Background
In England, clients with a personality disorder (PD) accessing mental health services do not follow a predefined linear care pathway as there are multiple access points and multiple service interfaces. As a result, clients are allocated one of a large number of services available to them at any one time. As they progress through their treatment, it becomes increasingly important to track their service use history, as clinicians need to understand their past treatment to inform future decisions. This is particularly important to avoid cyclic pathways, where clients are transferred back and forth between services without clinicians identifying a care pathway that is suitable for them.

Visualization of an individual client’s service use
Carenotes (current visualisation)

Future work
SUT, a visual support tool, has received a positive response from clinicians, and plans are in place for DPT to electronically embed the SUT within DUNDAS BMI (a business intelligence tool developed and maintained internally by DPT), which is linked to and displays up-to-date Carenotes data). Discussions are ongoing to tailor the SUT to the need of the clinicians, including recording additional information in Carenotes. As DPT internally manage DUNDAS BMI, this allows the SUT to be updated as required to meet the needs of the clinicians, rather than having to deal with barriers when using third party software. The information displayed in SUT is only limited by the data recorded in Carenotes, the flexibility of the software and the developer’s availability. The advantages offered by the SUT is not restricted to PD clients, hence SUT will be available for all mental health clients accessing DPT services. Future work is necessary to assess the impact of introducing these SUT to mental health service clinical decision making, and to understand if these translate into a real benefit for PD clients.

Development process
Development of SUT was based on reported techniques to visualise temporal data1, guiding a design that provides clear visualisations (as timelines) of individual client’s service use from routinely collected data available in Carenotes. The initial SUT design was developed on Carenotes data for any client diagnosed with a PD (ICD-10 diagnostic code F60-F61, or a care cluster 7 & 8) recorded between 01-01-2015 and 18-02-2018. This dataset contained fields including ward/team, date stamps and classification of services. Feedback from four separate consultations with DPT staff (e.g. clinicians, nurses, managers and administration), helped identify which data to include and how best to display. An example of the final result is displayed in Fig. 1 Panel B, where features that are currently supported by data collected in Carenotes are displayed alongside those that were requested, but that are not currently available in Carenotes (**).