

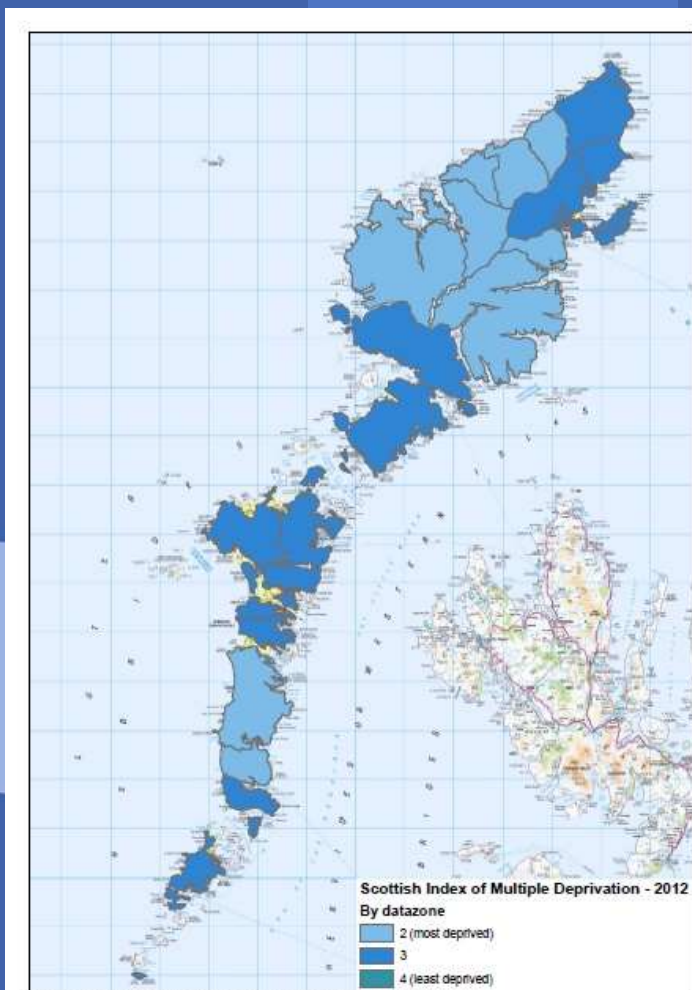
Health Inequalities and Community Profiling in the Western Isles

Martin Malcolm, Head of Public Health Intelligence, NHS Western Isles

Health Inequalities: National approach (SIMD & Targets

Datazones in the 15% most deprived by Health Board, SIMD 2012

Health Board	Total No.	SIMD 2012	
		No. DZs	National
Greater Glasgow & Lanarkshire	1,473	443	45.40%
Ayrshire & Arran	480	95	9.70%
Lothian	992	73	7.50%
Tayside	496	64	6.60%
Fife	453	58	5.90%
Forth Valley	371	39	4.00%
Grampian	684	27	2.80%
Highland	414	27	2.80%
Dumfries & Galloway	193	13	1.30%
Borders	130	5	0.50%
Orkney	27	0	0.00%
Shetland	30	0	0.00%
Western Isles	36	0	0.00%
Scotland	6,505	976	100.00%



Alternatives approaches



Geographical (area-based)

- Use SIMD in local context
- Smaller areas – eg. Census OAs
- Carstairs Index – but car ownership
- Fragile Rural Area Index – H&I
- Via GP Practices?
- Natural communities eg. local health communities

Other than Place

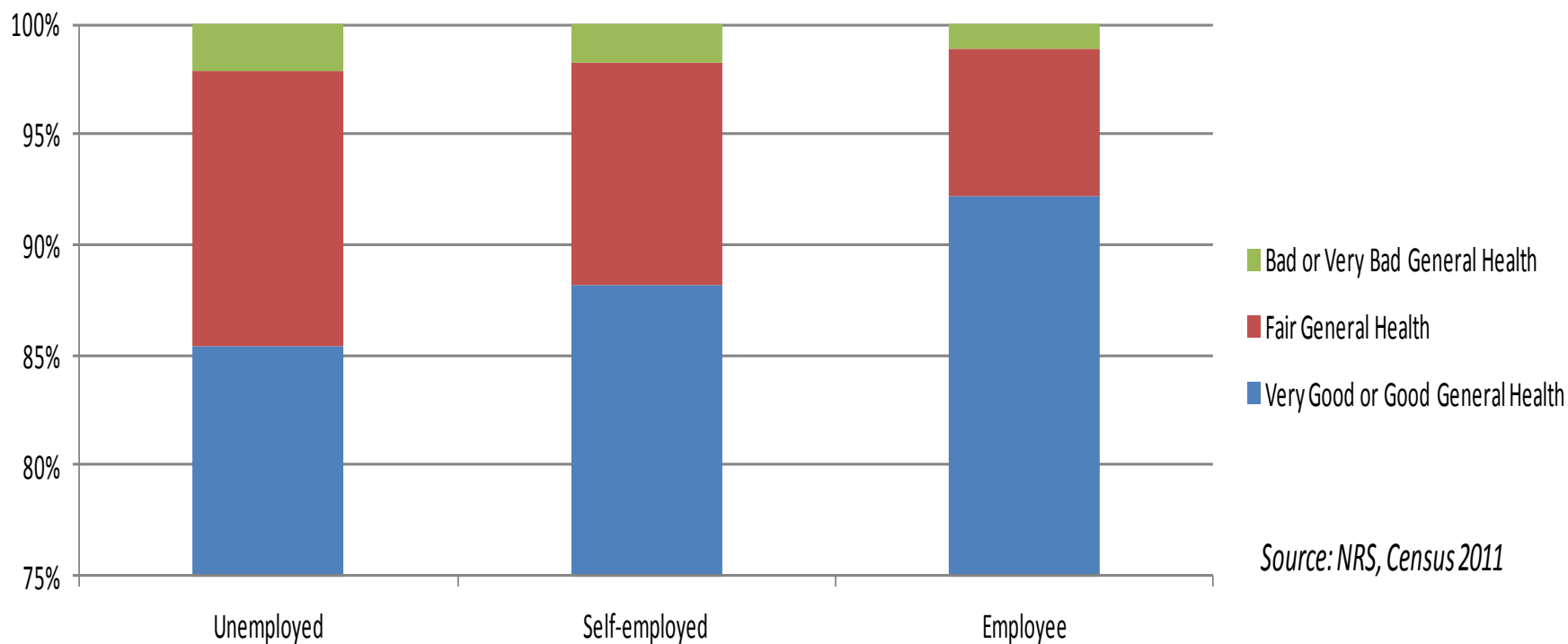
- Target on risk factors of inequality other than place eg. PROGRESS+ factors

PROGRESS + Factors of health disadvantage:

- **P**lace
- **R**eligion
- **O**ccupation
- **G**ender
- **R**ace
- **E**ducation
- **S**ES
- **S**ocial Capital
- **+** Age, disability, migration, etc.

Health Inequalities (PROGRESS+ : Occupation)

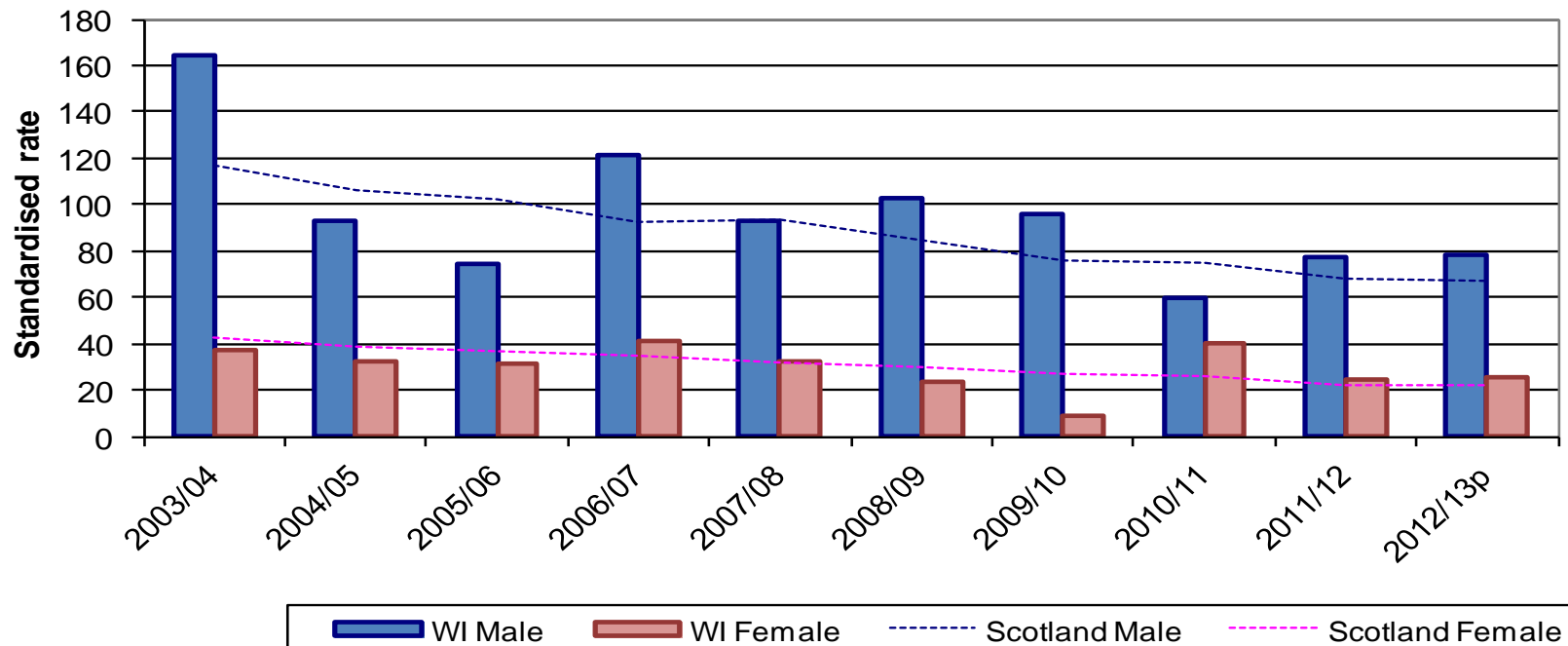
General Health status by Employment Status



Source: NRS, Census 2011

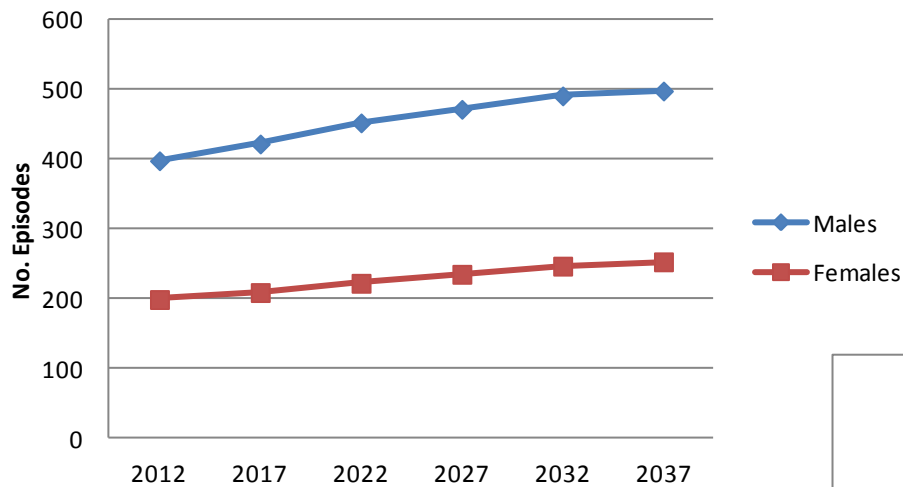
Health Inequalities (PROGRESS+ Gender)

Coronary heart disease mortality age under 75 years 2003/04 - 2012/13, age-sex standardised rate



Gender gaps - LTCs

Western Isles LTC Hospital Episodes, 2012 based projections

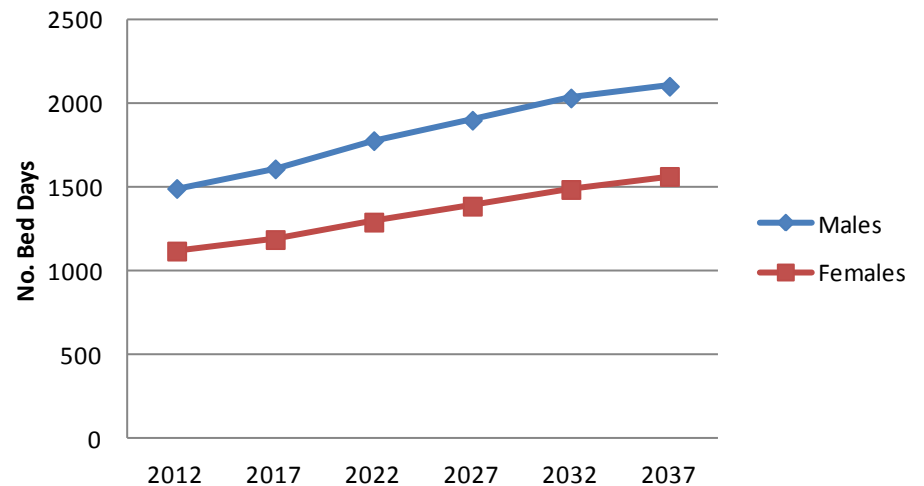


EPISODES

Bed Days



Western Isles LTC Hospital Bed Days, 2012 based projections



Rural Health Inequalities

Others to explore:

- Education group
- Housing type
- Social status – isolated/lonely
- migrants v. Indigenous
- Place – but based on natural communities

Health Profiling WI Communities



- Mapping PH domains/Indicators
- Based on 6 Community areas (pop. <250 to >2,000)
- Visualisation/presentation - mapping
- Uses:
 - Community Profiling for locality planning
 - health Inequalities intelligence

Profile Domains



Public Health Outcome Domains	ScotPHO Outcome Domains
Health Improvement	Behaviours
	Women's and Children's Health
Health Protection	Women's and Children's Health
Healthcare & Premature Mortality	Ill Health and Injury
	Mortality
Wider Determinants	Population

Indicators



Healthcare & Premature Mortality

Average length of stay - non routine admission

Average length of stay - routine admissions

Emergency admissions

RTA casualties

Hospital admissions for heart attack

Patients hospitalised with cerebrovascular disease

Patients hospitalised with CHD

PPAs

Prevalence of asthma

Prevalence of cancer

Prevalence of cardiovascular disease

Prevalence of chronic kidney disease

Prevalence of COPD

Prevalence of coronary heart disease

Prevalence of depression

Prevalence of diabetes

Prevalence of heart failure

Prevalence of hypo thyroidism

Prevalence hypertension

Prevalence of stroke/TIA

<75 mortality from cancer

<75 mortality from CVD

<75 mortality from CHD

<75 mortality from liver disease

<75 mortality from respiratory disease

Excess winter deaths

Health Improvement

Prevalence of obesity

Prevalence of smoking

Weekly alcohol consumption - Well North

Exclusively breastfed at 6-8 week review

Low birth weight

Primary 1 BMI

Health Protection

HPV

5 in 1 at 2 years

MMR immunisation at 2 years

MMR immunisation at 5 years

Cervical screening

Wider determinants

Population (split by age groups, <=15, 16-64, 65+)

Number of births

Number of deaths

Population change (split by age groups, <=15, 16-64, 65+)

Community Profiles

Community Health Profile

Harris



INDEX

Public Health Domain: Healthcare & premature mortality

ScotPHO Domain: Behaviours

- [1. Prevalence of obesity](#)
- [2. Prevalence of smoking](#)
- [3. Weekly alcohol consumption above recommended limits – Well North](#)

ScotPHO Domain: Ill health & injury

- [4. Average length of stay – Non routine admissions](#)
- [5. Average length of stay – Routine admissions](#)
- [6. Emergency admissions](#)
- [7. Patients hospitalised following a road traffic accident \(RTA\)](#)
- [8. Patients hospitalised following a heart attack](#)
- [9. Patients hospitalised with cerebrovascular disease](#)
- [10. Patients hospitalised with coronary heart disease \(CHD\)](#)
- [11. Potentially preventable admissions \(PPAs\)](#)
- [12. Prevalence of asthma](#)
- [13. Prevalence of cancer](#)
- [14. Prevalence of cardiovascular disease \(CVD\)](#)
- [15. Prevalence of chronic kidney disease](#)
- [16. Prevalence of chronic obstructive pulmonary disease \(COPD\)](#)
- [17. Prevalence of coronary heart disease \(CHD\)](#)
- [18. Prevalence of depression](#)
- [19. Prevalence of diabetes](#)
- [20. Prevalence of heart failure](#)
- [21. Prevalence of hypothyroidism](#)
- [22. Prevalence of hypertension](#)
- [23. Prevalence of stroke/transient ischaemic attack \(TIA\)](#)

ScotPHO Domain: Mortality

- [24. Early death from cancer \(<75 years\)](#)
- [25. Early death from cerebrovascular disease \(<75 years\)](#)
- [26. Early death from coronary heart disease \(CHD\) \(<75 years\)](#)
- [27. Early death from liver disease \(<75 years\)](#)
- [28. Early death from respiratory disease \(<75 years\)](#)
- [29. Excess winter deaths](#)

Public Health Domain: Health Improvement

ScotPHO Domain: Women and children's health

- [30. Exclusively breastfed at 6-8 weeks](#)
- [31. Low birth weight](#)
- [32. Primary 1 children at risk of being overweight or obese](#)

Public Health Domain: Health Protection

ScotPHO Domain: Women and children's health

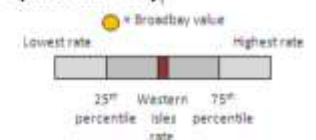
- [33. Completed HPV course](#)
- [34. Completed 5 in 1 immunisation by 24 months](#)
- [35. Uptake of 1 dose of MMR by 24 months](#)
- [36. Uptake of 1 dose of MMR by 5 years](#)
- [37. Uptake of cervical screening within last 5.5 years](#)

Public Health Domain: Wider determinants

ScotPHO Domain: Population

- [38. Population aged ≤ 15 years](#)
- [39. Population aged 16-64 years](#)
- [40. Population aged 65+ years](#)
- [41. Birth rate](#)
- [42. Death rate](#)
- [43. Population change 2012-2030 \(aged ≤15 years\)](#)
- [44. Population change 2012-2030 \(aged 16-64 years\)](#)
- [45. Population change 2012-2030 \(aged 65+ years\)](#)

Spine Chart Key

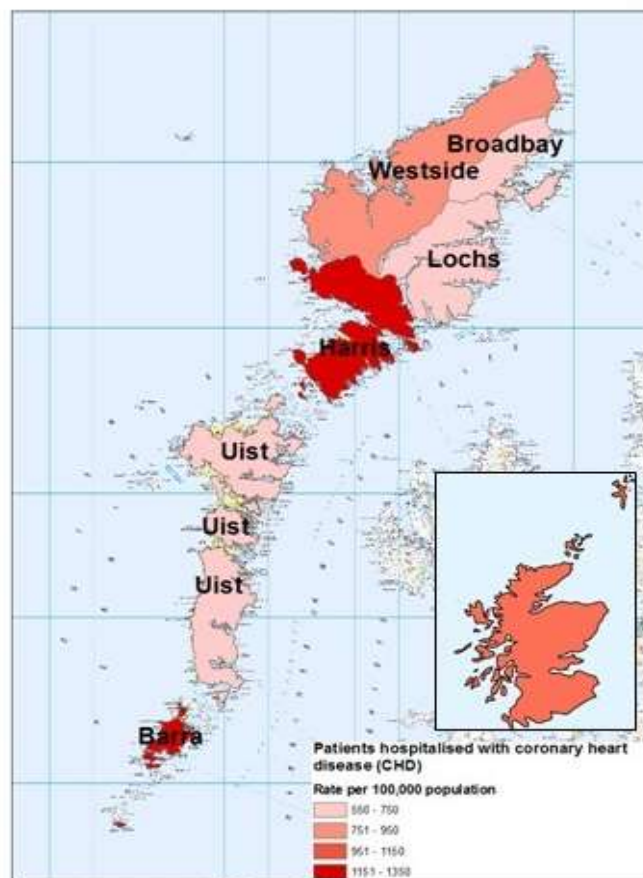


Profile Indicators

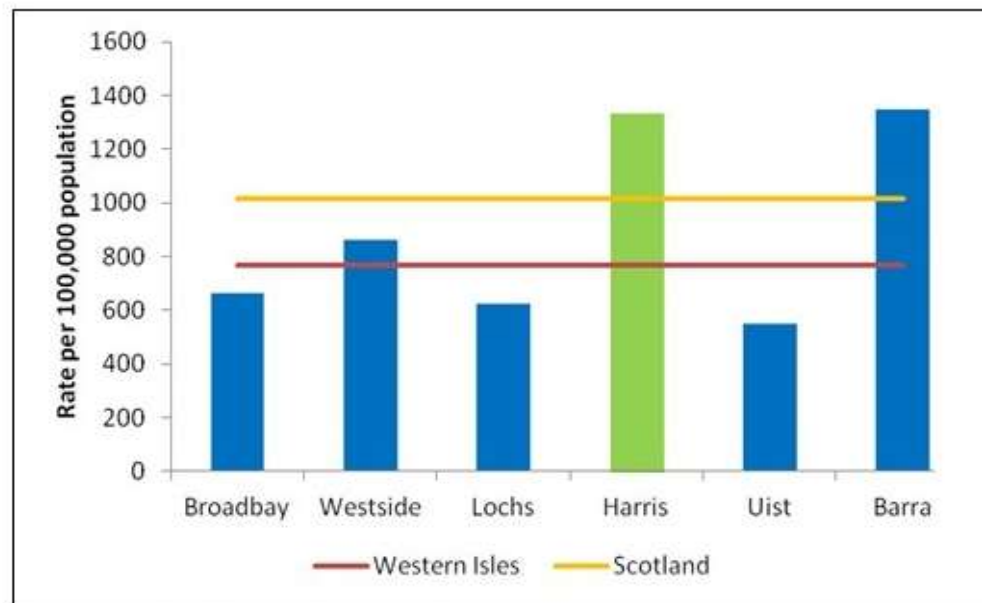
Patients hospitalised with coronary heart disease (CHD)

Public Health Outcome Domain: Healthcare & premature mortality

ScotPHO Domain: Ill health & injury

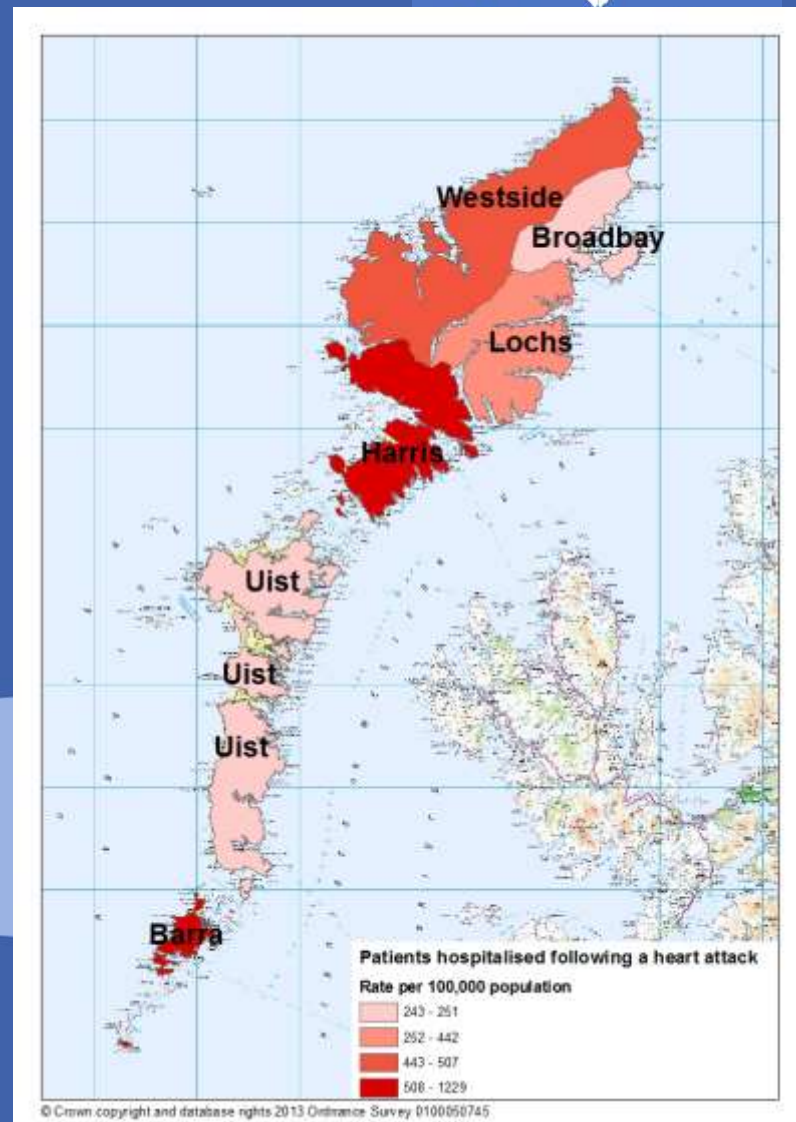
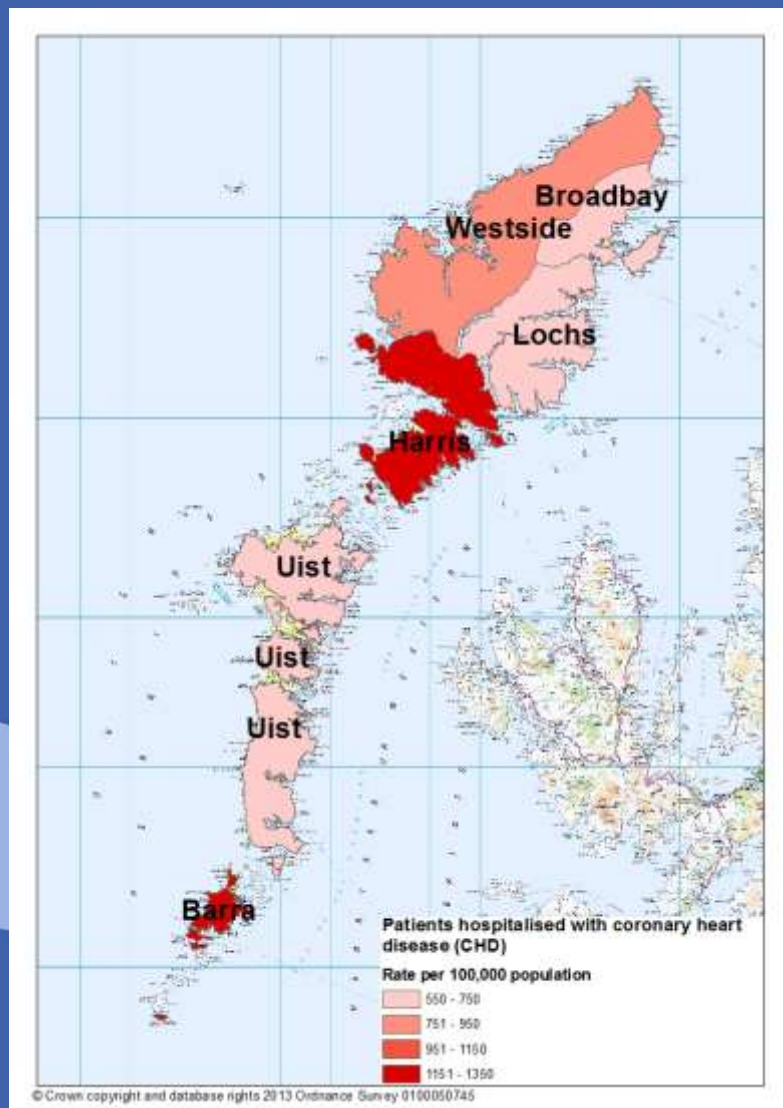


Harris (Rate)	Western Isles (Rate)	Western Isles Lowest	Western Isles Highest
1,332	768	550	1,350

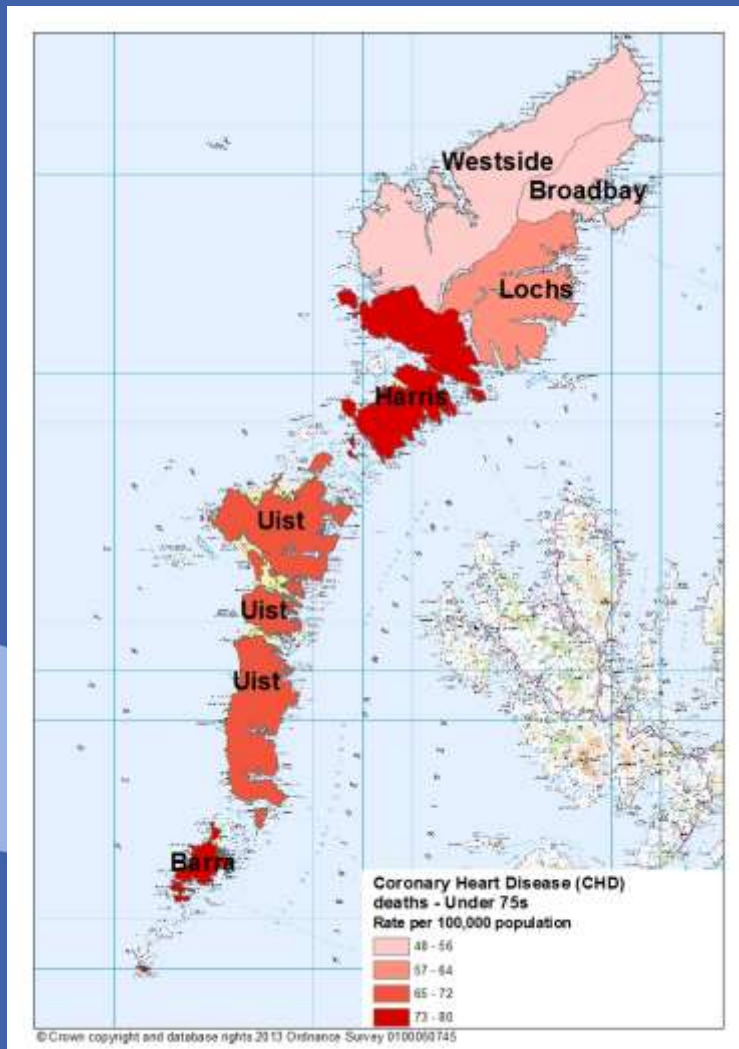


For further details please see [Appendix – 10](#)

Indicators: CHD/Heart Failure admissions



Profile Indicator: CHD/ CVD premature mortality



Developments



- Online Interactive Profiles
- Layered mapping – identify correlations/clusters
- Extended domain indicators

Online Profile Mapping

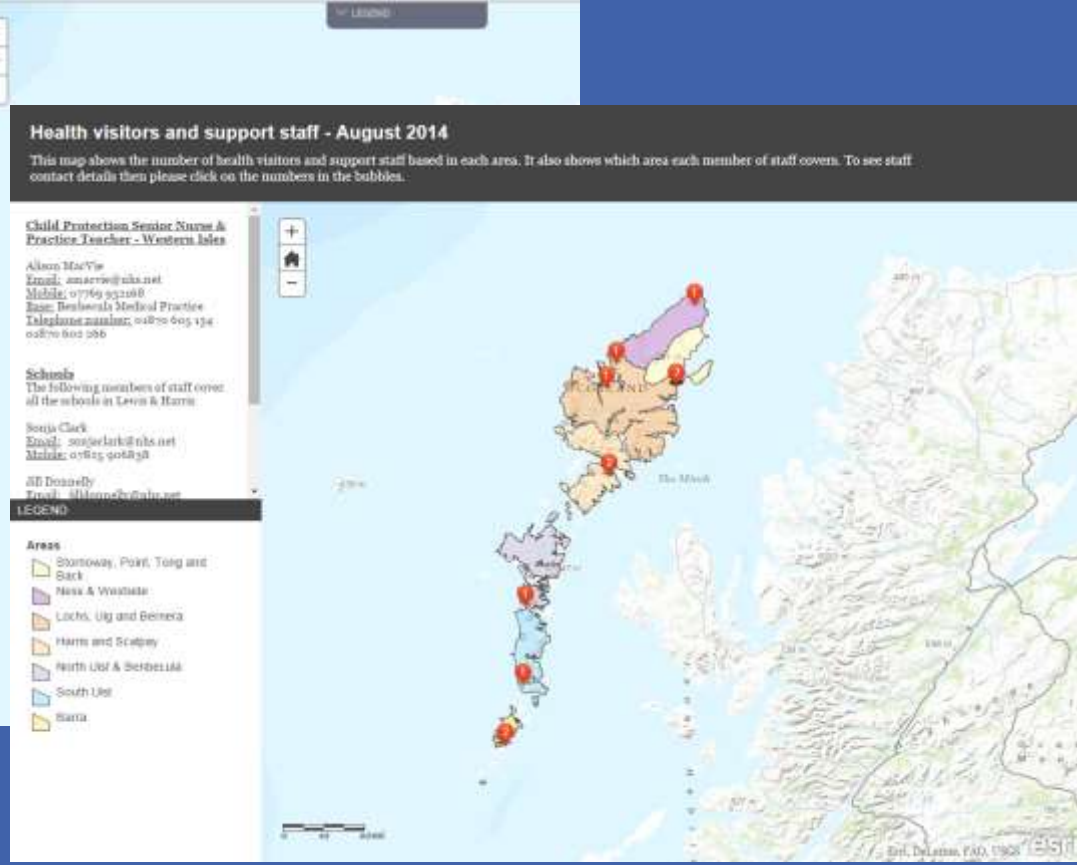
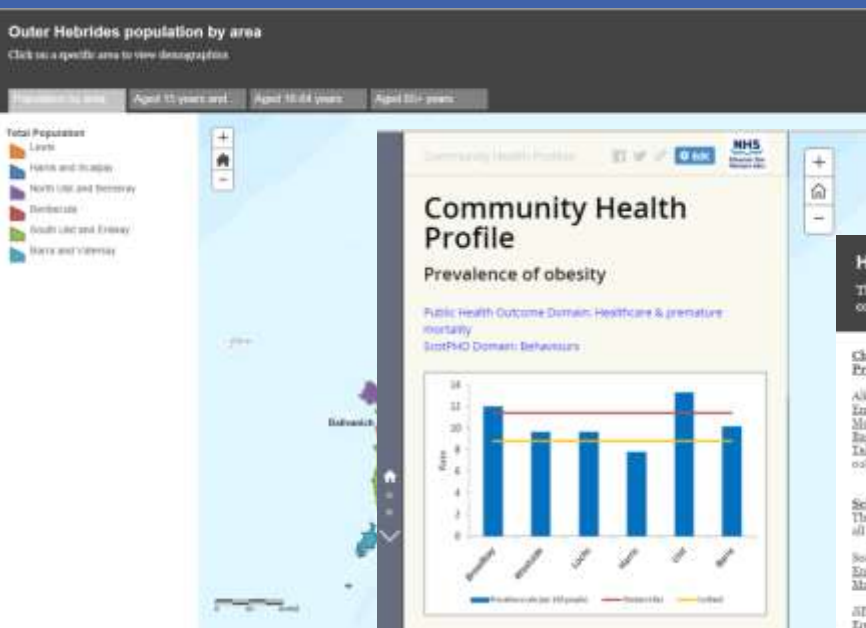


Examples:

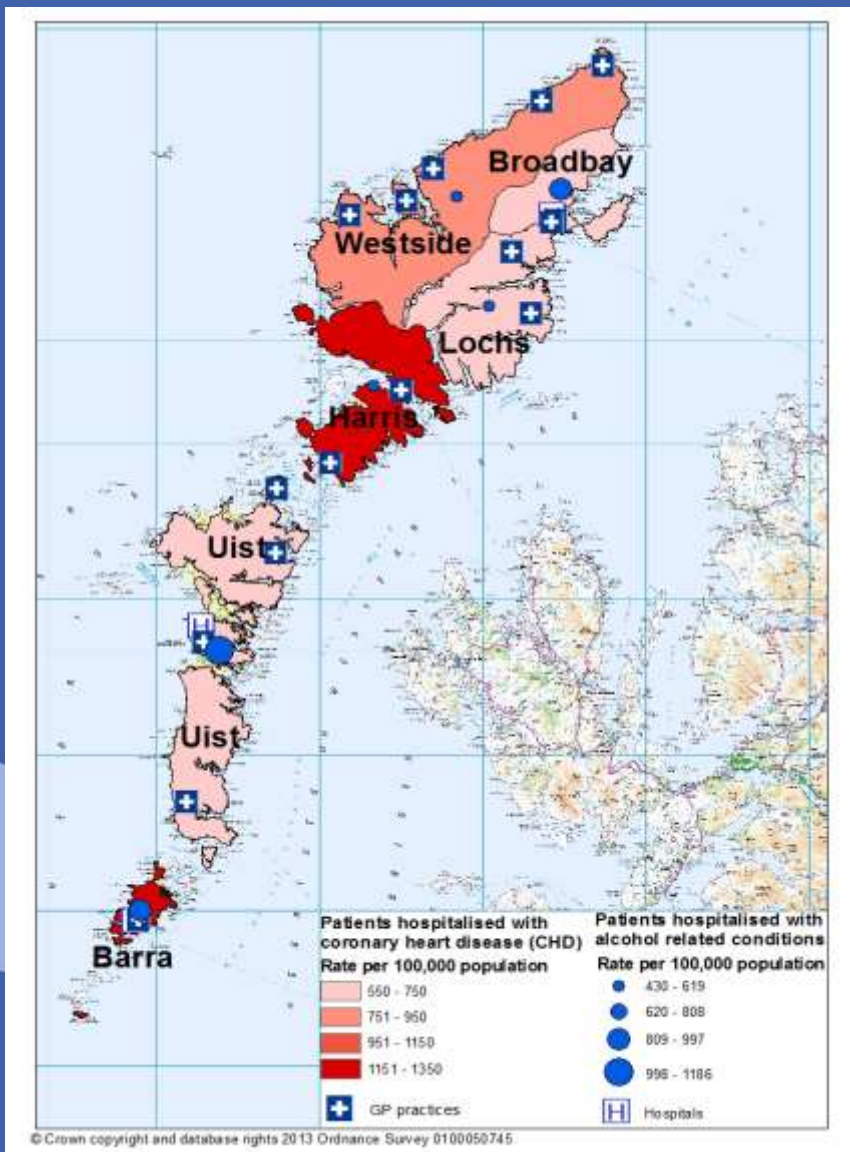
1) Outer Hebrides population by age

2) Community Profiles

3) Health visitors



Visualising potential associations - layering



Extended Profile Domains



E&W Public Health Outcomes Tool	ScotPHO
Healthcare & Premature Mortality	Ill-health and injury Life Expectancy & Mortality Mental Health
Health Improvement	Behaviours Women's and children's Health
Health Protection	Women's and children's Health Immunisations and screening
Wider determinants	Population Social Care & Housing Education Economy Crime Environment Social & economic circumstances



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