

EV0648

ePoster Viewing

Epidemiology of nosocomial infections

Cohort study of *Clostridium difficile* infection outcomes in Tayside, Scotland using routine data

C. Marwick<sup>1,2</sup>, J. Coats<sup>1</sup>, M. Gilpin<sup>1</sup>, M. Lockhart<sup>1</sup>, D. Nathwani<sup>1</sup>

<sup>1</sup>Ninewells Hospital & Medical School, Dundee, United Kingdom

Objective: To quantify outcomes after *Clostridium difficile* infection (CDI) in a well-defined patient cohort using routine data.

Methods: Details of all adult (>15 years old) patients in Tayside health board region with laboratory confirmed CDI from 01/01/2011 to 30/06/2013 were provided by Infection Control. We used anonymised record linkage to population datasets in the Health Informatics Centre, University of Dundee, to investigate outcomes. Univariate and multivariate (including factors with univariate p

Results: There were 453 positive samples from 333 eligible patients, 216 (65%) female and median age 77y (range 18-97y, IQR 65-85y). 43 (13%) lived in care homes, 66 (20%) had Charlson Comorbidity Index (CCI)=3+, 111 (33%) CCI=1-2, 156 (46%) CCI=0. Assessment of CDI severity was limited to raised WCC and/or renal impairment, 189 (57%) met these severity criteria. 55 (17%) patients died within 30d and 71 (21%) within 90d. 38 (14% of 278 (patients that died within 30d excluded)) had a first CDI recurrence within 40d and 50 (18%) within 90d. Results of logistic regression analysis of factors associated with adverse outcomes are shown in the table.

---

Conclusion: Mortality and CDI recurrence rates were lower than often reported, perhaps due to inclusion of community cases, adults of all ages, and non-severe CDI. Age and comorbidity mainly influenced these outcomes. Next we will analyse additional outcomes (length and cost of stay, readmissions) and, from case note review of a sample of patients, additional factors (treatment and severity criteria).