Tableau User Guide

Source
Overview of Workbooks
V0.4.2
**DOCUMENT CONTROL SHEET**

**Revision History**

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<td>0.1</td>
<td>22/05/17</td>
<td>Initial draft (from RB 5 pager)</td>
<td>Amy Hynd</td>
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<td>0.2</td>
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<td>Minor changes following comments</td>
<td>Rachael Bainbridge</td>
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<td>Minor changes and addition of Source Population and Pathways Matrix</td>
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<td>Additional information on location of death workbook</td>
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**Approvals**  This document requires the following signed approvals.

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DISCLAIMER

All breaches of information security that may have compromised the confidentiality, integrity or availability of Tableau or its information, actual or suspected, must be reported to NSS PHI without delay.

NSS PHI must also be notified of any access to data at a level not previously authorised (including unintentional access).

Additionally all breaches of information security, actual or suspected, should be reported in line with local Information protocols and procedures.

NSS contact details: NSS.Source@nhs.net
INTRODUCTION

Tableau is a business intelligence visualisation interactive software package which will be utilized to present Social Care data, health data and subsequent linked datasets. The Tableau Server Portal will provide access to dashboards published by ISD and workbooks that can be analysed at partnership level.

This document will provide:
- An overview of the content available within Tableau workbooks
- The different levels of access available

There are several workbooks available to a user across a range of years and access levels. There are 3 access levels available –
- Scotland (Level 1),
- Partnership Aggregate (Level 2) and
- Partnership Detail (Level 3).

You will only see information relating to the workbooks that you are authorised for.
A&E

This workbook is only available to those with Level 3 access, Partnership detailed.

The workbook provides information relating to Accident and Emergency departments in Scotland. It includes data from the A&E datamart which is costed using PLICS patient level costing methodology. Information on the number of attendances, number of individuals, and total costs can be found within the dashboards.

Analysis available includes:

- Summary A&E information showing the number of attendances, individuals and total cost by age. Information on multiple attendances is also presented.
- Times series showing the attendance rate and cost per attendance over four financial years. This can be compared with the Scottish attendance rate and cost per attendance over the same period.
- A&E information presented at hospital level. Information includes number of attendances, total cost and cost per attendance.
- A&E information mapped by datazone including the location of hospitals and SIMD details. Information includes number of attendances, number of individuals and total cost.

Delayed Discharge

This workbook is available with Level 1 and Level 2 access, presenting information at Scotland level and Partnership aggregate respectively.

Information presented includes number of delays, occupied bed days and estimates of the financial cost to the hospital sector associated with delayed discharges for each Partnership. Analysis available includes:

- High level summary of measures by financial quarter. Data can be broken down by age group and specialty.
- Detailed information on measures by financial quarter. Measures include Total Resource Consumption, Average Resource Consumption per day and Bed Days Occupied as either numbers or rates per 100,000 people.

Data in these dashboards are sourced from the NHS Cost Book and the Delayed Discharged database (EDISON).
Health & Social Care Expenditure

This workbook is available with Level 1 and Level 2 access with information available at Scotland level and Partnership aggregate respectively.

The workbook provides a high level overview of expenditure across the health and social care sectors. This workbook uses costs from the NHS Cost Book and the Local Authority Social Care Finance Return (LFR3) and apportions or ‘maps’ these costs to the relevant annual activity. Analysis available includes:

- Expenditure overview by year, split down into sectors / subsectors.
- Partnership breakdown by financial year.
- Expenditure per capita, comparison across partnerships.
- Variation in Health / Social Care split across partnerships.
- Expenditure change across financial years.
- Expenditure change, comparison across partnerships.

Hospital Expenditure & Activity

This workbook is only available to those with Level 3 access, Partnership detailed.

The workbook looks at hospital inpatient and day case activity and the costs associated with this. It includes data from General Acute, Geriatric Long Stay and Mental Health specialties which is costed using PLICS patient level costing methodology. Analysis includes:

- Overview of hospital activity and expenditure for Partnerships within the Health Board region.
- Comparison of hospital activity and expenditure by specialty for selected Partnerships and Health Board region.
Hospital level expenditure and activity for hospitals within and outwith the Health Board region.

Overview of hospital activity and expenditure for GP practices within the Partnership area.

Comparison of hospital activity and expenditure for selected GP practices, with split by specialty.

Detailed overview of hospital activity and expenditure for a selected GP practice by specialty.

Lookup of practices within the Partnership area, including NRAC practice populations used in analysis.

High Resource Individuals (HRIs)

This workbook is only available to those with Level 3 Partnership detailed access.

High resource individuals were identified as the highest resource users who collectively account for a set percentage of the total health expenditure of their Partnership area. The health costs included in the analysis include acute inpatient and day case activity, geriatric long stay, mental health and maternity activity, new consultant-led outpatient attendances, accident & emergency and community prescribing. Analysis includes:

- Overview of the number of individuals and expenditure used by the different HRI groups.
- Summary information on bed days, cost and episodes for HRIs compared to other service users.
- Comparison of various measures for HRIs across Partnerships for different service types.
- Mapping of HRIs by datazone within a Partnership. Ability to add on care home locations and a deprivation comparison.
- HRI individuals by gender for a Partnership area.

HRI - Long Term Conditions/ Multi-morbidities

This workbook is only available to those with Level 3 Partnership detailed access.

The workbook looks at the types of long term conditions and multi-morbidities HRIs have compared to other service users. Long term conditions (LTCs) are health conditions that last a year or longer, impacts on a person's life, and may require ongoing care and support. An individual with Multi-morbidity has two or more chronic conditions, in this case two or more LTCs. Analysis available includes:

- Overview of LTCs for different HRI groups, presenting the number of patients, total cost and bed days used.
- Overview of LTCs for the HRI groups broken down by age group.
- Overview of LTC multimorbidity and the proportions of additional LTCs by HRI group.
- A more detailed view of LTC multi-morbidities, looking at which additional LTCs are most common and any differences between the HRI groups.
- Analysis looking at proportions of addition LTCs / multi-morbidities for the different LTC groups.
HRI Pathways

This workbook is available with Level 1 and Level 3 access, Scotland level and Partnership detailed respectively.

The workbook demonstrates the movement of groups of individuals over four financial years between different HRI resource groups. Analysis available includes:

- Overview of the number of individuals and expenditure used by the different HRI groups within a Partnership.
- HRI pathways by financial years, presenting the total number of service users, total expenditure, and the flow of total individuals by HRI Group.
- High level summary of HRI Group pathways by financial years. Presents the total number of contacts, total expenditure, and total bed days by services used, and the number of individuals by LTC Group.

Integration Indicators

This workbook is available with Level 2 and Level 3 access, Partnership aggregate and Partnership detailed.

The workbook includes dashboards which presents information on the Core Suite of Integration Indicators. Analysis available includes:

- Overview of the integration indicators by Partnership compared to Scotland.
- Detailed breakdown of annual data for each indicator, time series and Partnership comparison.
- Detailed breakdown of quarterly data for each Partnership, showing trends over time.
- Annual and quarterly breakdown of integration indicators by locality.
Long Term Conditions

This workbook is only available to those with Level 3 Partnership aggregate access.

The workbook includes dashboards which provide information relating to Long Term Conditions (LTCs) in Scotland. LTCs are health conditions that last a year or longer, impacts on a person’s life, and may require ongoing care and support. Analysis includes:

- Overview of individuals who have at least one LTC or no LTC. Measures include the number of individuals, total cost, total bed days broken down by LTC.
- Number of patients in each LTC group and the prevalence rate of each individual LTC compared to the Health Board and Scottish prevalence rates.
- Comparison of number of patients, total cost, cost per individual, bed days and bed days per individual by Service Type and LTC.
- Time series comparison of LTC rates over four financial years.
- Detailed comparison of prevalence rates and number of individuals by Gender or SIMD quintile.
- Detailed overview of LTC multi-morbidity by individual LTC.
- Spatial analysis of prevalence rates, number of individuals and total costs by data zone.
Population and Pathways Matrix

This workbook is only available with Level 3 Partnership detailed access.

This workbook presents a classification matrix which segments partnership populations into intuitive user groups. It cross-tabulates a Demographic classification against a Service Use classification to understand who is using NHS services, what services they are interacting with and how they are interacting (e.g. one-off treatment or routine admissions). Selecting one demographic and one service use class, users are provided more in-depth analysis. Analysis available includes:

- Overview of matrix, presenting the number of patients for each cohort alongside their total cost, admissions and bed days used.
- Overview of demographics (gender, age bandings) for selected cohort.
- Overview of costs and activity for selected cohort.
- Overview of long term conditions for selected cohort.

11. Location of Death

This workbook is available with Level 3 Partnership detailed access.

The workbook presents information on the number of deaths per year in Scotland and by Partnerships. The information is broken down to present total number of deaths and proportions of deaths across the following locations: Hospital, Home, Care Home and Inpatient Hospice/Palliative Care Units. Outputs provided include:

- Overview of Location of Death
- Demographics
- Long Term Conditions
- Cause of Death