

Aberdeenshire Drug and Alcohol Cohort

1. Background

This paper presents statistics and analysis for individuals resident in Aberdeenshire who passed away in FY 2017/18 with a drug or alcohol diagnosis. This work includes costs and activity for any service interaction (currently linked via Source) up to two years prior to death.

2. Drug Cohort

2.1 Demographics

105 individuals from Aberdeenshire were identified as having died due to a drug diagnosis in FY 2017/18. This cohort is predominantly male (**69 individuals**) compared with female (**36 individuals**), with a **mean age 43** and **median age 41**. 60% are aged between 18 and 44, with 38% aged between 45 and 64. 47% of these individuals live in the most deprived quintile in Aberdeenshire.

2.2 Cost and Activity

Over the two years, this cohort of individuals had **227 A&E attendances** (from 71 individuals), **233 GP Out of Hours contacts** (from 55 individuals), **125 Non-Elective admissions** (from 44 individuals) and **15 Mental Health admissions** (from 10 individuals). Over the course of these two years, these individuals spent **1,036 days** in hospital, of which 66% were as acute non-elective; 30% of beddays were in mental health. Altogether, the total service use cost was **£596,406**. Of this, 62% was for acute non-elective, 20% was for mental health and 10% for Unscheduled Care (A&E and GP Out of Hours).

Looking at unplanned activity as a time series graph, it's evident that service use increases closer to death.

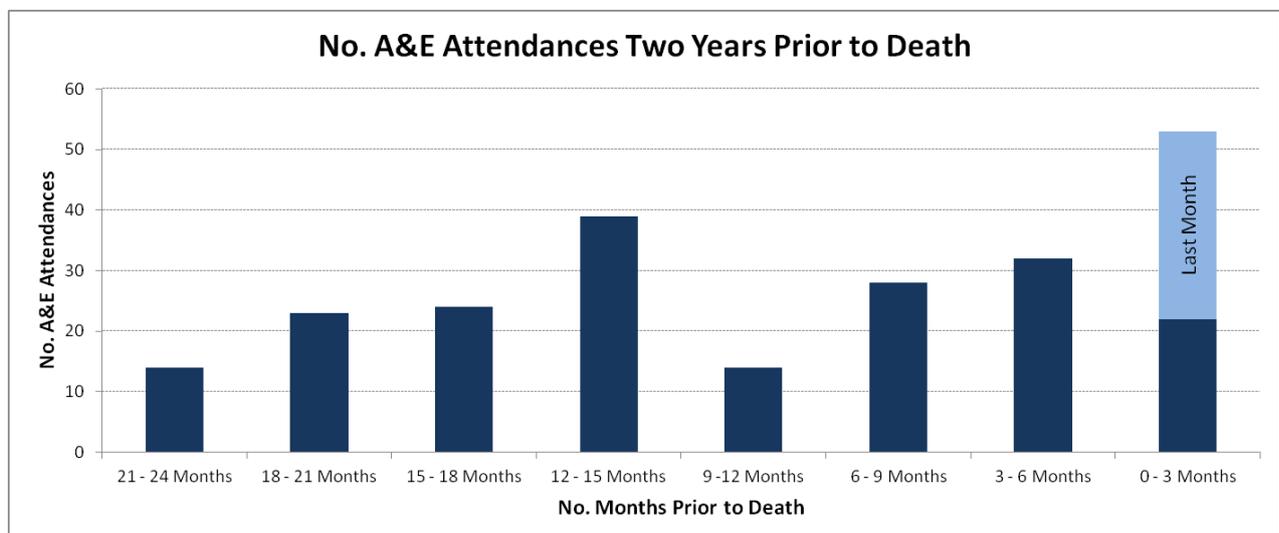


Figure 1. A&E attendances two years prior to death for the Drug cohort. The light blue bar is the activity in the last month.

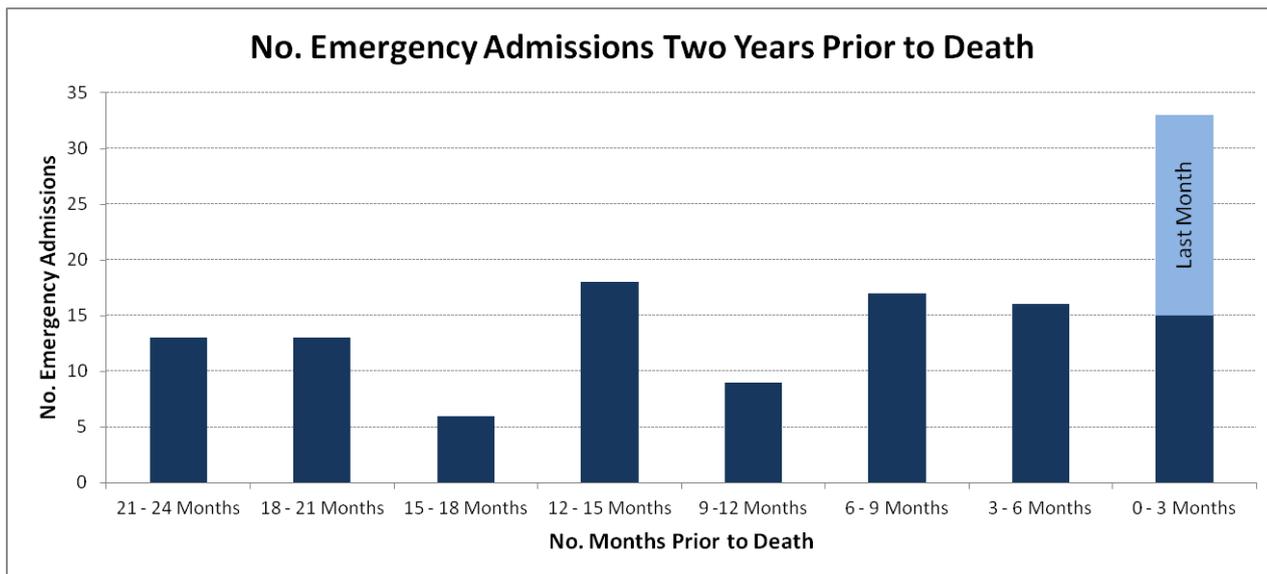


Figure 2. Emergency admissions two years prior to death for the Drug cohort. The light blue bar is the activity in the last month.

2.3 Pathways

Using Celonis software, it's possible to visualise how individuals flow through health and social care services.

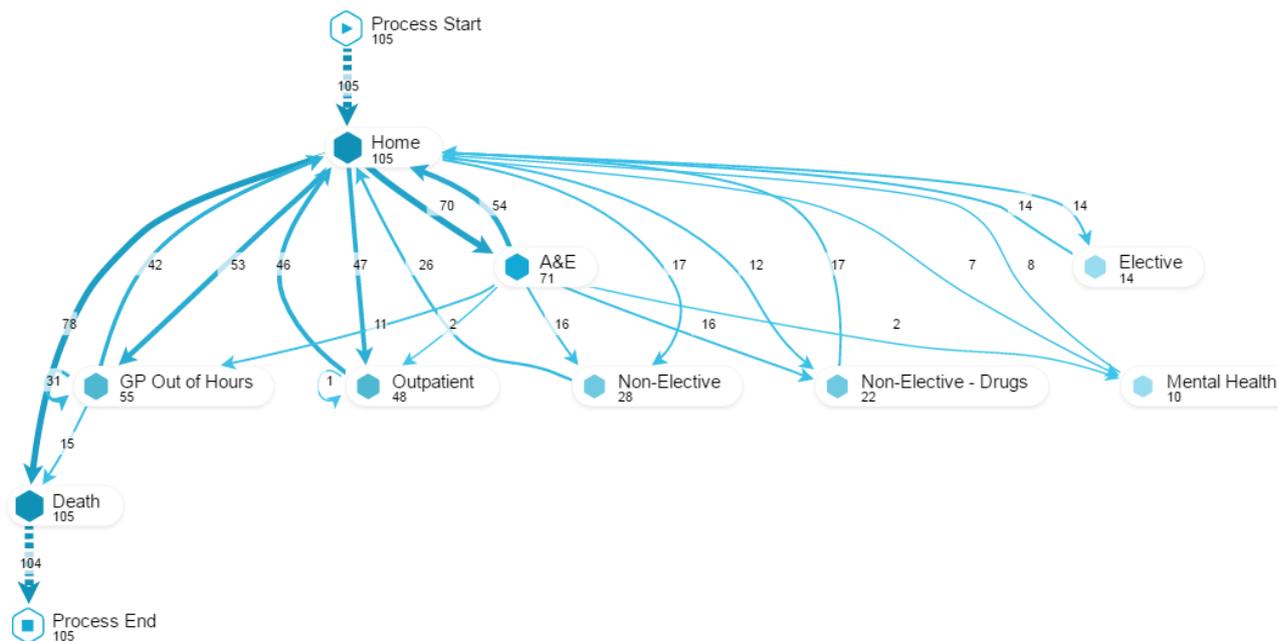


Figure 3a. Celonis pathways for the Drug cohort – showing the number of individuals to each service. In this case, 98% of activities and 93% of all possible pathways.

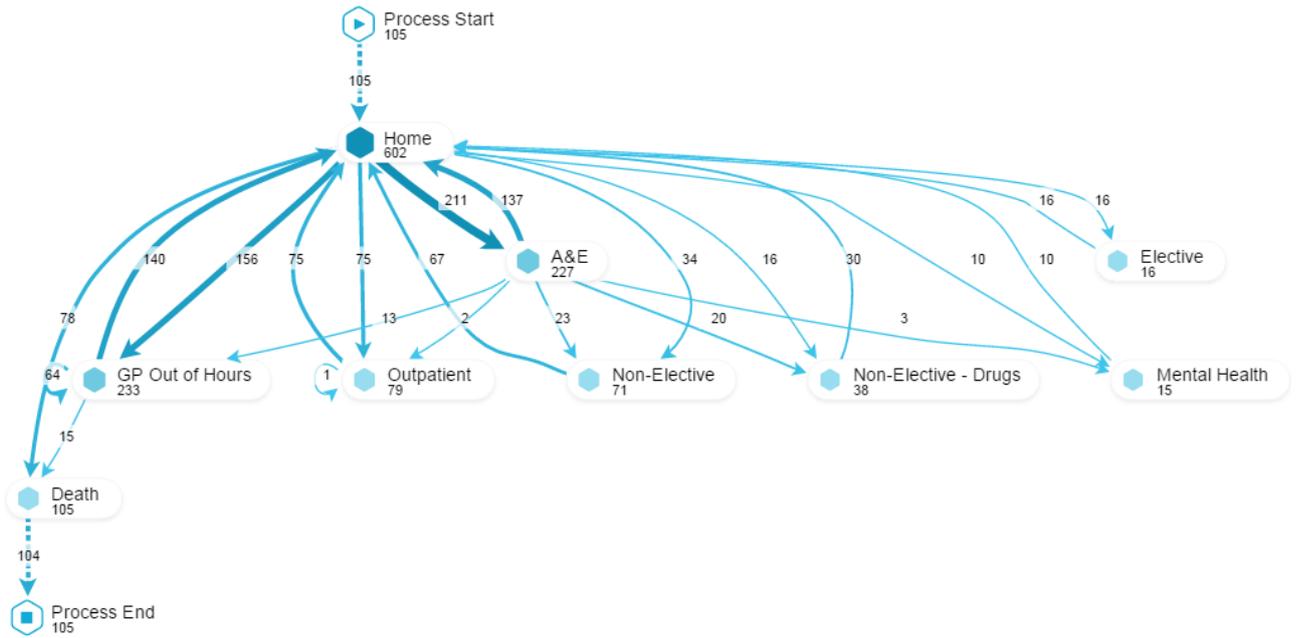


Figure 3b. Number of attendances/admissions for the pre-selected pathway group (98% of activities/93% of pathways).

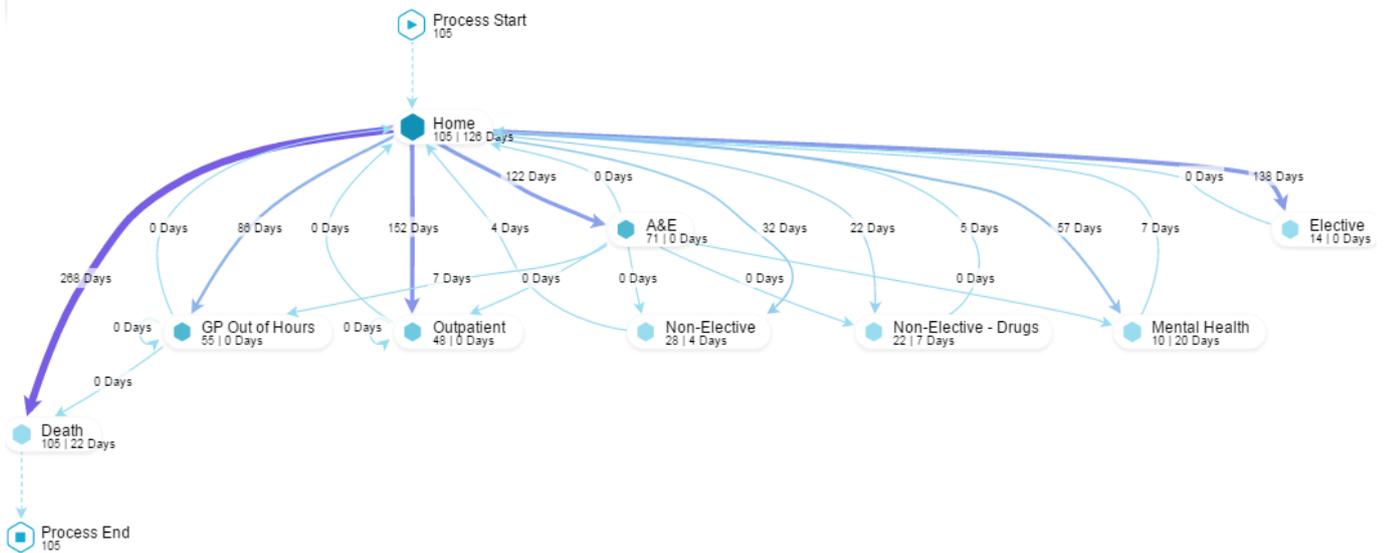


Figure 3c. Average length of time between activities or within an activity (e.g. average length of stay as Non-Elective) for the pre-selected pathway group (97% of activities/94% of pathways).

3. Alcohol Cohort

3.1 Demographics

85 individuals from Aberdeenshire were identified as having died due to an alcohol diagnosis in FY 2017/18. This cohort is predominantly male (**65 individuals**) compared with female (**20 individuals**), with a **mean age 59** and **median age 61**. 54% are aged between 45 and 64, with 25% aged between 65 and 74. 37% of these individuals live in the most deprived quintile in Aberdeenshire.

3.2 Cost and Activity

Over the two years, this cohort of individuals had **220 A&E attendances** (from 62 individuals), **193 GP Out of Hours contacts** (from 58 individuals) and **222 Non-Elective admissions** (from 73 individuals). Over the course of these two years, these individuals spent **2,977 days** in hospital, of which 89% were as acute non-elective. Altogether, the total service use cost was **£1,442,542**. Of this, 87% was for acute non-elective.

Looking at unplanned activity as a time series graph, it's evident that service use increases closer to death.

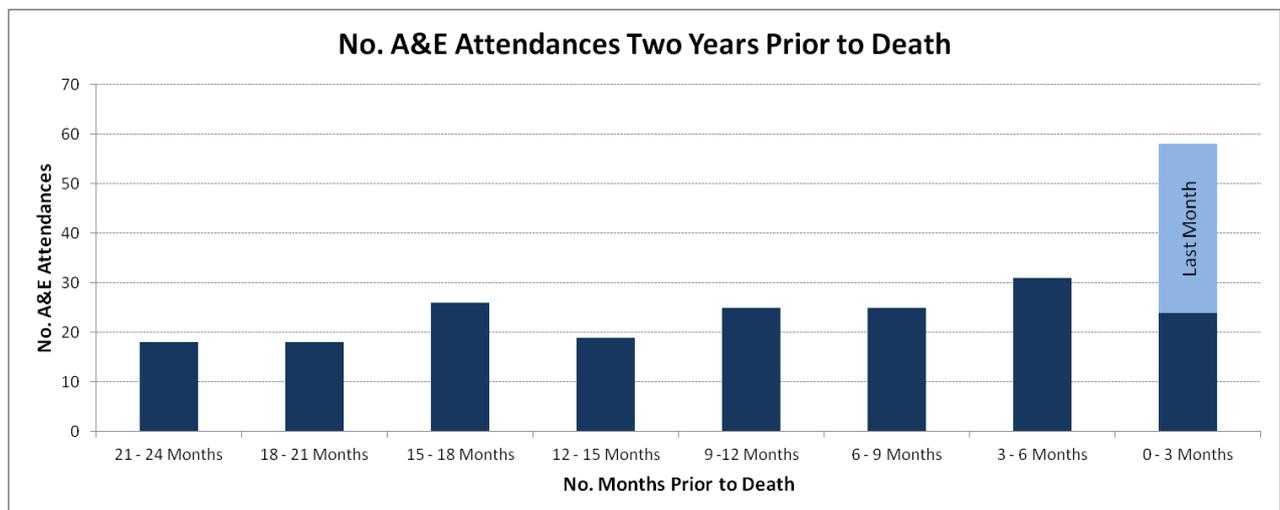


Figure 4. A&E attendances two years prior to death for the Alcohol cohort. The light blue bar is the activity in the last month.

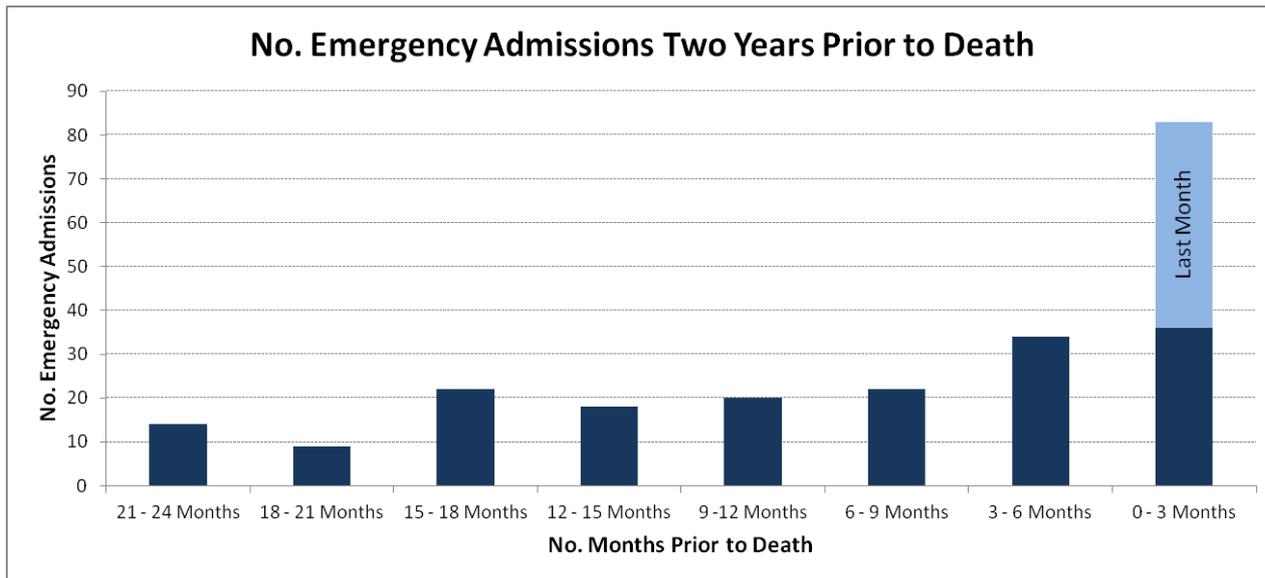


Figure 5. Emergency admissions two years prior to death for the Alcohol cohort. The light blue bar is the activity in the last month.

3.3 Pathways

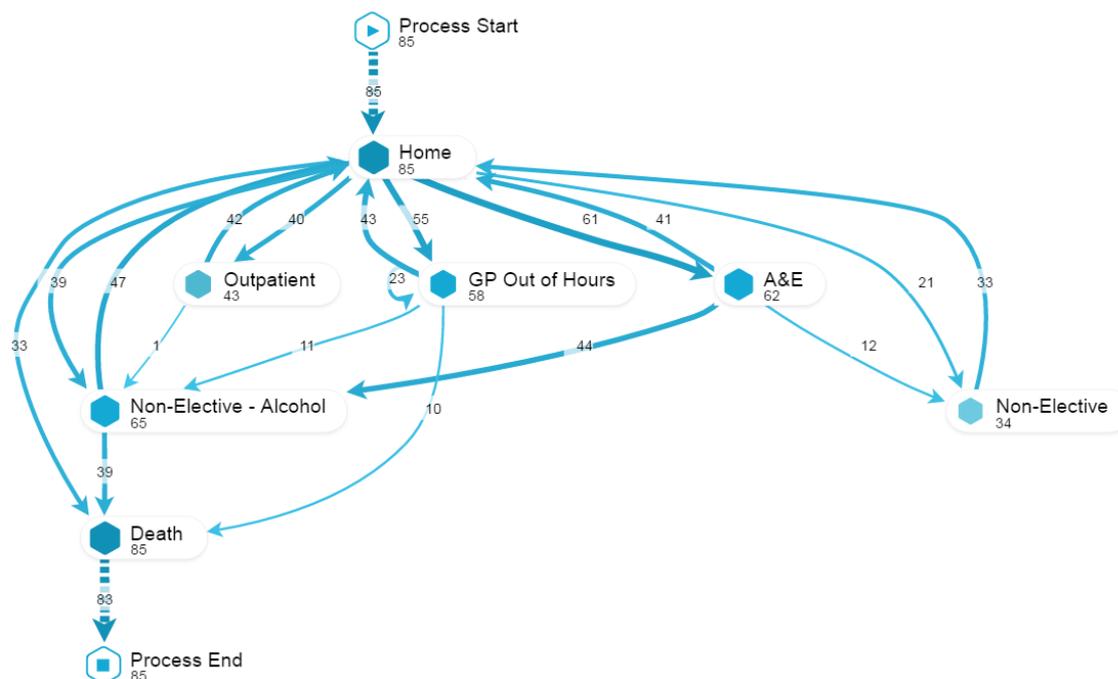


Figure 6a. Celonis pathways for the Alcohol cohort – showing the number of individuals to each service. In this case, 97% of activities and 91% of all possible pathways.

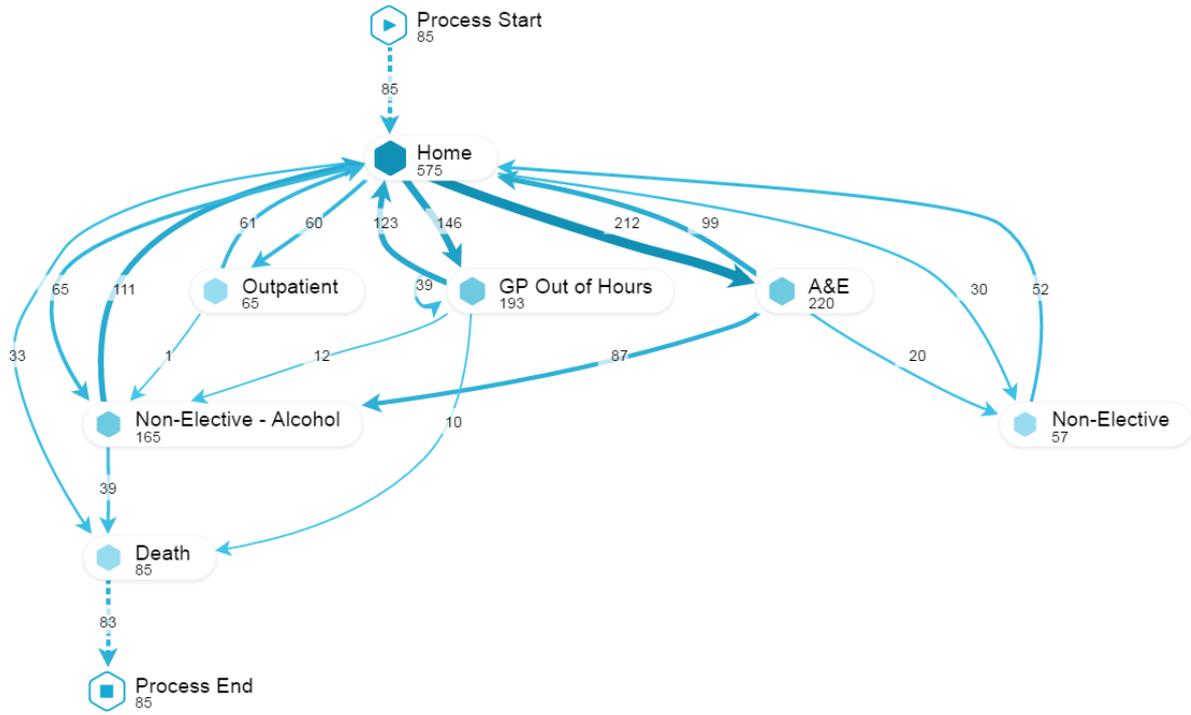


Figure 6b. Number of attendances/admissions for the pre-selected pathway group (98% of activities/93% of pathways).

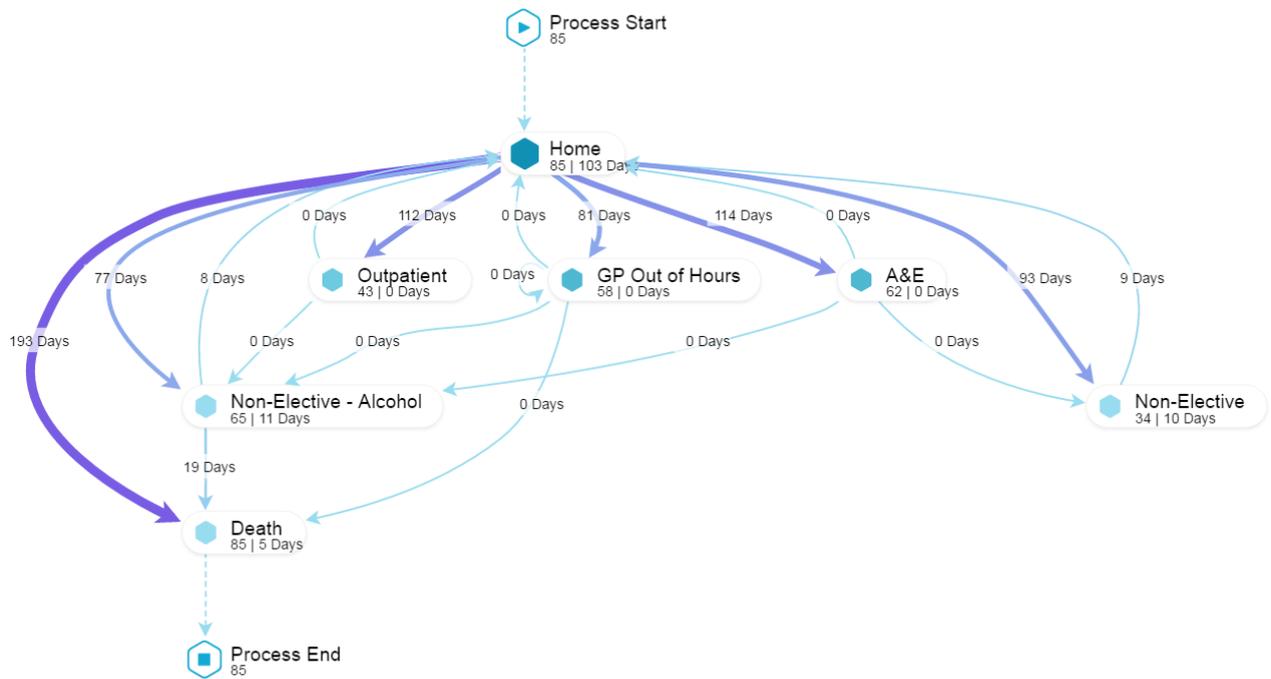


Figure 6c. Average length of time between activities or within an activity (e.g. average length of stay as Non-Elective) for the pre-selected pathway group (98% of activities/93% of pathways).