

Proposed Miniprojects from the National Health Service's Commissioning Support Unit (NHS CSU), for Birmingham, Black Country and Solihull

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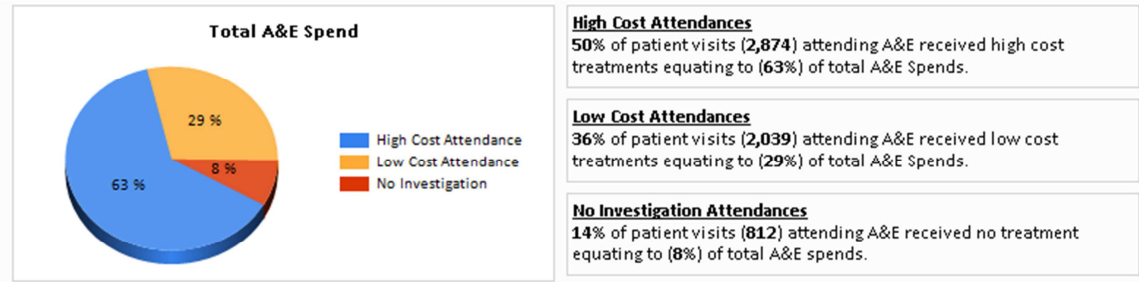
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Project: Modelling A&E utilization with chronic disease prevalence

Utilization of A&E services has seen a steady year on year growth of approximately 3%. One hypothesized cause for this is, with an aging population, a greater incidence of chronic diseases. Long-term medical conditions can give rise to complications that require urgent care. However, a chronic condition should be able to be well-managed by GP's making A&E visits rare.

The goal of this project is to examine how rates of A&E visits vary over geographical areas and see if differences in prevalence of chronic disease can explain those differences. Of course, there are numerous effects that could explain variation in A&E utilization, and thus any model must consider a large number of nuisance variables. The project will make use of the detailed records at the NHS CSU for the West Midlands to identify such an effect and characterize its importance.

Picture 1 – A report showing an anonymised practices A&E attendances for a year, including the percentage of patients who attended A&E who also had a Long Term Condition.



A&E Group Description	Attendances	Cost	Attendance %	Cost %
High Cost Attendance	2,874	£344,430	50%	63%
Low Cost Attendance	2,039	£158,494	36%	29%
No Investigation	812	£44,371	14%	8%
Total	5,725	£547,294		

