

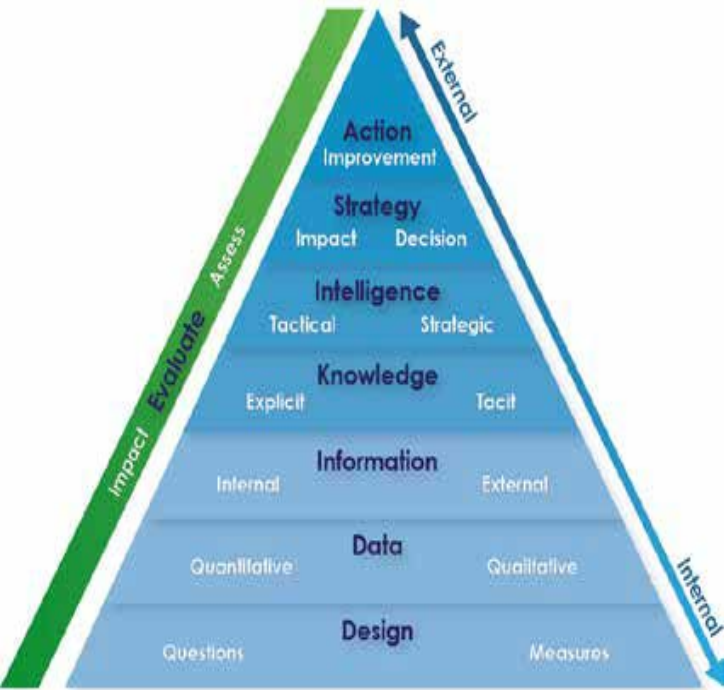
Local
Intelligence
Support Team
(LIST)



Using data to
improve
health and
social care

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What does LIST do?



- Use health & social care data to help our customers:
 - Improve health & social care services
 - Inform strategic planning
 - Respond to local priorities
- Transform data into evidence for action

What does LIST do?

- Employed centrally
 - NSS-ISD
- Work locally
 - In partnership/ council offices (in my case, across the Lothians)
- Customers:
 - Health & Social care partnerships
 - GP clusters



West Lothian
Council

◆ EDINBURGH ◆
THE CITY OF EDINBURGH COUNCIL

Midlothian



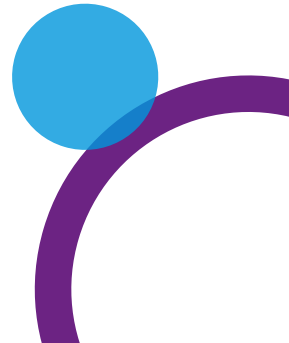
East Lothian
Council

What does LIST do?

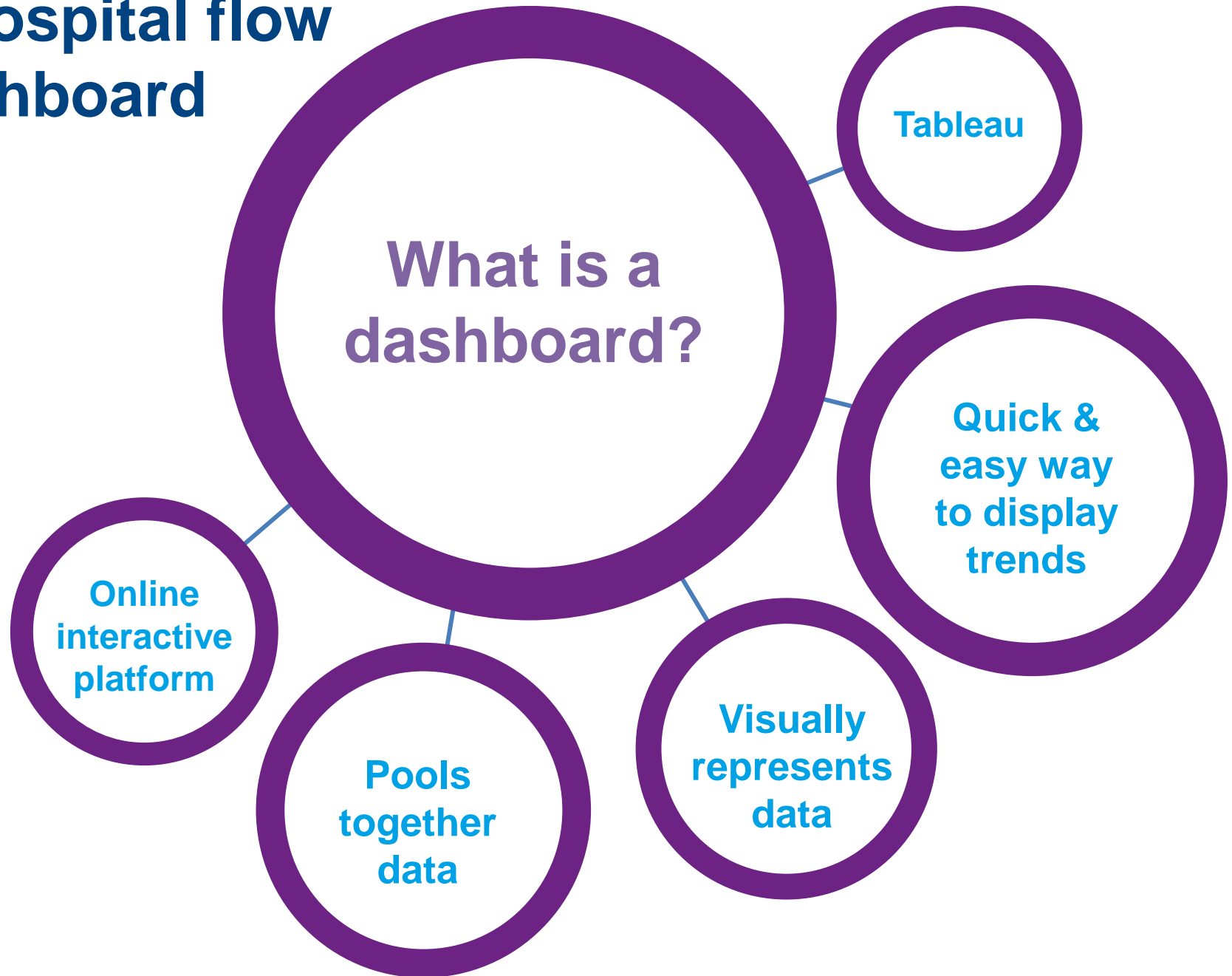
Type of work LIST is involved with

Very wide range including:

1. Hospital flow dashboard
2. Inequalities reports
3. GP work: Riverside Medical Practice



1: Hospital flow dashboard



1: Hospital flow dashboard

Developed with guidance from Edinburgh partnership:

- Steering group with membership across the Lothians for future development

The dashboard:

- Uses TRAK data (council to be added in phase 2)
- Displays in SPC format for easier interpretation of trends
- Interactive to allow greater level of detail

Consolidates & arranges Lothian data in one digital platform.



1: Hospital flow dashboard

Data collection

Data warehouse



Daily data feed

Data visualisation



NHS Lothian TRAK



Council social care systems

Oracle

1: Hospital flow dashboard

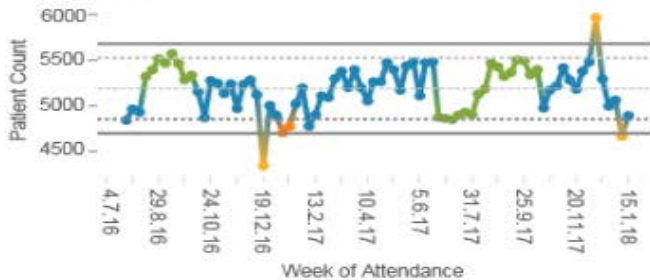
Overview | AE Attendance Dashboard | Admissions Dashboard | Delayed Discharges | Definitions | SPC Help

Partnership

(All)

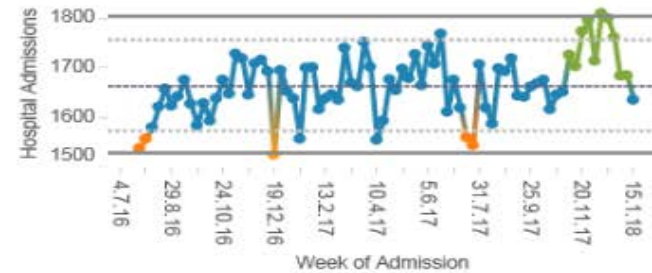
Accident & Emergency

A&E Attendance

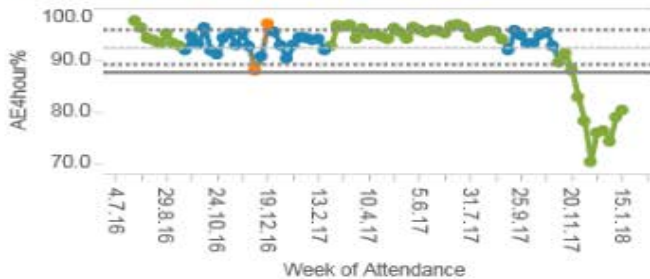


Unplanned Hospital Admissions

All unplanned admissions



% of A&E Attendance meeting 4hour Target



Delayed Discharges




Packages of Care/ Supported Discharge

Coming Soon

■ In Range
 ■ Outer 1/3
 ■ Outlier
 ■ Shift
 ■ Trend

1: Hospital flow dashboard - interactivity

- A&E
 - Attendances
 - 4 hour performance
 - Referral route/ destination
 - Conversion rate to inpatient
- Admissions
 - Planned/ unplanned
 - Specialty
 - Length of stay
 - Midnight bed count
- Delayed Discharges
 - Reason for delay
- Social Care Data
 - Assessment flow
 - Packages of care



Split by hospital,
locality, GP
Practice, age and
gender

Statistical Process Control Chart Interpretation Rules

Data points outside one of the control limits (Outlier):

- 0.3% chance it's caused by the normal process.

Two of three data points outside one of the 2-sigma control limits:

- Probability that any point will fall outside the warning limit ~5%; for two out of three points in a row is ~ 1%.

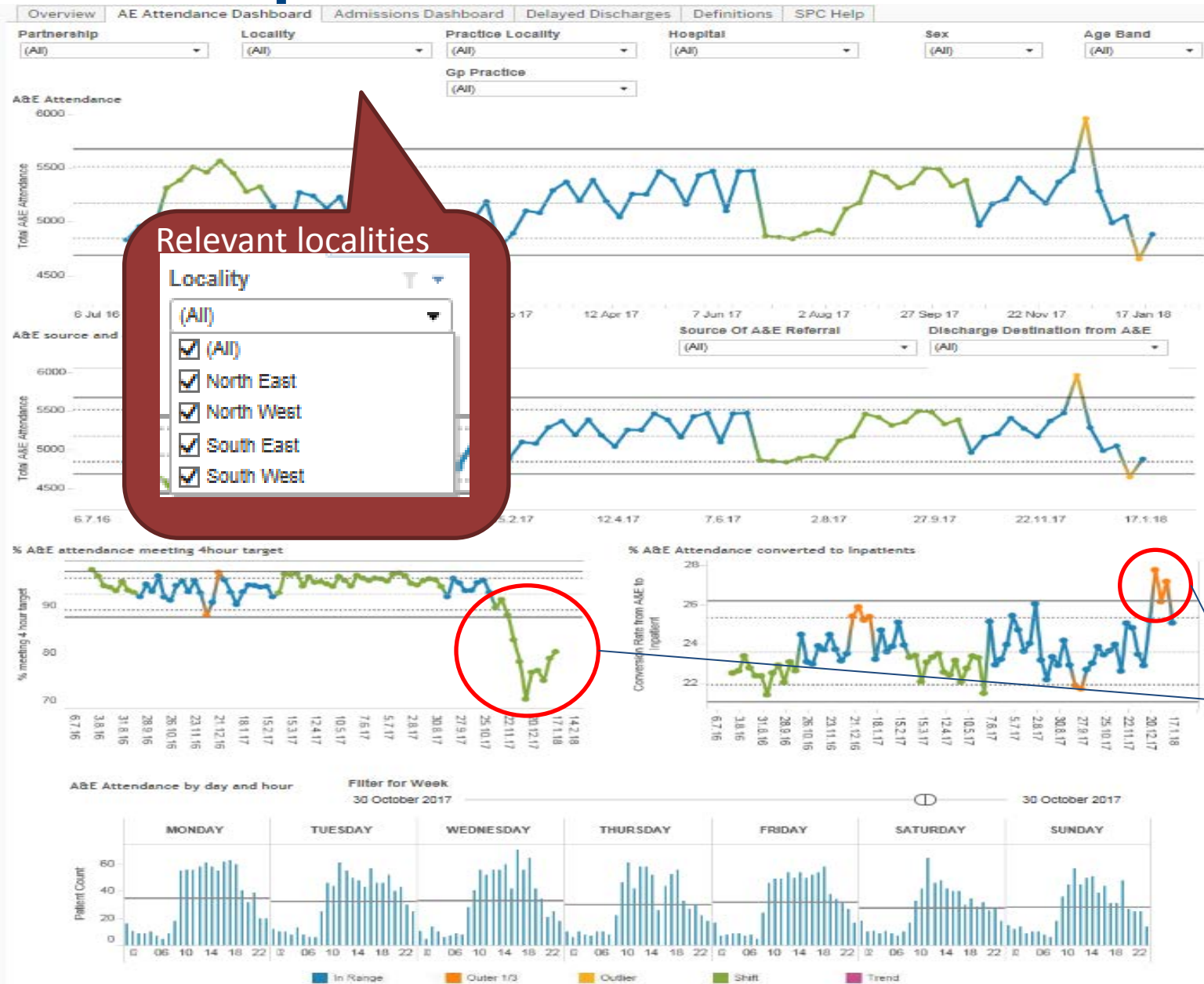
Eight data points in a row on the same side of the centre line (Shift):

- Sometimes 9 or 7 points. The chances that a point falls on the same side of the mean as the one before it is one in two. The probability of getting eight points on the same side is ~ 1%.

Six points in a row increasing or decreasing (Trend):

- Sometimes seven points rising or falling.

1: Hospital flow dashboard - interactivity



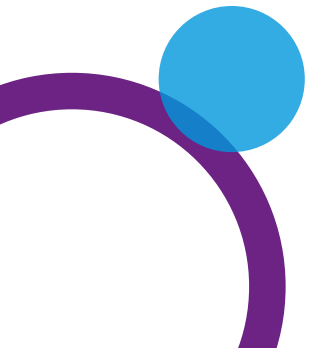
SPC rules broken let localities know unusual variation taking place - sometimes planned interventions, sometimes not!

2: Inequalities report

LIST compiles reports for the integrated joint boards in the four Lothian partnerships

Example: Inequalities report

- Present trends on a number of key indicators of health & social inequalities



2: Inequalities report

13 indicators for the Midlothian inequalities report:

1. Life expectancy of males and females
2. Early all-cause mortality (0-75)
3. Preventable admissions of 16-75 year olds
4. Type 2 diabetes prevalence
5. Mental health prescribing - depression and anxiety
6. 27-30 month check - language acquisition
7. PIPS entry score
8. Primary school attendance
9. S4 average tariff score
10. Adult qualifications
11. Working age population claiming out-of-work benefits
12. Gross weekly pay
13. Percentage of population income deprived



2: Inequalities report

Various data sources, including:

- National Records Scotland (NRS)
- Scotland Public Health Observatory (ScotPho)
- NSS Discovery
- Scottish Care Information Diabetes Collaboration
SCI diabetes
- Office National Statistics (ONS)
NOMIS labour market survey



2: Inequalities report-Life Expectancy

Chart 1: Life expectancy by sex for Midlothian and Scotland, 2002-2015

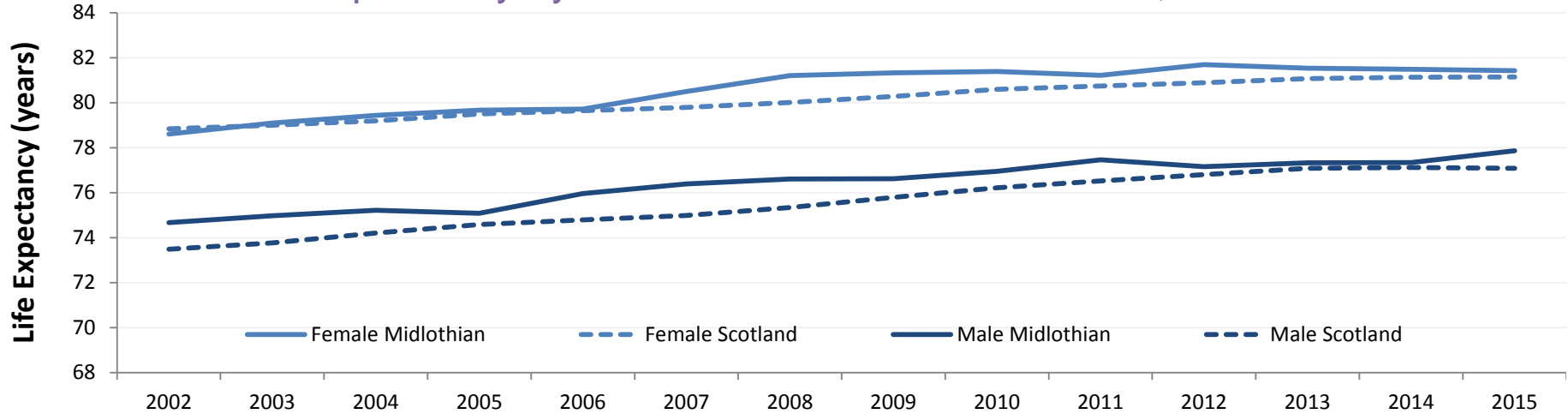
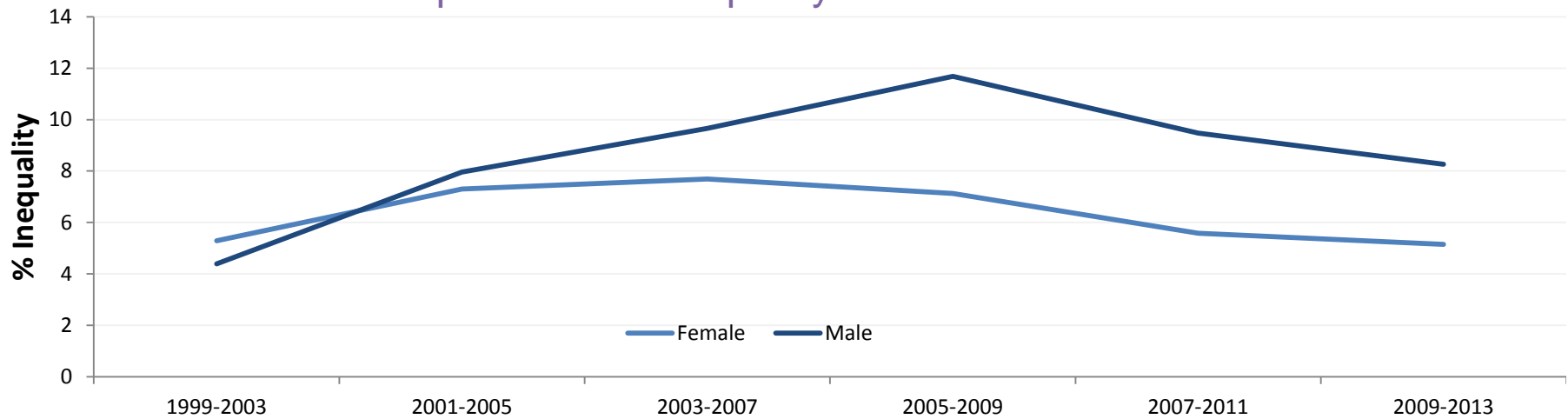


Chart 2: Slope Index of Inequality



Data source: NRS

2: Inequalities report-Out of work benefits

Chart 3: Percentage of working age population claiming out-of-work benefits

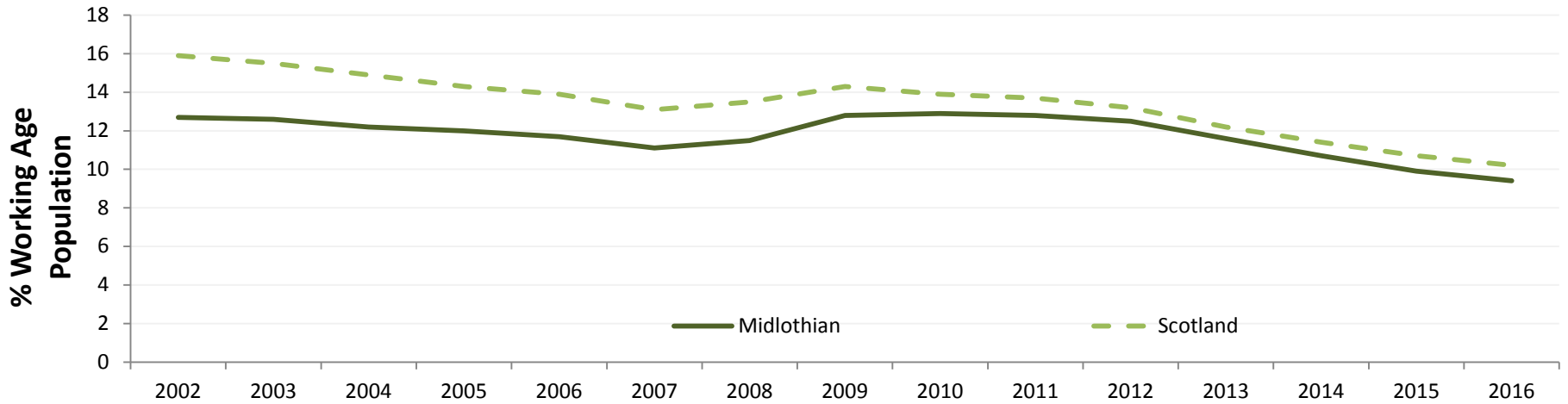
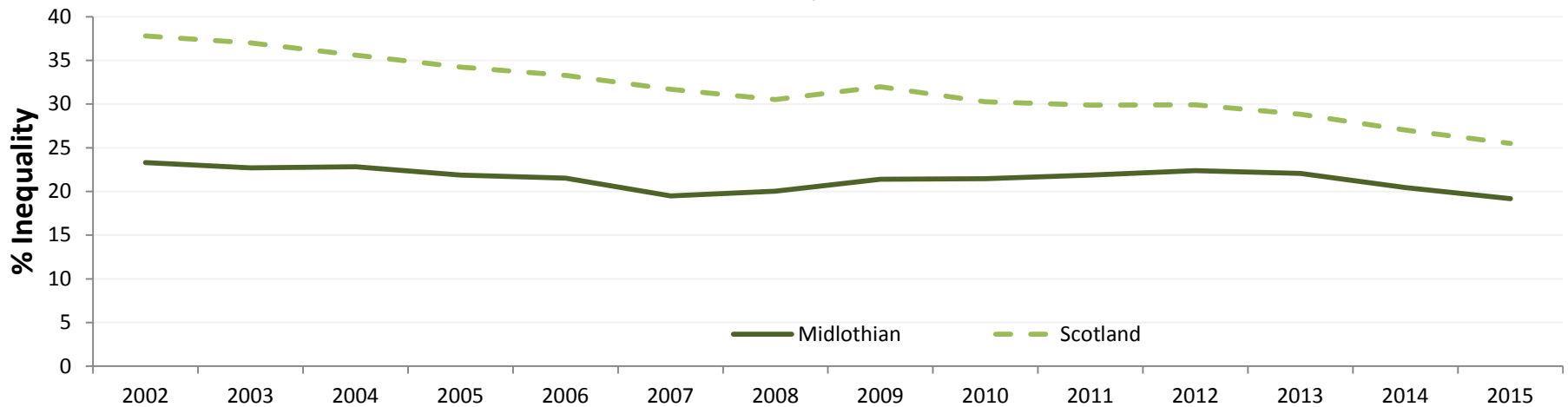


Chart 4: Slope Index of Inequality



3: GP work - Riverside Medical Practice.

Background

Merger: Eskbridge Practice + Riverside Practice
- January 29th 2018



- Greater Riverside Medical practice
 - 19,000 patients and growing
- Based in Musselburgh Primary Care Centre
 - Multi disciplinary team
 - GPs & Nurses
 - Nurse practitioner, physiotherapists, mental health occupational therapists & mental health practitioners.



3: GP work - Riverside Medical Practice.

Concern:

Riverside & Eskbridge already struggle

- Riverside reception ~ 40 calls/hr
- GP & Nurses appointments high unmet demand
- Large and growing patient list
- Struggle to
 - meet demand for acute care
 - manage chronic and complex care patient needs



3: GP work - Riverside Medical Practice.

Quality improvement project: New patient pathway

Initial point of contact:

- Interactive voice response system, select option:

Acute:

Improved telephone triage

Refer directly to secondary care services

wider multidisciplinary workforce

Same day appointment

Chronic:

increase number of GP appointments

increase the length of appointments to 15 to 20 minutes.

3: GP work - Riverside Medical Practice.

How is LIST involved?

- Data collected for 18 month prior merge → Jan/2019
 - number of calls to reception, requests for GP, nurse, physiotherapy, orthopaedic, & mental health apps, unmet demand

Analyse data at ~6 month intervals

- More referrals to secondary services?
- Less unmet demand for GP & nurse app?
- Longer GP appointments?



A decorative graphic consisting of a large purple circle with a smaller blue circle overlapping its left side.

Questions?

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