI and outcome

- 4.1 Was the patient treated for CDI on this occasion? If not, what were the clinical factors that were used to determine treatment was not required?
- 4.2 Was the patient told of the CDI diagnosis and did he/she demonstrate an understanding of the condition?
- 4.3 Does your local CDI treatment guideline contain a measure of severity? If so, how was this case categorised?
- 4.4 If this case was treated, what treatment (drug, dose, duration) was used? Was this treatment compliant with your local guidance?
- 4.5 What was the clinical outcome? Did the patient die within 30 days of CDI diagnosis? If so, was this death linked to CDI? Did CDI appear on the Death Certificate (which part); please provide details of all conditions listed?
- 4.6 If there was any non-compliance above explain why

5.0 Environmental Factors

- 5.1 Were there any cleanliness/environmental issues reported in relation to the area(s) in which the patient was cared for prior to the development of CDI (including the results of recent audits)? Please provide details of any issues.
- 5.2 Outline details of any additional cleaning measures that have been deployed in this/these area(s) over the previous three months (e.g. hydrogen peroxide vaporization) either as a pre-emptive measure (e.g. whole ward decant/deep clean) or as terminal side room cleaning in relation to previous episodes of CDI
- 5.3 What audit/monitoring measures were in place to assess the efficacy of cleaning? How robust (quantitative/qualitative) are these?
- 5.4 What monitoring of hand hygiene compliance was in place at the time including how robust this monitoring was e.g. who undertook the monitoring? What were the results?

5.5 If there was any non-compliance above, explain why.

6.0 Organisation issues

- 6.1 Were there any organisational factors that might have influenced this case? This could include whether staffing levels/skill mix were in line with local agreements where this patient was managed.
- 6.2 Is there evidence that mandatory training and IPC training have been undertaken by staff relevant to this case?
- 6.3 Is there evidence that communication and documentation related to this patient was adequate?
- 6.4 If there was any non-compliance above, explain why and how this could / could not be related to the development of *C. difficile* infection.

7.0 Optimisation of diarrhoea control in the organisation

- 7.1 Does the organisation have a protocol for the management of patients with diarrhoea? Was this being followed in the clinical area relevant to this case?

 More specifically:
 - 7.1.1 Was the documentation of patients with diarrhoea adequate/complete?
 - 7.1.2 Had the rate of diarrhoea increased in the clinical area relevant to the index case (during the 1 month beforehand)? Was a reason for this found and what measures were put in place to address this? Were these patients managed in accordance with local guidance in relation to sampling and source isolation of suspected infectious causes of diarrhoea?
- 7.2 If there was any non-compliance above, explain why.

8.0 Lessons Learned

- 8.1 Outline the lessons learned from this episode of CDI. Are there any recurring themes seen across this and other assessments? How have these been addressed?
- 8.2 Provide a commentary on any recurring themes from previous CDI case assessments. What is the hypothesis for why these cases are still happening? What action(s) has the organisation put in place to prevent further cases of CDI? What factors appear to be responsible for their lack of success?

9.0 Preventability

- 9.1 State whether you have identified any 'lapses in care' that could have contributed to the development of this CDI case.
- 9.2 In order to facilitate learning and optimisation of patient care, please identify any other lapses in care i.e. that did not contribute to the development of this CDI case.
- 9.3 If you consider this CDI case occurred despite no lapses in care (and so was deemed not to be 'preventable'), outline your reason(s) why.