

Kent Mental Health & Wellbeing Index

Local Wellbeing Tool

Technical Report

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Produced by

Jessica Mookherjee: Public Health Consultant (Jessica.Mookherjee@kent.gov.uk)

Gerrard Abi-Aad: Head of Public Health Intelligence (Gerrard.Abi-Aad@kent.gov.uk)

Rachel Kennard: Senior Intelligence Analyst (Rachel.Kennard@kent.gov.uk)

Zara Cuccu: Analyst (Zara.Cuccu@kent.gov.uk)

Correspondence to: Rachel Kennard



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| 1. Introduction & objectives

1.1 Introduction

Kent Public Health in KCC has always had an active public mental wellbeing programme. Part of this programme was to have high quality needs assessments. In a previous needs assessment for mental health it was pledged that the team would devise a way of analysing the strengths within a community. The mental wellbeing programme in Kent is committed to developing the local assets in its communities in order to create more health and wellbeing.

In 2010, the Government launched the Measuring National Wellbeing programme with the Office for National Statistics¹ and since further measures of wellbeing have been published. There is a growing body of research exploring wellbeing, and the impact of policy and programmes on wellbeing is being increasingly recognised.

Wellbeing is a key part of the public health agenda. This is why the team developed a comprehensive small area measure of mental health and wellbeing within Kent. This measure will serve a number of purposes, including assessing need, contributing to the preventative response and supporting decision making regarding service provision.

The Kent Mental Health & Wellbeing Index is constructed from 70 measures of a wide range of individual, household and area aspects of wellbeing. It has been constructed at Ward-level, and provides an assessment of the relative assets and vulnerabilities of an area in respect of the mental health and wellbeing of the population within it. The excel-based local wellbeing tool provides a vehicle for the dissemination of the data.

This document provides a detailed description of the approach, the framework used, the indicators selected and the construction of the final index.

1.2 Objectives

The overall objective for this work was to create a local wellbeing index that:

- Provides an objective measure of wellbeing at small-area level.
- Attempts to take into account all aspects of wellbeing.

¹ Office for National Statistics (2016) Measuring National Well-being. <http://bit.ly/29VnZhn>

2. Discovery phase

The project started with a discovery phase, whereby existing, published measures of mental health and wellbeing were reviewed.

A separate document has been produced providing the detailed findings of this review of the literature. The full detail is provided in Appendix A, but the review found that:

A range of publications were identified which measure objective wellbeing. This included; the Wellbeing & Resilience Measure (WARM) for local communities, as well as, the ONS Measure of National Wellbeing and the OECD Regional Wellbeing Indicator.

Frequent components of the mental wellbeing measures focus on individual, household and area level domains. Within these domains, the following indicators have been identified to be associated with wellbeing and frequently used;

- Individual indicators, which explore socio-economic position and health
 - Income
 - Education
 - Employment
 - Health
- Household indicators, which explore relationships and how we spend our time
 - Relationships and family
 - Care giving
 - Community involvement
- Area indicators, which characterise the wider environment
 - Accessibility
 - Local economy
 - Crime,
 - Natural environment.

Other health indicators (such as, obesity) did not feature within the above frameworks. Also, indicators related to health behaviours (such as, smoking, alcohol consumption and diet) did not feature.

The review concluded that

The approach taken should be adapted to suit local need. The domains from the WARM framework could be used, but the most up to date and reliable indicators highlighted within the range of frameworks could be selected.

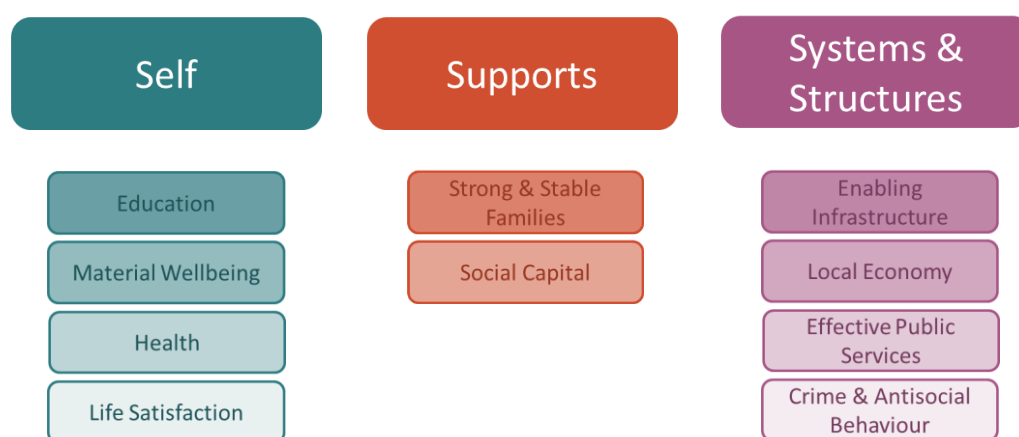
| 3. The approach

3.1 Framework

On the basis of the conclusions drawn from the discovery phase it was decided that the WARM framework domains would be used. This was principally due to suitability of this framework for local assessment at small-area level. Indeed, this was the primary objective of this particular measure of wellbeing. Other frameworks measured wellbeing across larger geographical areas.

The WARM framework is made up of three domains: self, supports, and systems and structures. Underneath these three domains sit 10 sub-domains, as shows in the figure below.

Figure 3.1: WARM framework domains and sub-domains



3.2 Indicator selection

A key aim for indicator selection was to recognise the main, modifiable factors known to influence wellbeing across the life course. The World Health Organisation (WHO), published 'The urban health index: a handbook for its calculation and use', which recommended the following criteria for indicator selection when constructing this type of index:

- built on consensus
- relevant
- valid and reliable
- sensitive to differences
- clear specification
- repeatable.

These principles were used to inform our selection of the individual indicators included within the Kent Mental Health & Wellbeing Index, but it was necessary to sacrifice the ability for frequent repeated measurement in a number of cases. This was principally due to either:

- The need to combine several years' of data to produce robust local estimates
- The need to draw on synthetic estimation methods
- Or, the need to draw on Census data.

Broadly, our approach started by considering the indicators included under each of the ten sub-domains in the WARM framework. The list was then evaluated in the context of:

- the WHO criteria
- relevant indicators from review of the literature for measures of wellbeing (including the OECD Regional Wellbeing Indicator and the ONS Measure of National Wellbeing)
- new sources of data
- expert opinion
- evidence on the commonly recognised elements of wellbeing
- relevance to policy
- statistical and sensitivity analysis (see below).

3.3 Index construction

Again, the WHO recommendations on index construction were used as the start point for the Kent Mental Health & Wellbeing Index.

- Standardising indicators:
 - This is the difference from the indicator value and the minimum of the indicator values divided by the difference between the range of indicator values.
 - The purpose of this step is to adjust for the varying metrics and scales of indicators.
- Sensitivity analysis for the selection of indicators:
 - Indicator correlations were used to inform the final selection of indicators for each sub-domain.
 - The effect of including and excluding indicators on the overall index and ward ranking was considered.
- Producing summary statistics to inspect distribution and quantify gap:
 - This included the mean, median, minimum, maximum, slope of mid-section, 10th and 90th percentile and ratio of top and bottom deciles for each of the ten sub-domains.
 - An index plot was used to visually inspect the range of values for Kent, with the ward names at the high and low ends labelled.

The WHO advocated the use of geometric means for combining indicators to create each sub-domain. It was found that this approach caused distortions in overall Ward rankings. For example, a Ward scoring highly for the majority of indicators, but close to zero for just one would be assigned a very low overall index score. For this reason, arithmetic means have been used to combine indicators within each sub-domain.

Consideration was given to the possibility of weighting individual indicators, and indeed sub-domains, but rejected. This was principally due to a lack of robust and objective information on which to base the assignment of weights to individual indicators². Within each sub-domain, all indicators have the same weight³. Within each of the three domains, each sub-domain has the same weight.

3.4 Consultation

The development process included an extensive consultation phase, whereby expert opinion was sought on the indicators included and the development of the index from a wide range of stakeholders. These included Directors, Heads of Service, commissioners, Public Health specialists, Public Health practitioners, suppliers and analysts from both within and outside of Kent. A draft index was presented to the following groups for their input, and feedback incorporated into the final product:

- Public Health Senior Management Team (SMT)
- Public Health Divisional Management Team (DMT)
- Live Well Steering Group
- KCC Business Intelligence
- South East Public Health Intelligence Group (SEPHIG)
- South East Public Mental Health & Wellbeing Network

² An Analytic Hierarchy Process (AHP) approach was considered as a means of generating weights for individual indicators and/or sub-domains.

³ With the exception of the three indicators on perceptions of personal safety ('walking alone at night', 'walking alone during the day' and 'home alone at night'). In this case these three indicators have each been given a weight of 0.3333.

| 4. Self domain

4.1 Education

What does the evidence say?

There is a body of evidence outlining the relationship between education and wellbeing. Higher education has been found to be positively related to wellbeing⁴. Those with A-levels and below were identified to have lower levels of wellbeing than people with degree level qualifications.⁴ Emotional wellbeing at age 7 was found to be related to higher educational progression from Key Stage 1 to 2 (ages 7 and 11 respectively).⁵ The range of higher childhood wellbeing measures at ages 10 and 13, were positively related to education achievement at Key Stage 2, 3 and 4 (ages 11, 14 and 16 respectively).⁵

Indicators selected

- Attainment: Key Stage 4 pupils
 - % pupils achieving 5+ A*-C GCSEs (including English & Maths) at the end of Key Stage 4, 2014. Source: KCC, MIU.
- Attainment: Early years foundation stage pupils
 - % pupils achieving a good level of development at early years foundation stage, 2014. Source: KCC, MIU.
- Qualification levels in the adult population: Level 2
 - % persons (aged 16+) with a Level 2 qualification (or higher), 2011. Source: Census.
- Qualification levels in the adult population: Level 4
 - % persons (aged 16+) with a Level 4 qualification (or higher), 2011. Source: Census.
- Qualification levels in the adult population: No qualifications*
 - % persons (aged 16+) with no qualifications, 2011. Source: Census.
- Education, skills and training IMD domain*
 - Source: IMD 2015.

* Denotes indicators where the polarity has been reversed
(i.e. high values are associated with poor wellbeing)

⁴ NatCen (2013) Predictors of wellbeing. <http://bit.ly/1r555Zq>

⁵ Childhood Wellbeing Research Centre (2012) The impact of pupil behaviour and wellbeing on educational outcomes. <http://bit.ly/113N2G0>

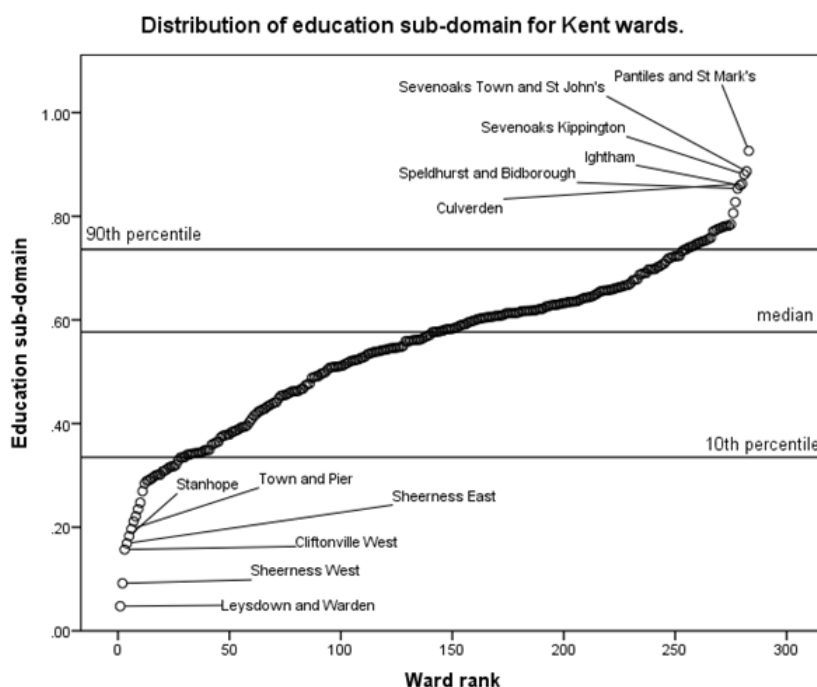
Rationale

The majority of education indicators were directly adopted from the WARM framework and ONS measure. Unlike the WARM framework, we did acknowledge early development within the Kent Mental Health and Wellbeing Index, due to the likely longitudinal relationship with education and wellbeing. Also, the education, skills and training domain⁶ of the Index of Multiple Deprivation, 2015 was selected in preference to the similar domain of the Child Wellbeing Index, which is older and dates back to 2009.

Distribution and summary statistics

The correlation matrix shows positive correlations between the six measures of education at Ward-level. All of the key statistics are within acceptable levels, with the distribution as expected.

	<i>Attainment - GCSE</i>	<i>Attainment - Year R</i>	<i>Qualifications - Level 2</i>	<i>Qualifications - Level 4</i>	<i>Qualifications - None*</i>	<i>Education IMD*</i>
Attainment - GCSE	1					
Attainment - Year R	0.42	1				
Qualifications - Level 2	0.69	0.45	1			
Qualifications - Level 4	0.68	0.41	0.92	1		
Qualifications - None*	0.75	0.36	0.94	0.81	1	
Education IMD*	0.85	0.48	0.88	0.81	0.82	1



Measures of Central Tendency

Mean	0.55
Median	0.58

Measures of Range

Minimum	0.05
Maximum	0.93
Mean of bottom decile	0.26
Mean of top decile	0.79
Ratio of top:bottom decile	3.02
Slope of mid-section	0.002

⁶ This incorporates; Key Stage 2 and Key Stage 4 attainment, secondary school absence, staying on in education post 16, entry to higher education, adult skills and English language proficiency.

4.2 Material wellbeing

What does the evidence say?

The effect of economic disadvantage on wellbeing has been well researched. Employment insecurity from unemployment or temporary work for married and cohabiting couples influence wellbeing.⁷ Also, area unemployment negatively impacts wellbeing, for all residents, including those within employment.⁸ Lower household income has been found to be negatively related to wellbeing.⁹ However, perceived satisfaction with income¹⁰ and relative income¹¹ were also found to be of influence. Across Europe, benefit entitlement and higher public spending have been found to be associated with wellbeing.

Indicators selected

- Income
 - Synthetic estimates of median household income, modelled using Mosaic. Source: Mosaic 2014 (ConsumerView).
- Employment rate
 - % (aged 16-74) in employment, 2011. Source: Census.
- Unemployment rate: age 16-64*
 - Claimant count (%): Age 16-64, Nov 2015. Source: DWP
- Unemployment rate: age 50+*
 - Claimant count (%): Age 50+, Nov 2015. Source: DWP
- Unemployment rate: age 18-24*
 - Claimant count (%): Age 18-24, Nov 2015. Source: DWP
- Working age benefits*
 - % of working age (16-64) claiming benefits, May 2015. Source: DWP.
- Income deprivation: children*
 - % of children affected by income deprivation (IDACI). Source: IMD 2015
- Income deprivation: older people*
 - % of older people affected by income deprivation (IDAOP). Source: IMD 2015.

* Denotes indicators where the polarity has been reversed
(i.e. high values are associated with poor wellbeing)

⁷ Inanc, H. (2016), "Unemployment, temporary work and subjective well-being: Gendered effect of spousal labour market insecurity in the United Kingdom", OECD Statistics Working Papers, <http://bit.ly/2a7iPQC>

⁸ New Economics Foundation (2012) Wellbeing evidence for policy: a review. <http://bit.ly/29IGzcQ>

⁹ NatCen (2013) Predictors of wellbeing. <http://bit.ly/1r555Zq>

¹⁰ The Young Foundation. (2010) The state of happiness: can public policy shape peoples wellbeing and resilience? <http://bit.ly/29Le7Td>

¹¹ New Economics Foundation (2012) Wellbeing evidence for policy: a review. <http://bit.ly/29IGzcQ>

Rationale

The selected range of material wellbeing indicators were considerably modified from those used by WARM framework and ONS. This was to focus on unemployment and income, as opposed to benefit claimants, due to the body of evidence. Therefore, the Kent Mental Health and Wellbeing Index used a single measure of benefits claimants for those of working-age, to replace the series of benefits claimants indicators included under WARM. Furthermore, the income deprivation indices for children¹² and older people¹³ from the Index of Multiple Deprivation, 2015 were selected in preference to the similar domain of the Child Wellbeing Index, which is older and dates back to 2009. Employment rate was included in the OECD Regional Wellbeing Indicator, and has also been included here. It was not possible to source recent, Ward-level data on County Court Judgements.

¹² Children aged 0 to 15 living in income deprived families.

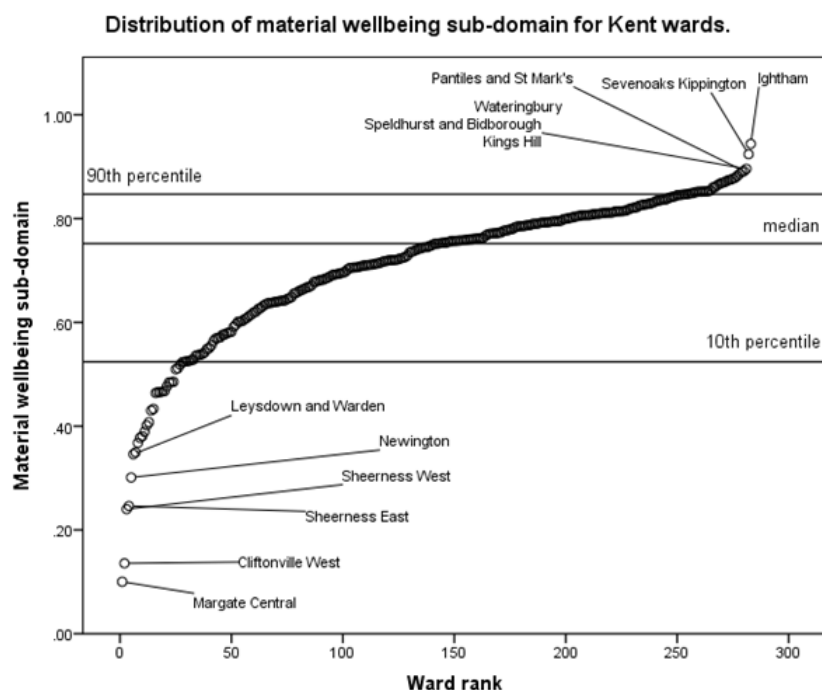
¹³ Those aged 60 or over who experience income deprivation.

Both are subsets of the income deprivation domain which measures the proportion of the population in an area experiencing deprivation relating to low income. The definition of low income includes both those people that are out-of-work and those that are in work but who have low earnings.

Distribution and summary statistics

The correlation matrix shows positive correlations between all eight measures of material wellbeing at Ward-level. All of the key statistics are within acceptable levels, with the distribution as expected.

	Income	Employment rate	Unemployment - age 16-64*	Unemployment - age 50+*	Unemployment - age 18-24*	Working age benefits*	IDACI*	IDAOP1*
Income	1							
Employment rate	0.56	1						
Unemployment - age 16-64*	0.64	0.41	1					
Unemployment - age 50+*	0.57	0.40	0.57	1				
Unemployment - age 18-24*	0.64	0.40	0.64	0.88	1			
Working age benefits*	0.72	0.47	0.41	0.40	0.40	1		
Income deprivation - children*	0.73	0.46	0.93	0.82	0.84	0.46	1	
Income deprivation - older people*	0.69	0.42	0.87	0.73	0.80	0.42	0.89	1



Measures of Central Tendency

Mean	0.71
Median	0.75

Measures of Range

Minimum	0.10
Maximum	0.94
Mean of bottom decile	0.41
Mean of top decile	0.87
Ratio of top:bottom decile	2.15
Slope of mid-section	0.001

4.3 Health

What does the evidence say?

The effect of physical and psychological health on wellbeing has been well researched. Self-reported health and objective health (from the presence of illness or disability) have been linked to wellbeing; with lower wellbeing identified within people with poor self-reported health and longstanding limiting illness.^{14&15} Although, there may be some adaption to chronic illness over time.¹⁵ Psychological health from diagnosed mental disorder (such as, depression, bipolar disorder and schizophrenia) have also been linked to wellbeing.¹⁵ Further, level of wellbeing has been accepted to be protective for life expectancy and mortality.¹⁶

Indicators selected

- Health self-assessment
 - % in 'very good' or 'good' health (self-assessed), 2011. Source: Census.
- Healthy life expectancy: At birth
 - Healthy life expectancy at birth, 2010-2014. Source: ONS (PCMD).
- Health life expectancy: At 65 years
 - Healthy life expectancy at 65 years, 2010-2014. Source: ONS (PCMD).
- Premature mortality*
 - Premature mortality rate (all-cause, age-standardised), 2010-2014. Source: ONS (PCMD).
- Disability*
 - % whose day to day activities are limited by a long term health problem or disability, 2011. Source: Census.
- Depression*
 - (Modelled) % with depression (based on GP-level recorded prevalence), 2014/15. Source: QOF.
- Mental Health problems*
 - (Modelled) % with mental health problems (based on GP-level recorded prevalence), 2014/15. Source: QOF.
- Mental Health contact rates*
 - Mental health contact rates (adults aged 15-64), 2014. Source: K&M NHS.
- Mental Illness Needs Index (MINI)*
 - Mental Illness Needs Index (MINI), 2000. Source: Durham University.
- Hospital admissions: Alcohol*

¹⁴ NatCen (2013) Predictors of wellbeing. <http://bit.ly/1r555Zg>

¹⁵ New Economics Foundation (2012) Wellbeing evidence for policy: a review. <http://bit.ly/29IGzcQ>

¹⁶ Chida, Y & Steptoe, A. (2008). Positive psychological wellbeing and mortality: a quantitative review of prospective observational studies. *Psychosomatic Medicine*, 70(7)741-56

- Alcohol-related hospital admissions (all ages, age-standardised), 2006/07-2014/15. Source: SUS.
- Hospital admissions: Self-harm*
 - Hospital admissions for self-harm (all ages, age-standardised), 2006/07-2014/15. Source: SUS.
- Hospital admissions: Falls*
 - Emergency hospital admissions for falls (65+, age-standardised), 2012-13-2014/15. Source: SUS.
- Health IMD domain*
 - Source: IMD 2015.

* Denotes indicators where the polarity has been reversed
(i.e. high values are associated with poor wellbeing)

Rationale

The selected range of health indicators was considerably extended from those used by WARM framework and ONS. This was to incorporate a wider range of indicators of psychological and physical ill health. Such as, falls and alcohol related hospital admissions as well as, mental health contact rates, the Mental Illness Needs Index (MINI) and the prevalence of mental health problems and depression. The Kent Mental Health and Wellbeing Index does include measures of limiting long term illness and self-assessment of health, as did the WARM framework. We also incorporated healthy life expectancy and premature mortality, as did the OECD Regional Wellbeing Indicator and the ONS Measure of National Wellbeing. Furthermore, the health and disability score from the Index of Multiple Deprivation, 2015 was selected in preference to the similar domain of the Child Wellbeing Index, which is older and dates back to 2009.

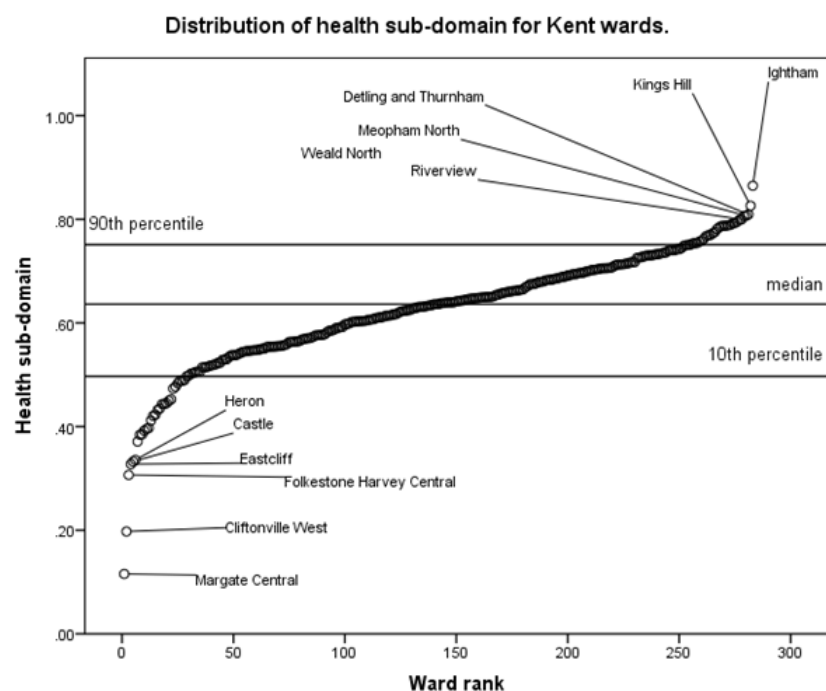
Distribution and summary statistics

The correlation matrix shows mainly positive correlations between the 13 measures of health at Ward-level.

	<i>In good health</i>	<i>HLE - at birth</i>	<i>HLE - at 65</i>	<i>Premature mortality*</i>	<i>Disability*</i>	<i>Depression*</i>	<i>Mental health problems*</i>
In good health	1						
HLE - at birth	0.47	1					
HLE - at 65	0.33	0.92	1				
Premature mortality*	0.48	0.80	0.58	1			
Disability*	0.97	0.38	0.27	0.36	1		
Depression*	0.31	0.08	0.02	0.13	0.14	1	
Mental health problems*	0.17	0.26	0.19	0.30	0.30	0.20	1
Mental health contact rates*	0.59	0.59	0.41	0.69	0.49	0.51	0.51
Mental Illness Needs Index (MINI)*	0.61	0.56	0.38	0.67	0.53	0.16	0.49
Admissions - alcohol*	0.40	0.53	0.33	0.66	0.31	0.52	0.09
Admissions - self-harm*	0.41	0.49	0.32	0.60	0.31	-0.04	0.17
Admissions - falls*	-0.20	0.11	0.16	0.03	-0.21	0.16	-0.07
Health IMD*	0.76	0.68	0.50	0.76	0.66	0.45	0.23

	<i>Mental health contact rates*</i>	<i>Mental Illness Needs Index (MINI)*</i>	<i>Admissions - alcohol*</i>	<i>Admissions - self-harm*</i>	<i>Admissions - falls*</i>	<i>Health IMD*</i>
In good health						
HLE - at birth						
HLE - at 65						
Premature mortality*						
Disability*						
Depression*						
Mental health problems*						
Mental health contact rates*	1					
Mental Illness Needs Index (MINI)*	0.79	1				
Admissions - alcohol*	0.78	0.69	1			
Admissions - self-harm*	0.30	0.65	0.33	1		
Admissions - falls*	0.05	-0.03	0.23	0.89	1	
Health IMD*	0.80	0.81	0.66	-0.02	-0.12	1

All of the key statistics are within acceptable levels, with the distribution as expected.



Measures of Central Tendency	
Mean	0.62
Median	0.64
Measures of Range	
Minimum	0.12
Maximum	0.86
Mean of bottom decile	0.40
Mean of top decile	0.78
Ratio of top:bottom decile	1.94
Slope of mid-section	0.001

4.4 Life satisfaction

What does the evidence say?

Indicators of subjective wellbeing from an individual's personal assessment of their life, has been highlighted as a fundamental indicator, even though an individual's perception may not fully capture actual circumstances. Limitations of this measure may include personal adaption to the environment and sensitivity to change in wellbeing¹⁷.

Indicators selected

- Low 'life satisfaction'*
 - Synthetic estimates of the percentage scoring 0-6 for "Overall, how satisfied are you with your life nowadays?", modelled using Acorn. Source: ONS (Annual Population Survey & Acorn), 2011/12.
- Low 'happy yesterday'*
 - Synthetic estimates of the percentage scoring 0-6 for "Overall, how happy did you feel yesterday?", modelled using Acorn. Source: ONS (Annual Population Survey & Acorn), 2011/12.
- Low 'worthwhile'*
 - Synthetic estimates of the percentage scoring 0-6 for "Overall, to what extent do you feel the things you do in your life are worthwhile?", modelled using Acorn. Source: ONS (Annual Population Survey & Acorn), 2011/12.

* Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

¹⁷ NatCen (2013) Predictors of wellbeing. <http://www.natcen.ac.uk/our-research/research/predictors-of-wellbeing/>

Rationale

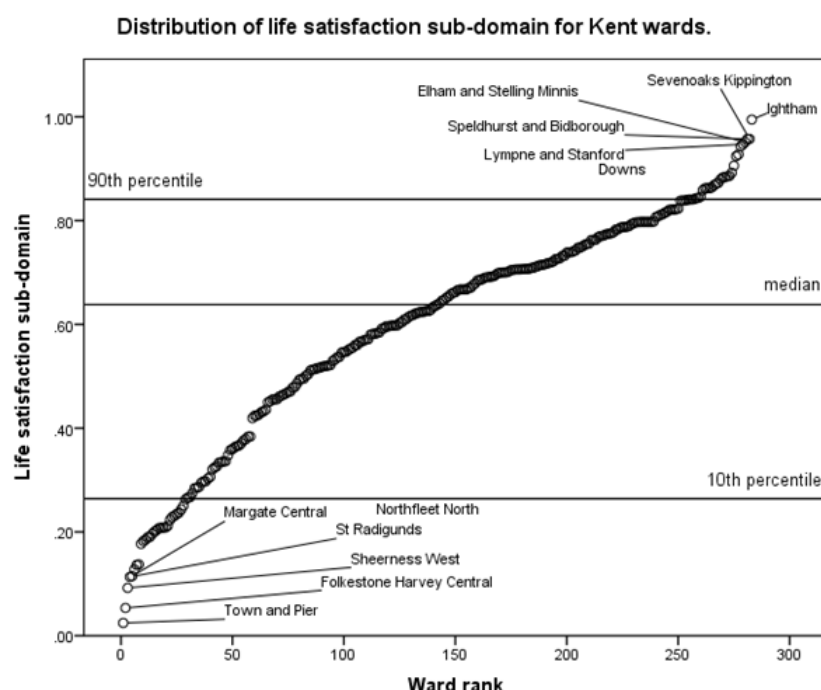
WARM suggests inclusion of an indicator of overall life satisfaction, from the Place Survey. The Kent Mental Health and Wellbeing Index also includes measures of overall life satisfaction, but it has been necessary to locate an alternative data source due to the discontinuation of local Place Surveys. Key metrics from the ONS Annual Population Survey, modelled to small-area level using Acorn, have been used. Measures of 'worthwhile' and 'happy yesterday' have been used alongside life satisfaction, as per the ONS Measure of National Wellbeing.

Distribution and summary statistics

The correlation matrix shows strong correlations between the three measures of life satisfaction at Ward-level.

	Low 'life satisfaction'	Low 'happy yesterday'	Low 'worthwhile'
Low 'life satisfaction'	1		
Low 'happy yesterday'	0.98	1	
Low 'worthwhile'	0.98	0.97	1

All of the key statistics are within acceptable levels, with the distribution as expected.



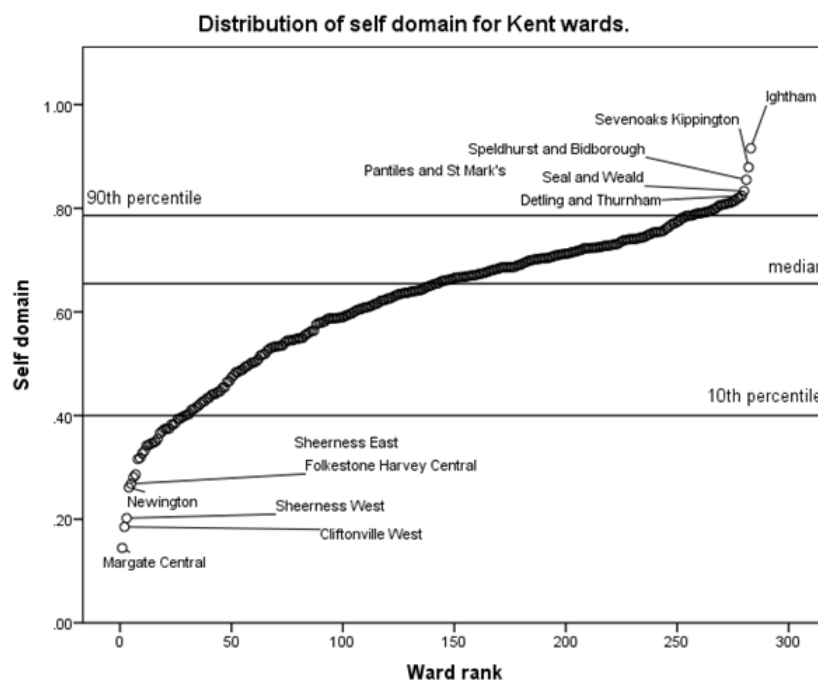
Measures of Central Tendency	
Mean	0.60
Median	0.64
Measures of Range	
Minimum	0.02
Maximum	0.99
Mean of bottom decile	0.18
Mean of top decile	0.89
Ratio of top:bottom decile	4.88
Slope of mid-section	0.002

4.5 Overall domain

The correlation matrix shows strong correlations between the four sub-domains of the 'self' domain at Ward-level.

	<i>Education</i>	<i>Material wellbeing</i>	<i>Health</i>	<i>Life satisfaction</i>
Education	1			
Material wellbeing	0.86	1		
Health	0.71	0.86	1	
Life satisfaction	0.80	0.84	0.78	1

All of the key statistics are within acceptable levels, with the distribution as expected.



Measures of Central Tendency	
Mean	0.62
Median	0.65
Measures of Range	
Minimum	0.14
Maximum	0.92
Mean of bottom decile	0.33
Mean of top decile	0.81
Ratio of top:bottom decile	2.45
Slope of mid-section	0.001

| 5. Supports domain

5.1 Strong & stable families

What does the evidence say?

Supportive relationships with family have been related to life satisfaction and wellbeing.¹⁸ Loneliness and social isolation are known to negatively impact on wellbeing.¹⁹ This is known to affect a large number of older people²⁰ and a number of factors have been associated including; being widowed, affected by ill health or disability,²⁰ as well as, mental illness.²¹ Stable families composed of married couples rather than single or divorced individuals have been related to higher wellbeing.²¹ But, the influence from having children was unclear²¹ with some evidence suggesting that type of family structure had no difference on children's happiness, as a measure of wellbeing.²² But, family conflict has been associated with lower children's wellbeing,²¹ and informal care provision associated with lower wellbeing.²¹

Indicators selected

- Married couple households with children
 - % living in households consisting of married couples with dependent children, 2011. Source: Census.
- Households with children but no adult in employment*
 - % living in households with dependent children, but no adults in employment, 2011. Source: Census.
- Lone parent households with children: Dependent*
 - % living in households consisting of a lone parent with dependent children, 2011. Source: Census.
- Lone parent households with children: Any*
 - % living in households consisting of a lone parent with children (either dependent or non-dependent), 2011. Source: Census.
- Divorcee households*
 - % households headed by an adult (aged 16+) not living in a couple and divorced, 2011. Source: Census.

¹⁸ The Young Foundation (2010) Taking the temperature of local communities. <http://bit.ly/29VopUL>

¹⁹ Social Care Institute for Excellence (2012) Preventing loneliness and social isolation among older people. <http://bit.ly/29RR63Z>

²⁰ Age UK (2015) Loneliness evidence review. <http://bit.ly/29R2km1>

²¹ New Economics Foundation (2012) Wellbeing evidence for policy: a review. <http://bit.ly/29IGzcQ>

²² NatCen (2013) Predictors of wellbeing. <http://bit.ly/1r555Zq>

- Carers
 - % providing 50+ hours of unpaid care per week, 2011. Source: Census.
- Young carers
 - % children and young people (aged 0-24) providing unpaid care, 2011. Source: Census.
- Under-occupied households - single-person aged 65+*
 - % households that are under-occupied by a single-person aged 65+, 2011. Source: Census.
- One person pensioner households*
 - % living in one person pensioner (aged 65+) households, 2011. Source: Census.
- Social isolation*
 - (Modelled) social isolation propensity indicator, 2015. Source: KCC Business Intelligence.
- Safe from harm: domestic abuse victims
 - Domestic abuse victims (troubled families programme), rate per 1,000 population, Jan 2014-Feb 2016. Source: KCC, MIU.
- Safe from harm: adult safeguarding incidents
 - Adult social care safeguarding enquiries, 2013/14-2015/16. Source: KCC, MIU.
- Safe from harm: child safeguarding incidents
 - Children's social care referrals progressing to an initial assessment, 2013/14-2015/16. Source: KCC, MIU.

* Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

Rationale

The selected range of indicators was considerably extended from those used by the WARM framework. This was to incorporate a wider range of indicators of care provision and other factors suggesting conflict within the family environment. Consultation with community mental health and wellbeing providers suggested inclusion of a measure of young carers, as well as, the original indicator for 50+ hours of unpaid care. Due to the body of evidence on social isolation and loneliness, especially amongst older people, we included; measures of social isolation propensity, one-person pensioner households and under-occupied households for single persons aged 65+. The Care Act 2014, which has come into force since the creation of the WARM index, defines wellbeing to relate to personal dignity and protection from abuse and neglect.²³ In order to incorporate this within the Kent Mental Health & Wellbeing Index measures of referrals to both adult and children's social care, as well as, domestic abuse victims were also included.

Distribution and summary statistics

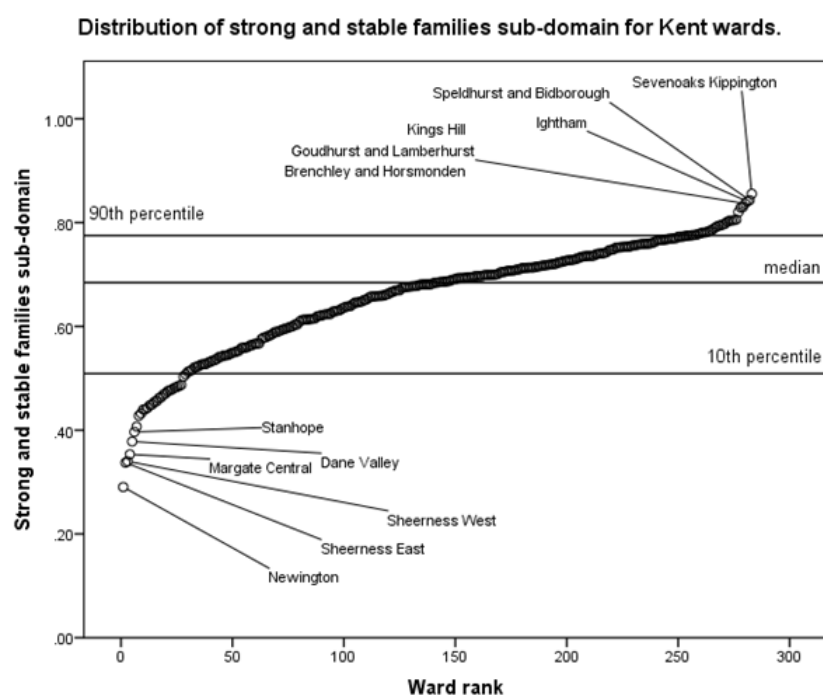
The correlation matrix shows that for this sub-domain, correlations between measures are not always positive at Ward-level. This is as expected for this sub-domain, since individual indicators measure very different (and not necessarily linked, or correlated) aspects of the characteristics of strong and stable families.

	<i>Married with children</i>	<i>No employment with children*</i>	<i>Lone parents (dependent)*</i>	<i>Lone parents (any)*</i>	<i>Divorcee households*</i>	<i>Carers*</i>	<i>Young carers*</i>
Married with children	1						
No employment with children*	0.48	1					
Lone parents (dependent)*	0.41	0.93	1				
Lone parents (any)*	0.44	0.93	0.99	1			
Divorcee households*	0.58	0.74	0.77	0.78	1		
Carers*	0.56	0.43	0.30	0.36	0.24	1	
Young carers*	0.53	0.41	0.35	0.37	0.41	0.52	1
Under-occupied, aged 65+*	-0.56	-0.36	-0.35	-0.35	-0.61	-0.19	-0.29
One person pensioners*	0.54	-0.10	-0.18	-0.13	0.13	0.36	0.41
Social isolation*	0.52	0.45	0.41	0.47	0.54	0.44	0.36
Domestic abuse victims*	0.29	0.68	0.65	0.65	0.56	0.22	0.26
Social care referrals (adults)*	0.46	0.38	0.36	0.36	0.36	0.33	0.29
Social care referrals (children)*	0.62	0.84	0.76	0.77	0.75	0.44	0.45

²³ Department of Health (2014) Care and support statutory guidance: issued under the care act 2014.
<http://bit.ly/1zBG9ck>

	<i>Under-occupied, aged 65+*</i>	<i>One person pensioners*</i>	<i>Social isolation*</i>	<i>Domestic abuse victims*</i>	<i>Social care referrals (adults)*</i>	<i>Social care referrals (children)*</i>
Married with children						
No employment with children*						
Lone parents (dependent)*						
Lone parents (any)*						
Divorcee households*						
Carers*						
Young carers*						
Under-occupied, aged 65+*	1					
One person pensioners*	-0.42	1				
Social isolation*	-0.51	0.53	1			
Domestic abuse victims*	-0.27	-0.13	0.38	1		
Social care referrals (adults)*	-0.31	0.27	0.35	0.26	1	
Social care referrals (children)*	-0.44	0.08	0.53	0.65	0.42	1

All of the key statistics are within acceptable levels, with the distribution as expected.



Measures of Central Tendency	
Mean	0.66
Median	0.68
Measures of Range	
Minimum	0.29
Maximum	0.86
Mean of bottom decile	0.44
Mean of top decile	0.80
Ratio of top:bottom decile	1.82
Slope of mid-section	0.001

5.2 Social capital

What does the evidence say?

Connections with others and shared positive experiences are important to wellbeing. Physical activity is known to positively affect health and in turn wellbeing.²⁴ But participation or even spectating sport has been said to promote connections with others; which has been said to be important for enjoyment and belonging.²⁴ Wider elements of benefit include; self-esteem, as well as, improved behaviour, learning and education among school aged children.²⁵ Social cohesion has been related to supportive, connected and cooperative communities that enhance wellbeing.²⁶ There is no agreed measure of social cohesion for wellbeing, but the indicators for voter turnout or political engagement²⁷ and transiency help to describe engagement and local community. There is also evidence linking volunteering and altruistic behaviour with life satisfaction and wellbeing.²⁸

Indicators selected

- Voluntary work
 - Synthetic estimates of the % a member of a voluntary service group, modelled using Acorn Wellbeing. Source: Acorn Wellbeing.
- Environmental organisation membership
 - Synthetic estimates of the % a member of an environmental organisation, modelled using Acorn. Source: Acorn.
- Sports/hobby organisation membership
 - Synthetic estimates of the % a member of a sports/hobby organisation, modelled using Mosaic. Source: Mosaic 2014 (TGI).
- Participation in sport
 - Synthetic estimates of the % who do 1 or more hours a week of sport, modelled using Mosaic. Source: Mosaic 2014 (TGI).
- Voter turnout
 - Voter turnout: 2015 general election. Source: Electoral Commission.

²⁴ Van Mill, A., & Hopkins, H. (2015) Sport, culture and wellbeing; a wellbeing public dialogue. <http://bit.ly/1ROBUG5>

²⁵ The Young Foundation. (2010) The state of happiness: can public policy shape peoples wellbeing and resilience? <http://bit.ly/29Le7Td>

²⁶ Eurofound (2014) Social cohesion and wellbeing in the EU. <http://bit.ly/29RCwJw>

²⁷ The Electoral Commission (2005) Social exclusion and political engagement: research report. <http://bit.ly/29V7Mc0>

²⁸ New Economics Foundation (2012) Wellbeing evidence for policy: a review. <http://bit.ly/29IGzcQ>

- Sense of community: belong to neighbourhood
 - Synthetic estimates of the % who feel that they 'belong to neighbourhood', modelled using Acorn Wellbeing. Source: Acorn Wellbeing.
- Sense of community: talk to neighbours
 - Synthetic estimates of the % who 'regularly talk to neighbours', modelled using Acorn Wellbeing. Source: Acorn Wellbeing.
- Transiency*
 - % not living at the same address one year ago, 2011. Source: Census.

* Denotes indicators where the polarity has been reversed
(i.e. high values are associated with poor wellbeing)

Rationale

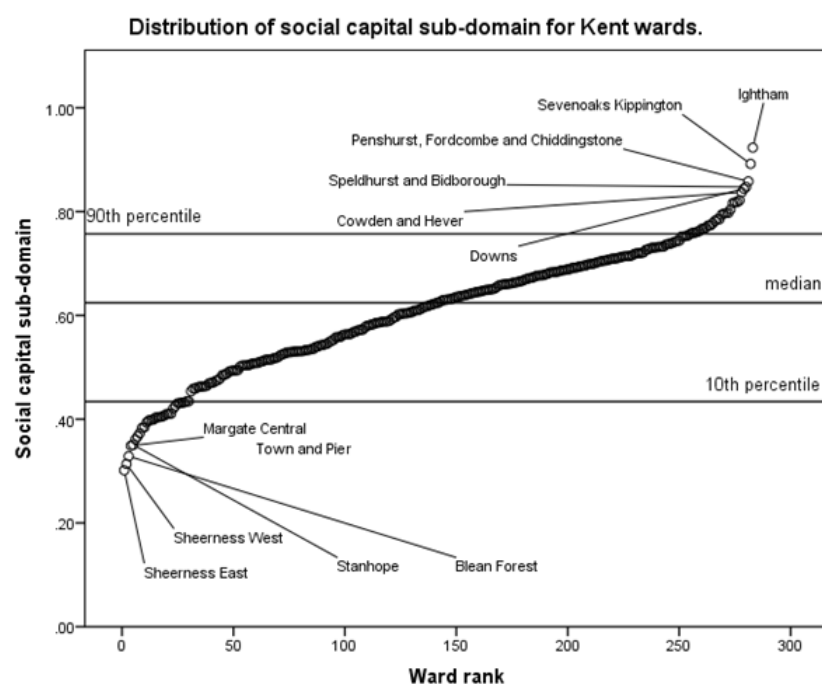
We extended the range of indicators used by the WARM framework to incorporate measures of engagement, connections with others, shared positive experiences and community. This has been captured by memberships of sports/hobby groups, memberships of environmental groups and participation in sport. The sense of community has been captured through measures of feelings of belonging in neighbourhood, regularly talking to neighbours, as well as, area transiency. Voter turnout featured within both the OECD Regional Wellbeing Indicator and the ONS Measure of National Wellbeing, and so has also been included here. WARM used an indicator from the National Indicator Dataset relating to unpaid help, as well as, an indicator for involvement in local decision making groups from the local Place Surveys. Both have now been discontinued and so are no longer routinely collected at local level. This has been replaced with a synthetic estimate of volunteering, derived via the Acorn Wellbeing geo-demographic classification system.

Distribution and summary statistics

The correlation matrix shows mainly positive correlations between the 8 measures of social capital at Ward-level. The exception is the transiency measure, which is negatively correlated with a number of the indicators in this sub-domain.

	Voluntary group	Environmental group	Sports/hobby group	Participation in sport	Voter turnout	Belong to neighbourhood	Talk to neighbours	Transiency
Voluntary group	1							
Environmental group	0.74	1						
Sports/hobby group	0.88	0.74	1					
Participation in sport	0.34	0.53	0.59	1				
Voter turnout	0.16	0.07	0.20	0.23	1			
Belong to neighbourhood	0.81	0.81	0.84	0.37	0.03	1		
Talk to neighbours	0.65	0.36	0.58	-0.15	-0.10	0.74	1	
Transiency	-0.44	-0.21	-0.30	0.04	0.10	-0.25	-0.44	1

All of the key statistics are within acceptable levels, with the distribution as expected.



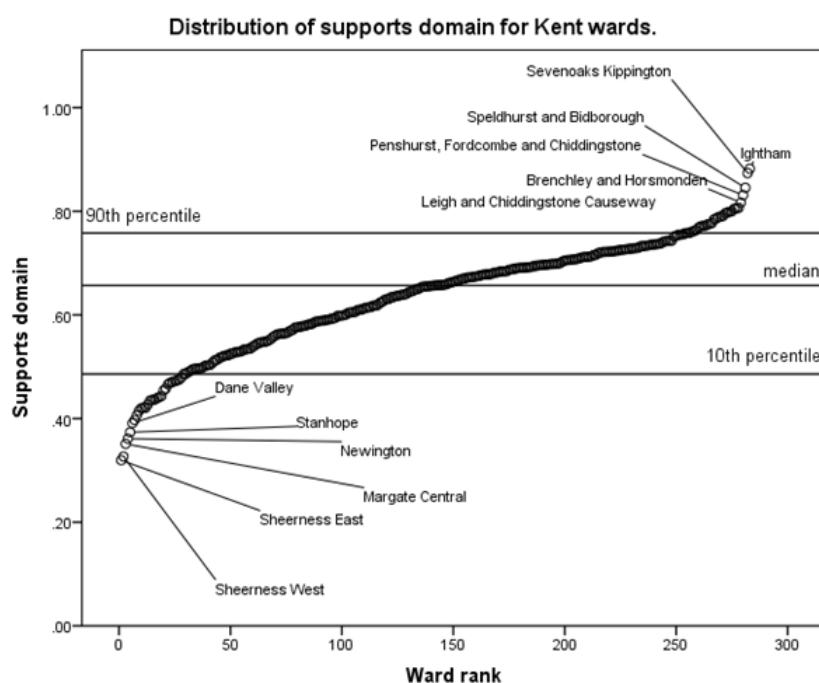
Measures of Central Tendency	
Mean	0.61
Median	0.62
Measures of Range	
Minimum	0.30
Maximum	0.92
Mean of bottom decile	0.39
Mean of top decile	0.80
Ratio of top:bottom decile	2.05
Slope of mid-section	0.001

5.3 Overall domain

The correlation matrix shows strong correlation between the two sub-domains of the 'supports' domain at Ward-level.

	<i>Strong & stable families</i>	<i>Social capital</i>
Strong & stable families	1	
Social capital	0.81	1

All of the key statistics are within acceptable levels, with the distribution as expected.



Measures of Central Tendency	
Mean	0.63
Median	0.66
Measures of Range	
Minimum	0.32
Maximum	0.88
Mean of bottom decile	0.43
Mean of top decile	0.79
Ratio of top:bottom decile	1.86
Slope of mid-section	0.001

| 6. Systems & structures domain

6.1 Enabling Infrastructure

What does the evidence say?

Living conditions have been identified within the wellbeing literature. Particularly, lower wellbeing has been found within housing overcrowding, as well as, rented accommodation in comparison to home ownership²⁹. Whilst the Care Act 2014, has shifted its focus from 'providing services' to 'meeting needs', they do say that wellbeing should inform the delivery of universal services for all people in the local population.³⁰ Commuting has been related to lower life satisfaction; but this may be influenced by length of time and mode of commuting, as more positive effects are observed from active travel.³¹ We included the barriers to housing and services Index of Multiple Deprivation, which includes; road distance to post office, primary school, general store or supermarket, GP surgery, as well as, household overcrowding, homelessness and housing affordability.

Indicators selected

- Renting households*
 - % households living in rented accommodation (or living rent free), 2011. Source: Census.
- Over-occupied households*
 - % households that are over-occupied, 2011. Source: Census.
- Travel to work: less than 10km
 - % employed adults travelling less than 10km to work (or working from home), 2011. Source: Census.
- Access to services: Distance to GP*
 - Distance to nearest GP, 2016. Source: KCC.
- Access to services: Distance to A&E*
 - Distance to nearest urgent care centre/A&E, 2016. Source: KCC.
- Barriers to housing and services IMD domain*
 - Source: IMD 2015.

* Denotes indicators where the polarity has been reversed
(i.e. high values are associated with poor wellbeing)

²⁹ New Economics Foundation (2012) Wellbeing evidence for policy: a review. <http://bit.ly/29IGzcQ>

³⁰ Department of Health (2014) Care and support statutory guidance: issued under the care act 2014. <http://bit.ly/1zBG9ck>

³¹ New Economics Foundation (2012) Wellbeing evidence for policy: a review. <http://bit.ly/29IGzcQ>

Rationale

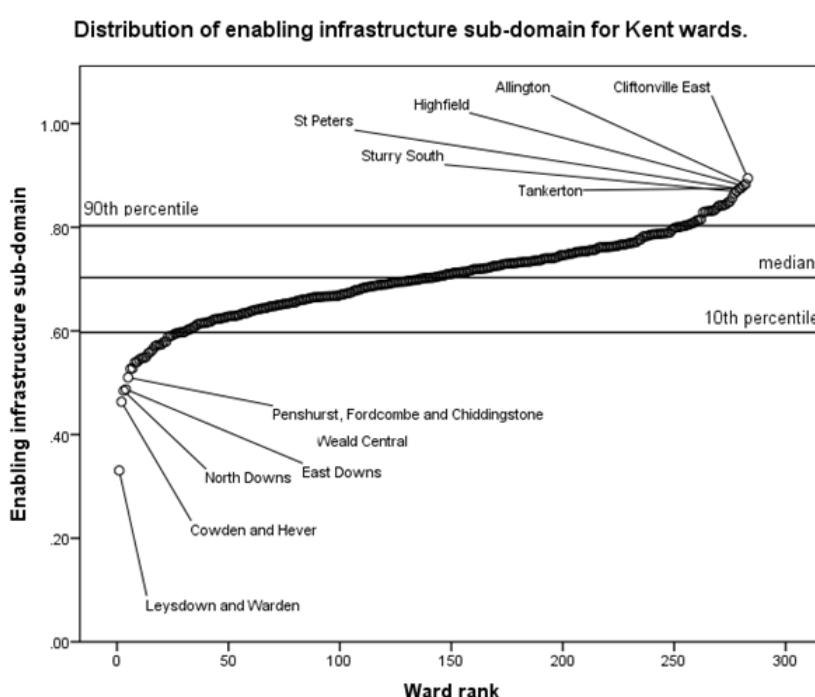
We extended the range of indicators used by the WARM framework to incorporate measures of overcrowding. We also included distance to key health services, as a proxy for the delivery of universal services for all people in a population. Access to pharmacies was considered for inclusion, but found to be very highly correlated to access to GPs. Furthermore, the barriers to housing and services score from the Index of Multiple Deprivation, 2015 was selected in preference to the similar domain of the Child Wellbeing Index, which is older and dates back to 2009.

Distribution and summary statistics

The correlation matrix shows a mix of positive and negative correlations between the six measures of enabling infrastructure at Ward-level. In particular, the measures relating to poor housing often negatively correlate with measures relating to access to services. This is to be expected due to the influence of deprived urban areas, where housing is poor but access to services is good.

	<i>Renting households</i>	<i>Over-occupied households</i>	<i>Travel <10km to work</i>	<i>Distance to GP</i>	<i>Distance to A&E</i>	<i>Barriers to housing & services IMD</i>
Renting households	1					
Over-occupied households	0.77	1				
Travel to work: less than 10km	-0.38	-0.27	1			
Access to services: Distance to GP	-0.29	-0.36	0.29	1		
Access to services: Distance to A&E	-0.20	-0.24	0.25	0.28	1	
Barriers to housing and services IMD	-0.05	-0.16	0.22	0.65	0.19	1

All of the key statistics are within acceptable levels, with the distribution as expected.



Measures of Central Tendency

Mean	0.70
Median	0.70

Measures of Range

Minimum	0.33
Maximum	0.89
Mean of bottom decile	0.55
Mean of top decile	0.84
Ratio of top:bottom decile	1.53
Slope of mid-section	0.001

6.2 Local economy

What does the evidence say?

It is sensible to assume that numbers of local businesses provides an indication of the local economy, which may indirectly relate to work and worklessness. We have previously identified the importance of employment for wellbeing. Further, the scale of businesses, in terms of numbers of employees, may provide further information.

Indicators selected

- Number of businesses
 - Number of businesses in the MSOA, per head population, 2015. Source: ONS (IDBR).
- Access to employment*
 - Average travel time by public transport/walking to medium-sized employment centres (with 500 to 4999 jobs available), 2014. Source: Department for Transport.

* Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

Rationale

WARM suggests inclusion of the following indicators:

Domain	Measure	Indicator
Systems and structures	Local economy	Vacancies – summary analysis
		VAT based local units by employment size band 0-4
		VAT based local units by employment size band 20+
		Travel time to nearest employment centre by walk. Journey cannot be made within 120 minutes.
		Target population within 20 minutes by composite mode.

The local economy sub-domain has been the most challenging in respect of securing high quality, relevant and meaningful data at Ward-level. The Kent Mental Health & Wellbeing Index uses a single measure of numbers of local businesses (within the MSOA) in an attempt to stabilise the data (particularly on larger enterprises) at small-area level. Average journey time by public transport (or walking) to a medium-sized employment centre has been used as an alternative to the ability to make the journey within 2 hours used within the WARM framework. Small-area vacancy data, used within the WARM framework, is no longer available.

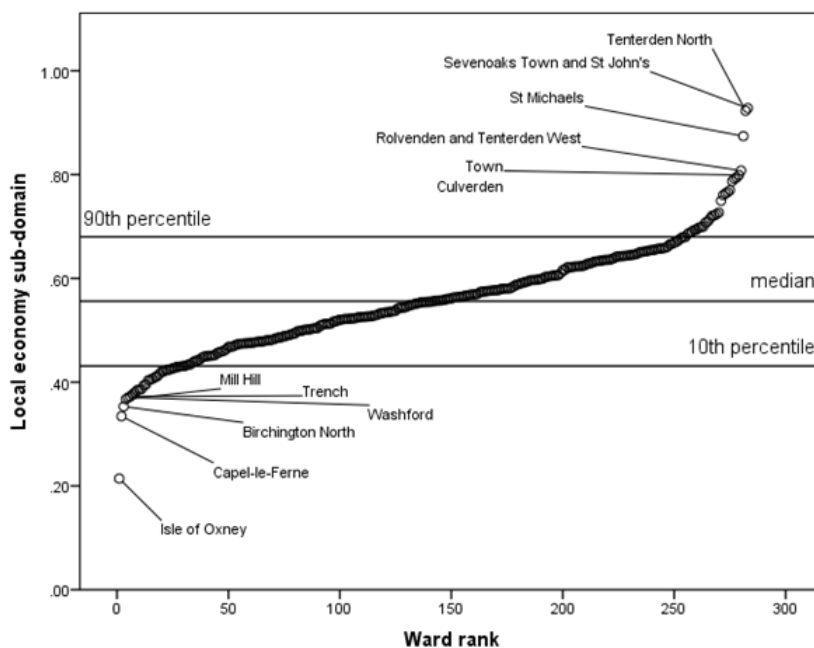
Distribution and summary statistics

The correlation matrix shows a weak correlation between the two measures of the local economy at Ward-level. This suggests that they are measuring different aspects of the local economy.

	<i>Number of businesses</i>	<i>Access to employment</i>
Number of businesses	1	
Access to employment	-0.24	1

All of the key statistics are within acceptable levels, with the distribution as expected.

Distribution of local economy sub-domain for Kent wards.



Measures of Central Tendency	
Mean	0.56
Median	0.56
Measures of Range	
Minimum	0.21
Maximum	0.93
Mean of bottom decile	0.39
Mean of top decile	0.75
Ratio of top:bottom decile	1.91
Slope of mid-section	0.001

6.3 Effective public services

What does the evidence say?

Trust in public institutions, such as the police, has been shown to be related to higher life satisfaction³². Furthermore, accessible and adequate health and social care services was identified for community wellbeing³³. The wellbeing of the staff within organisations has been identified to be important to patient's experience of care and services; this in turn is an important to individual's health and wellbeing.³⁴

Indicators selected

- Satisfaction with GP
 - % who would recommend GP surgery to someone who has just moved to the area (modelled from practice-level data), 2016. Source: GP Patient Survey
- Satisfaction with local police
 - Synthetic estimates of the % rating local police as doing a good or excellent job, modelled using Mosaic. Source: Mosaic 2014 (British Crime Survey).
- Library usage
 - % using the library (borrowers, all-age), 2014. Source: KCC.

Rationale

We have attempted to maintain the range of indicators used by the WARM framework, with the exception of satisfaction with fire and rescue services. Synthetic estimates of satisfaction with the police, derived using Mosaic, were used due to the discontinuation of the local Place Surveys. Library usage has also been included as a proxy for satisfaction, since whilst satisfaction data is routinely collected by Kent libraries, the data is not robust at Ward-level.

³² New Economics Foundation (2012) Wellbeing evidence for policy: a review. <http://bit.ly/29IGzcQ>

³³ Van Mill, A., & Hopkins, H. (2015) Community wellbeing; a wellbeing public dialogue. <http://bit.ly/29QLFF9>

³⁴ National Institute for Health Research (2012) Exploring the relationship between patients experiences of care and the influence of staff motivation, affect and wellbeing. <http://bit.ly/1oEXers>

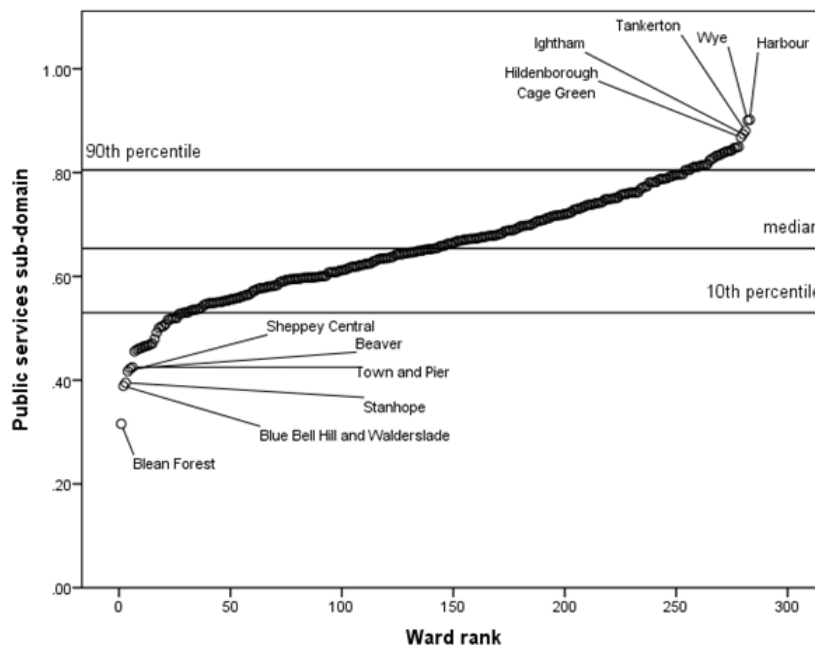
Distribution and summary statistics

The correlation matrix shows positive correlations between the three measures of effective public services at Ward-level.

	<i>Satisfaction with GP</i>	<i>Satisfaction with local police</i>	<i>Library usage</i>
Satisfaction with GP	1		
Satisfaction with local police	0.10	1	
Library usage	0.39	0.31	1

All of the key statistics are within acceptable levels, with the distribution as expected.

Distribution of public services sub-domain for Kent wards.



Measures of Central Tendency	
Mean	0.66
Median	0.65
Measures of Range	
Minimum	0.32
Maximum	0.90
Mean of bottom decile	0.47
Mean of top decile	0.84
Ratio of top:bottom decile	1.77
Slope of mid-section	0.001

6.4 Crime & antisocial behaviour

What does the evidence say?

The importance of crime as a determinant of health has long been identified within legislation and policy to support inclusion within a Wellbeing Index. Experience and fear of crime is known to negatively impact on wellbeing, although, it has been described as complex, with indirect links between the environment, health and wellbeing³⁵. For example, interpretation of the physical environment may depend on familiarity and social networks, and so influence individuals and population groups differently³⁶. Increases in area crime rates have been shown to have a negative impact on residents³⁷.

Indicators selected

- Feel safe: Walking alone at night
 - Synthetic estimates of the % who feel 'very safe' walking alone at night, modelled using Mosaic. Source: Mosaic 2014 (British Crime Survey).
- Feel safe: Walking alone during the day
 - Synthetic estimates of the % who feel 'very safe' walking alone during the day, modelled using Mosaic. Source: Mosaic 2014 (British Crime Survey).
- Feel safe: Home alone at night
 - Synthetic estimates of the % who feel 'very safe' home alone at night, modelled using Mosaic. Source: Mosaic 2014 (British Crime Survey).
- Crime: All recorded*
 - Reported crime rate: all recorded crime (rate per 1,000 population), Dec 2013 - Nov 2015. Excludes antisocial behaviour. Source: Police.data.uk.
- Crime: Burglary*
 - Reported crime rate: burglary (rate per 1,000 population), Dec 2013 - Nov 2015. Source: Police.data.uk.
- Crime: Antisocial behaviour*
 - Reported crime rate: antisocial behaviour (rate per 1,000 population), Dec 2013 - Nov 2015. Source: Police.data.uk.
- Crime: Violence & sexual offences*
 - Reported crime rate: violence & sexual offences (rate per 1,000 population), Dec 2013 - Nov 2015. Includes domestic violence. Source: Police.data.uk.
- Crime IMD domain*
 - Source: IMD 2015.

* Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

³⁵ Lorenc, T., et al (2014) Crime, fear of crime and mental health: synthesis of theory and systematic reviews of interventions and qualitative evidence. Public Health Research, 2.2

³⁶ Lorenc T., et al (2013) Fear of crime and the environment: systematic review of UK qualitative evidence. BMC Public Health, 13, 496

³⁷ Cornaglia, F., & Leigh, A. (2011). Crime and mental wellbeing. Centre for Economic Performance, 1049.

Rationale

WARM suggests inclusion of the following indicators:

Domain	Measure	Indicator
Systems and structures	Crime	Crime score
		How safe or unsafe do you feel when outside in your local area during the day? (safe)
		How safe or unsafe do you feel when outside in your local area after dark? (safe)
		Burglary
		Antisocial behaviour
		Violence
		Crime

We have attempted to maintain the range of indicators used by the WARM framework. The Kent Mental Health & Wellbeing Index includes crime rate data and perceptions of safety in the local area, as advocated by WARM. Perceptions of safety ‘home alone at night’ have also been included. Furthermore, the crime domain from the Index of Multiple Deprivation, 2015 was selected in preference to the similar domain of the Child Wellbeing Index, which is older and dates back to 2009.

Distribution and summary statistics

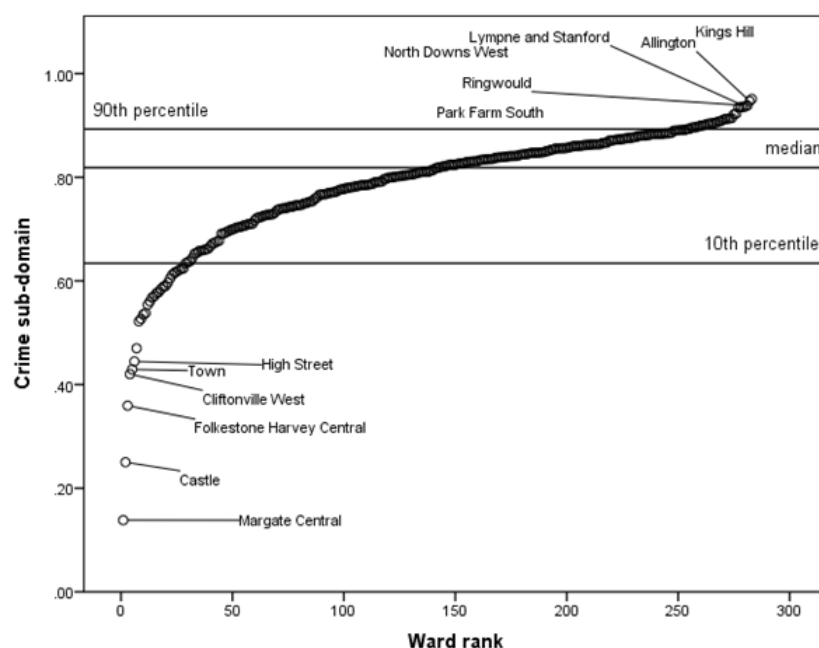
The correlation matrix shows positive correlations between the majority of the eight measures making up the crime & antisocial behaviour sub-domain at Ward-level.

	<i>Feel Safe</i>		
	<i>Walking alone at night</i>	<i>Walking alone during the day</i>	<i>Home alone at night</i>
Feel safe: Walking alone at night	1		
Feel safe: Walking alone during the day	0.87	1	
Feel safe: Home alone at night	0.66	0.90	1
Crime: All recorded	0.47	0.55	0.39
Crime: Burglary	-0.03	0.10	0.13
Crime: Antisocial behaviour	0.50	0.56	0.35
Crime: Violence & sexual offences	0.54	0.62	0.42
Crime IMD domain	0.51	0.56	0.45

	<i>Crime</i>				
	<i>All recorded</i>	<i>Burglary</i>	<i>Antisocial behaviour</i>	<i>Violence & sexual offences</i>	<i>Crime IMD domain</i>
Feel safe: Walking alone at night					
Feel safe: Walking alone during the day					
Feel safe: Home alone at night					
Crime: All recorded	1				
Crime: Burglary	0.51	1			
Crime: Antisocial behaviour	0.88	0.41	1		
Crime: Violence & sexual offences	0.94	0.41	0.91	1	
Crime IMD domain	0.67	0.53	0.65	0.69	1

All of the key statistics are within acceptable levels, with the distribution as expected.

Distribution of crime sub-domain for Kent wards.



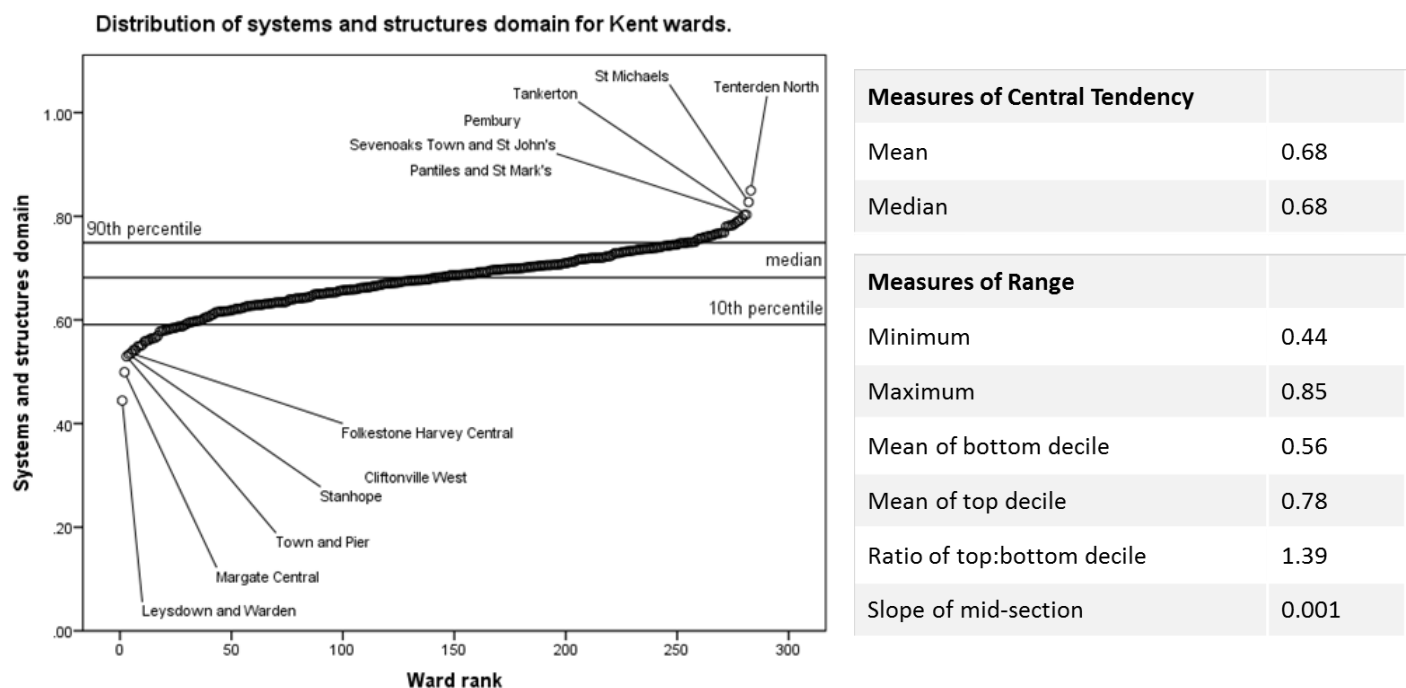
Measures of Central Tendency	
Mean	0.79
Median	0.82
Measures of Range	
Minimum	0.13
Maximum	0.95
Mean of bottom decile	0.53
Mean of top decile	0.91
Ratio of top:bottom decile	1.73
Slope of mid-section	0.001

6.5 Overall domain

The correlation matrix shows mainly fairly weak correlations between the four sub-domains of the 'systems & supports' sub-domain at Ward-level.

	<i>Enabling infrastructure</i>	<i>Local economy</i>	<i>Effective public services</i>	<i>Crime & antisocial behaviour</i>
Enabling infrastructure	1			
Local economy	-0.07	1		
Effective public services	0.07	0.30	1	
Crime & antisocial behaviour	0.19	-0.07	0.45	1

The key distribution statistics are given below.



As a result of the relatively weak correlations between the sub-domains of the overall 'systems & supports' domain, there is a smaller range of values for this domain than the other two. The ratio of top:bottom decile is 1.39, compared with ratios of 2.45 and 1.86 respectively for the 'self' and 'supports' domains.

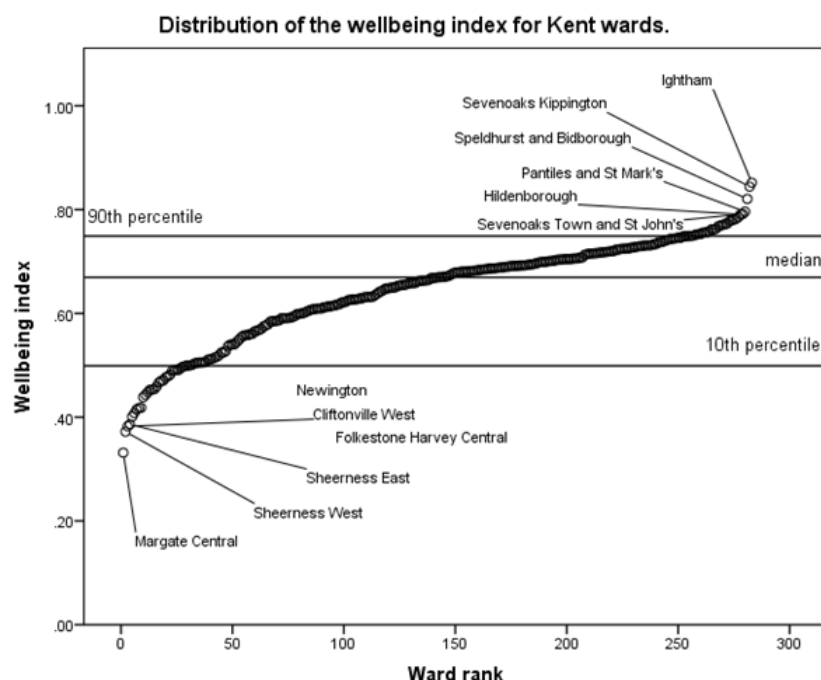
7. Overall index

The 70 indicators described above have been combined to form the ten sub-domains, and then the three domains: 'self', 'support' and 'systems & structures'. These three domains have then been combined to produce the overall Kent Mental Health & Wellbeing Index score for each of the 283 Wards in Kent.

The correlation matrix shows strong correlations between the three domains of the overall Kent Mental Health & Wellbeing Index at Ward-level, and particularly the 'self' and 'supports' domains.

	<i>Self</i>	<i>Supports</i>	<i>Systems & structures</i>
Self	1		
Supports	0.95	1	
Systems & structures	0.68	0.65	1

All of the key statistics are within acceptable levels, with the distribution as expected.



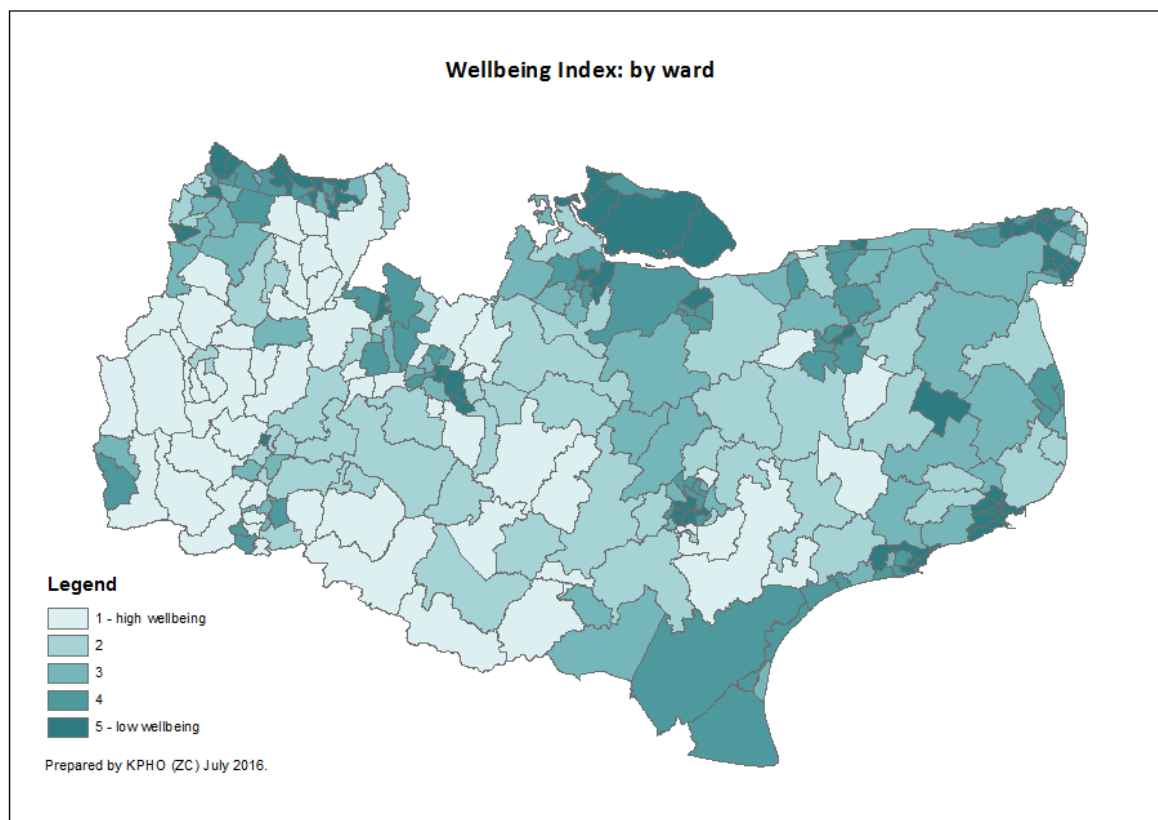
Measures of Central Tendency

Mean	0.64
Median	0.67

Measures of Range

Minimum	0.33
Maximum	0.85
Mean of bottom decile	0.45
Mean of top decile	0.77
Ratio of top:bottom decile	1.73
Slope of mid-section	0.001

The map below provides a geographic summary of the overall Kent Mental Health & Wellbeing Index scores.

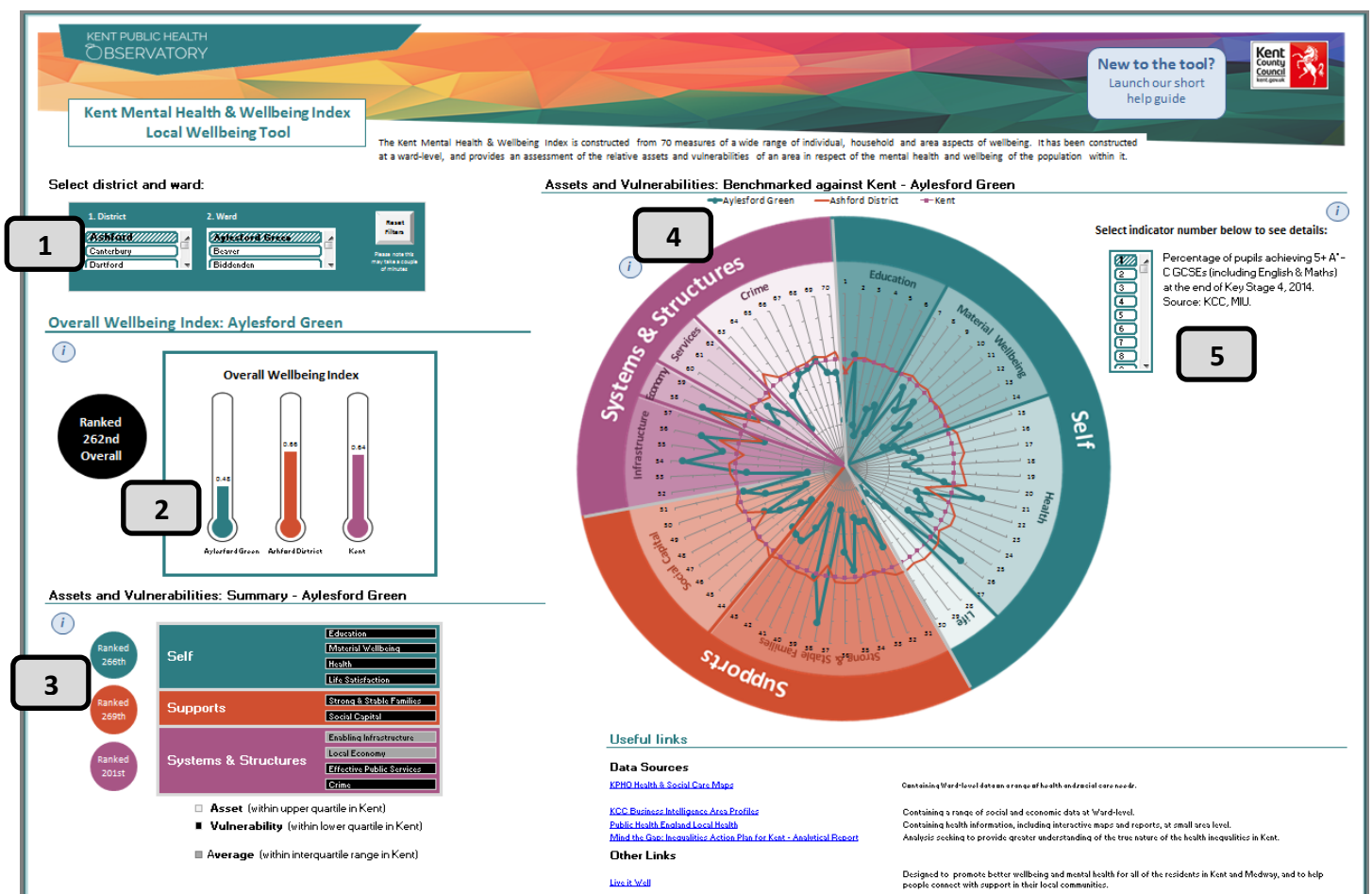



Whilst there are local variations, this analysis shows a clear divide between East and West in respect of wellbeing. Around two-thirds of the 50 highest overall index scores are in Maidstone, Sevenoaks, Tonbridge & Malling or Tunbridge Wells.

8. Local Wellbeing Tool

An excel-based Local Wellbeing Tool has been developed as the key method of dissemination for the Kent Mental Health & Wellbeing Index. The tool can be found on the Kent Public Health Observatory (KPHO) website at <http://www.kpho.org.uk/health-intelligence/disease-groups/mental-health/kent-mental-health-and-wellbeing-index>.

The tool displays results for individual Wards in Kent. The figure below is provided by way of an example of the output of the tool, using Aylesford Green in Ashford.



- 1 Filter:** Used to select the Ward of interest. Select first the District, and then the Ward.
 - 2 Overall index:** Thermometer chart showing the overall index score for the Ward of interest, the District and Kent overall. High scores denote positive wellbeing. The output also includes the rank for the Ward of interest, where the Ward ranked 1st is the best in terms of wellbeing, and the Ward ranked 283rd the worst.
 - 3 Assets and vulnerabilities summary:** Table showing relative assets (white) and vulnerabilities (black) of the Ward in question in respect of the scores for each of the 10 sub-domains. Sub-domains scores within the upper quartile across Kent are shaded white, those in the lower quartile black, and those within the middle 50% grey. Also included are ranks for the Ward of interest for each of the three domains ('self', 'supports' and 'systems & structures').
 - 4 Detailed assets and vulnerabilities:** Wellbeing wheel providing a detailed breakdown of the relative performance of the Ward in question for each of the 70 indicators included within the index. The wheel shows the standardised score for each indicator indexed against (or relative to) the overall Kent score for that index. The score for the Ward in question is shown in teal, the District in orange, and the Kent benchmark in magenta. Points outside of the Kent benchmark suggest higher than average performance on that aspect of wellbeing, and points inside of the Kent benchmark the opposite.
 - 5 Indicator key:** The detailed assets and vulnerabilities wheel contains all 70 of the indicators included in the Kent Mental Health & Wellbeing Index. Each indicator has been numbered on the wheel diagram. A summary definition and the source for each indicator is available by selecting the indicator number.
-  **Information button:** The tool includes a series of information buttons. Hover the mouse over a button to see a short text description of individual elements of the tool.

Useful links are provided, including:

- Other Ward-level data sources
 - KPHO Health & Social Care Maps
 - KCC Business Intelligence Area Profiles
 - Public Health England Local Health
- Mind the Gap: Inequalities Action Plan for Kent – Analytical Report
- Live it Well.

The tool also includes details of the individual indicators, including the data sources.

Assets and Vulnerabilities: Key

Education

- 1 % pupils achieving 5+ A*-C GCSEs (including English & Maths) at the end of Key Stage 4, 2014. Source: KCC, MIU.
- 2 % pupils achieving a good level of development at early years foundation stage, 2014. Source: KCC, MIU.
- 3 % persons (aged 16+) with a Level 2 qualification (or higher), 2011. Source: Census.
- 4 % persons (aged 16+) with a Level 4 qualification (or higher), 2011. Source: Census.
- 5 % persons (aged 16+) with no qualifications, 2011. Source: Census.
- 6 Education, skills and training IMD domain. Source: IMD 2015.

Material Wellbeing

- 7 (Modelled) median household income. Source: Mosaic 2014 (ConsumerView).
- 8 % (aged 16-74) in employment, 2011. Source: Census.
- 9 Claimant count (%): Age 16-64, Nov 2015. Source: DWP
- 10 Claimant count (%): Age 50+, Nov 2015. Source: DWP
- 11 Claimant count (%): Age 18-24, Nov 2015. Source: DWP
- 12 % of working age (16-64) claiming benefits, May 2015. Source: DWP.
- 13 % of children affected by income deprivation (IDACI). Source: IMD 2015
- 14 % of older people affected by income deprivation (IDACPI). Source: IMD 2015.

Health

- 15 % in 'very good' or 'good' health (self-assessed), 2011. Source: Census.
- 16 Healthy life expectancy at birth, 2010-2014. Source: ONS (PCMD).
- 17 Healthy life expectancy at 65 years, 2010-2014. Source: ONS (PCMD).
- 18 Premature mortality rate (all-cause, age-standardised), 2010-2014. Source: ONS (PCMD).
- 19 % whose day to day activities are limited by a long term health problem or disability, 2011. Source: Census.
- 20 (Modelled) % with depression (based on GP-level recorded prevalence), 2014/15. Source: QOF.
- 21 (Modelled) % with mental health problems (based on GP-level recorded prevalence), 2014/15. Source: QOF.
- 22 Mental health contact rates (adults aged 15-64), 2014. Source: K&M NHS.
- 23 Mental Illness Needs Index (MINI), 2000. Source: Durham University.
- 24 Alcohol-related hospital admissions (all ages, age-standardised), 2006/07-2014/15. Source: SUS.
- 25 Hospital admissions for self-harm (all ages, age-standardised), 2006/07-2014/15. Source: SUS.
- 26 Emergency hospital admissions for falls (65+, age-standardised), 2012-13-2014/15. Source: SUS.
- 27 Health IMD domain. Source: IMD 2015.

Life Satisfaction

- 28 (Modelled) subjective wellbeing: low 'life satisfaction' (% scoring 0-6), 2011/12. Source: ONS (Annual Population Survey & Acorn).
- 29 (Modelled) subjective wellbeing: low 'happy yesterday' (% scoring 0-6), 2011/12. Source: ONS (Annual Population Survey & Acorn).
- 30 (Modelled) subjective wellbeing: low 'worthwhile' (% scoring 0-6), 2011/12. Source: ONS (Annual Population Survey & Acorn).

Strong & Stable Families

- 31 % living in households consisting of married couples with dependent children, 2011. Source: Census.
- 32 % living in households with dependent children, but no adults in employment, 2011. Source: Census.
- 33 % living in households consisting of a lone parent with dependent children, 2011. Source: Census.
- 34 % living in households consisting of a lone parent with children (either dependent or non-dependent), 2011. Source: Census.
- 35 % households headed by an adult (aged 16+) not living in a couple and divorced, 2011. Source: Census.
- 36 % providing 50+ hours of unpaid care per week, 2011. Source: Census.
- 37 % children and young people (aged 0-24) providing unpaid care, 2011. Source: Census.

Strong & Stable Families Contd.

- 38 % households that are under-occupied by a single-person aged 65+, 2011. Source: Census.
- 39 % living in one person pensioner (aged 65+) households, 2011. Source: Census.
- 40 (Modelled) social isolation propensity indicator, 2015. Source: KCC Business Intelligence.
- 41 Domestic abuse victims (troubled families programme), rate per 1,000 population, Jan 2014-Feb 2016. Source: KCC, MIU.
- 42 Adult social care safeguarding enquiries, 2013/14-2015/16. Source: KCC, MIU.
- 43 Children's social care referrals progressing to an initial assessment, 2013/14-2015/16. Source: KCC, MIU.

Social Capital

- 44 (Modelled) % a member of a voluntary service group. Source: Acorn Wellbeing.
- 45 (Modelled) % a member of an environmental organisation. Source: Acorn.
- 46 (Modelled) % a member of a sports/hobby organisation. Source: Mosaic 2014 (TGI).
- 47 (Modelled) % who do 1 or more hours a week of sport. Source: Mosaic 2014 (TGI).
- 48 Voter turnout: 2015 general election. Source: Electoral Commission.
- 49 (Modelled) % who feel that they 'belong to neighbourhood'. Source: Acorn Wellbeing
- 50 (Modelled) % who 'talk regularly to neighbours'. Source: Acorn Wellbeing
- 51 Transiency: % not living at the same address one year ago, 2011. Source: Census.

Enabling Infrastructure

- 52 % households living in rented accommodation (or living rent free), 2011. Source: Census.
- 53 % households that are over-occupied, 2011. Source: Census.
- 54 % employed adults travelling less than 10km to work (or working from home), 2011. Source: Census.
- 55 Distance to nearest GP, 2016. Source: KCC.
- 56 Distance to nearest urgent care centre/A&E, 2016. Source: KCC.
- 57 Barriers to housing and services IMD domain. Source: IMD 2015.

Local Economy

- 58 Number of businesses in the MSDA, per head population, 2015. Source: ONS (IDBR).
- 59 Average travel time by public transport/walking to medium-sized employment centres (with 500 to 4999 jobs available), 2014. Source: Department for Transport.

Effective Public Services

- 60 % who would recommend GP surgery to someone who has just moved to the area (modelled), 2016. Source: GP Patient Survey
- 61 (Modelled) % rating local police as doing a good or excellent job. Source: Mosaic 2014 (British Crime Survey).
- 62 % using the library (borrowers, all-age), 2014. Source: KCC.

Crime

- 63 (Modelled) % who feel 'very safe' walking alone at night. Source: Mosaic 2014 (British Crime Survey).
- 64 (Modelled) % who feel 'very safe' walking alone during the day. Source: Mosaic 2014 (British Crime Survey).
- 65 (Modelled) % who feel 'very safe' home alone at night. Source: Mosaic 2014 (British Crime Survey).
- 66 Reported crime rate: all recorded crime (rate per 1,000 population), Dec 2013 - Nov 2015. Excludes antisocial behaviour. Source: Police.data.uk.
- 67 Reported crime rate: burglary (rate per 1,000 population), Dec 2013 - Nov 2015. Source: Police.data.uk.
- 68 Reported crime rate: antisocial behaviour (rate per 1,000 population), Dec 2013 - Nov 2015. Source: Police.data.uk.
- 69 Reported crime rate: violence & sexual offences (rate per 1,000 population), Dec 2013 - Nov 2015. Includes domestic violence. Source: Police.data.uk.
- 70 Crime IMD domain. Source: IMD 2015.

| Appendix A: Review of mental wellbeing measures

Review Of Mental Wellbeing Measures

December 2015



Produced by

Jessica Mookherjee: Public Health Consultant (Jessica.Mookherjee@Kent.gov.uk)

Rachel Kennard: Senior Intelligence Analyst (Rachel.Kennard@kent.gov.uk)

Zara Cuccu: Analyst (Zara.Cuccu@Kent.gov.uk)

Correspondence to: Rachel Kennard



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| 1. Key Findings

1.1 Summary

A range of publications were identified which measure objective wellbeing. This included; the Wellbeing & Resilience Measure (WARM), the OECD Regional Wellbeing Indicator and the ONS Measure of National Wellbeing.

Frequent components of the mental wellbeing measures focus on individual, household and area level domains. Within these domains, the following indicators have been frequently used;

- Individual indicators, which explore socio-economic position and health
 - Income,
 - Education,
 - Employment,
 - Health,
- Household indicators, which explore relationships and how we spend our time
 - Relationships and family,
 - Care giving,
 - Community involvement,
- Area indicators, which characterise the wider environment
 - Accessibility,
 - Local economy,
 - Crime,
 - Natural environment,

Other health indicators (such as, obesity) did not feature within the above frameworks. Also, indicators related to health behaviours (such as, smoking, alcohol consumption and diet) did not feature within the above frameworks.

The Mental Wellbeing Impact Assessment Toolkit could be used to help choose the relevant wellbeing indicators.³⁸

³⁸ Mental Wellbeing Impact Assessment Toolkit <http://www.apho.org.uk/resource/item.aspx?RID=95836>

1.2 Possible Approach

The approach taken should be adapted to suit local need. The domains from the WARM framework could be used, but the most up to date and reliable indicators highlighted within the range of frameworks could be selected.

The Wellbeing Acorn geodemographic segmentation tool is of interest due to the ability to cluster the population into groups and type to identify the predominant characteristics for each ward.

The reference data used by Wellbeing Acorn is also of interest for indicator use, especially due to its inclusion of lifestyle risk behaviours and subjective wellbeing indicators.

Therefore, a ward profile could be constructed to include the following:

- Predominant classification identified using Wellbeing Acorn.
- An overall ward level wellbeing indicator score based on the three domains and selected indicators.
- A map to show groups of wards based on the overall ward level wellbeing indicator score.
- A benchmarked profile of the domains and their indicators to highlight above or below average performance.

| 2. Introduction

2.1 Mental Wellbeing

Wellbeing is a key part of the public health agenda. The Department of Health (2014) define wellbeing within two dimensions:

Subjective - how people think and feel about their own wellbeing.

Measured nationally within the Annual Population Survey; data is available at a regional and local authority level.³⁹

The Warwick Edinburgh Mental Wellbeing Scale is a validated tool for the measurement of individual wellbeing.⁴⁰

Objective - the external components believed to be important to wellbeing.

- A range of published frameworks have been published to measure objective wellbeing. This includes; the Wellbeing & Resilience Measure (WARM), the OECD Regional Wellbeing Indicator and the ONS Measure of National Wellbeing. These use a range of components and indicators.

This report aims to describe these published frameworks which measure objective wellbeing. Interpretation will focus on their components and indicators with a view to possible application locally at a small area level. The relevant sources will be explored for their availability at a small area level and date of publication.

³⁹ Office for National Statistics (2014) Personal wellbeing in the UK, 2013/14.

<http://www.ons.gov.uk/ons/rel/wellbeing/measuring-national-well-being/personal-well-being-in-the-uk--2013-14/sb-personal-well-being-in-the-uk--2013-14.html#tab-1--Key-points>

⁴⁰ Warwick Edinburgh Mental Wellbeing Scale <http://www.healthscotland.com/scotlands-health/population/Measuring-positive-mental-health.aspx>

| 3. WARM Wellbeing & Resilience Measure

3.1 Key Findings

The Wellbeing & Resilience Indicator (WARM)⁴¹ was developed for the measurement of local wellbeing. It uses three domains, each made up of a range of indicators to make up the measurement framework.

- Self
 - education
 - health
 - material wellbeing
- Supports
 - strong and stable families
- Systems and structures
 - local economy
 - public services
 - crime and antisocial behaviour
 - infrastructure
 - belonging

Limitations

Several of the indicators for strong and stable families, as well as, for local economy are over 10 years old.

⁴¹ The Young Foundation (2010) Taking the temperature of local communities.
<http://youngfoundation.org/wp-content/uploads/2012/10/Taking-the-Temperature-of-Local-Communities.pdf>

Table 1: WARM – Wellbeing and Resilience Measure: life satisfaction and education measures.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Self	Life satisfaction	How satisfied with your life nowadays?	Place Survey	2008	Ward
	Education	5 GCSEs	Census	2011	Ward
		Working age qualified to L2	Census	2011	Ward
		Working age qualified to L4	Census	2011	Ward
		Education score	Child Wellbeing Index	2009	LSOA
		Adults with low or no qualifications	Census	2011	Ward
		Staying on in education post 16	IMD	2015	LSOA

Table 2: WARM – Wellbeing and Resilience Measure: health measures.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Self	Health	Households with one or more person with a limiting long term illness.	National Indicator Dataset	2008	Ward
		Mental health indicator	Neighbourhood Statistics	2007	LSOA
		Years of potential life lost	Neighbourhood Statistics	2007	LSOA
		Health and disability score	Child Wellbeing Index	2009	LSOA
		Percentage of people with good health	Place Survey	2008	Ward
		Comparative Illness and Disability Ratio	Neighbourhood Statistics	2007	LSOA
		Measure of adults suffering from mood or anxiety disorders	Neighbourhood Statistics	2007	LSOA

Table 3: WARM – Wellbeing and Resilience Measure: material wellbeing.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Self	Material wellbeing	Income support (average)	DWP	2009	LSOA
		Incapacity benefits	DWP	2009	LSOA
		Claimants for less than 12 months	Neighbourhood Statistics	2007	MSOA
		Income index	CLG	2007	LSOA
		Claimant count	NOMIS	2010	Ward
		Claimants aged 50+	NOMIS	2010	Ward
		Claimants aged 18-24	NOMIS	2010	Ward
		Material wellbeing score	Child Wellbeing Index	2009	LSOA
		Income deprivation affecting older people	IMD	2015	LSOA
		County court judgements	Neighbourhood Statistics	2005	MSOA
		Average value of CCJs	Neighbourhood Statistics	2005	SOA
		Average weekly household total income	ONS – Small area model based estimates	2011/12	MSOA

Table 4: WARM – Wellbeing and Resilience Measure: strong and stable families.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Supports	Strong and stable families	People aged 16 and over living in households: not living in a couple: divorced	Neighbourhood Statistics	2001	LSOA
		Households with no adults in employment: with dependent children.	Neighbourhood Statistics	2001	LSOA
		One person pensioner	Neighbourhood Statistics	2001	LSOA
		Married couple households: with dependent children	Neighbourhood Statistics	2001	LSOA
		Lone parent households: with dependent children.	Neighbourhood Statistics	2001	LSOA
		Lone parent	DWP	2009	LSOA
		Carer	DWP	2009	LSOA

Table 5: WARM – Wellbeing and Resilience Measure: social capital.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Supports	Social Capital	Those who have given unpaid help at least once per month over the last 12 months.	National Indicator Dataset	2008	Ward
		A member of a group making decisions on local health or education services.	Place Survey	2008	Ward
		A member of a decision making group set up to regenerate the local area.	Place Survey	2008	Ward
		A member of a decision making group set up to tackle local crime problems.	Place Survey	2008	Ward
		A member of a tenants group decision making committee	Place Survey	2008	Ward

Table 6: WARM – Wellbeing and Resilience Measure: enabling infrastructure.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Systems and structures	Enabling infrastructure	Barriers to housing and services score	Neighbourhood Statistics	2007	LSOA
		Difficulty of access to owner occupation	Neighbourhood Statistics	2007	LSOA
		Housing score	Child Wellbeing Index	2009	LSOA
		Housing in poor conditions score	Neighbourhood Statistics	2007	LSOA
		Homelessness index	Neighbourhood Statistics	2007	LSOA
		Distance travelled to work – less than 2km	National Indicator Dataset	2001	MSOA

Table 7: WARM – Wellbeing and Resilience Measure: local economy.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Systems and structures	Local economy	Vacancies – summary analysis	NOMIS	2010	LSOA
		VAT based local units by employment size band 0-4	Neighbourhood Statistics	2004	Ward
		VAT based local units by employment size band 20+	Neighbourhood Statistics	2004	Ward
		Travel time to nearest employment centre by walk. Journey cannot be made within 120 minutes.	Core Accessibility Indicators	2008	LSOA
		Target population within 20 minutes by composite mode.	Core Accessibility Indicators	2008	LSOA

Table 8: WARM – Wellbeing and Resilience Measure: effective public services.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Systems and structures	Effective public services	How satisfied or dissatisfied you are with each of the following public services in your – local police (very satisfied or fairly satisfied)	Place Survey	2008	Ward
		How satisfied or dissatisfied you are with each of the following public services in your – fire and rescue (very satisfied or fairly satisfied)	Place Survey	2008	Ward
		How satisfied or dissatisfied you are with each of the following public services in your – GP (very satisfied or fairly satisfied)	Place Survey	2008	Ward
		How satisfied or dissatisfied you are with each of the following public services in your – local hospital (very satisfied or fairly satisfied)	Place Survey	2008	Ward

Table 9: WARM – Wellbeing and Resilience Measure: crime.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Systems and structures	Crime	Crime score	Child Wellbeing Index	2009	LSOA
		How safe or unsafe do you feel when outside in your local area during the day? (safe)	Place Survey	2008	Ward
		How safe or unsafe do you feel when outside in your local area after dark? (safe)	Place Survey	2008	Ward
		Burglary	Kent Police	2014	Ward
		Antisocial behaviour	Kent Police	2014	Ward
		Violence	Kent Police	2014	Ward
		Crime	Kent Police	2014	Ward

Table 10: WARM – Wellbeing and Resilience Measure: enabling infrastructure.

WARM			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Systems and structures	Enabling infrastructure	Travel time to nearest GP by walk	Core Accessibility Indicators	2008	LSOA
		Target population weighted by the access to GPs by walk	Core Accessibility Indicators	2008	LSOA
		Number of FE institutions within 30 minutes by walk	Core Accessibility Indicators	2008	LSOA
		Number of primary schools within 15 minutes' walk	Core Accessibility Indicators	2008	LSOA
		People who feel they belong to their neighbourhood.	Place Survey	2008	Ward

| 4. OECD Regional Wellbeing Indicator

4.1 Key Findings

The OECD Regional Wellbeing Indicator⁴² was developed for comparison of the OECD regions. It uses several indicators to make up the measurement framework.

- Material conditions
 - income
 - jobs
 - housing
- Quality of life
 - health
 - education
 - environment
 - civic engagement
 - accessibility of services

Limitations

In comparison to the other indicators, the OECD Regional Wellbeing measurement framework appears focused.

This framework includes mortality indicators, which were not acknowledged in the WARM or ONS frameworks.

Several of the indicators are not known to be available below district or Kent level, however, could be modified for small area analysis.

⁴² OECD (2015) Regional wellbeing indicator. <http://www.oecdregionalwellbeing.org/index.html>

Table 11: OECD Regional Wellbeing Indicator

OECD			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Material conditions	Income	Gross household disposable income.	ONS	2013	Kent
	Jobs	Employment rate Unemployment rate	NOMIS	2014	Ward
	Housing	Number of rooms per person	Census	2011	Ward
Quality of Life	Health	Life expectancy at birth	PCMD	2010 - 2014	Ward
		Age standardised mortality rate	SUS		Ward
	Education	Share of labour force with secondary education	Census	2011	Ward
	Environment	Estimated average exposure to air pollution (PM2.5)	PHOF	2013	District
	Safety	Homicide rate	Police	2010/11 2014/15	National
	Civic engagement	Voter turnout	Electoral Commission	2015	Ward
	Accessibility of services	Share of households with broadband access	Eurostat	2007-2013	National

| 5. ONS Measure of National Wellbeing

5.1 Key Findings

The ONS Measure of National Wellbeing⁴³ uses several indicators to make up the measurement framework.

- Health
- Relationships
- Education and skills
- What we do
- Where we live
- Our finances
- The economy
- Governance
- The environment
- Measures of personal wellbeing

Limitations

Several of the personal wellbeing, relationships and natural environment indicators are not known to be available below district or Kent level.

A few of the indicators within the remaining domains are also sourced from survey data, particularly those focused around community engagement with the arts.

⁴³Office for National Statistics (2015) Measures of national wellbeing.
<http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc146/wrapper.html>

Table 12: ONS Measures of National Wellbeing: personal wellbeing.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Personal wellbeing	Personal wellbeing	Very high rating of satisfaction with their lives overall	ONS Annual Population Survey	2014/15	LA
		Very high rating of how worthwhile the things they do are	ONS Annual Population Survey	2014/15	LA
		Rated their happiness yesterday as very high	ONS Annual Population Survey	2014/15	LA
		Rated their anxiety yesterday as very low	ONS Annual Population Survey	2014/15	LA
		Population mental well-being	UK Household Longitudinal Study	2009 - 2014	Ward

Table 13: ONS Measures of National Wellbeing: our relationships.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Our relationships	Our relationships	Average rating of satisfaction with family life	Eurofound, European Quality of Life Survey	2011	Survey
		Average rating of satisfaction with social life	Eurofound, European Quality of Life Survey	2011	Survey
		Has a spouse, family member or friend to rely on if they have a serious problem	Understanding Society: UK Household Longitudinal Study	2009 - 2014	Ward

Table 14: ONS Measures of National Wellbeing: health.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Health	Health	Healthy life expectancy at birth (male/female)	PCMD, ONS	2010 - 14	Ward
		Reported a long term illness and a disability	Labour Force Survey, ONS	April to June 2015	Survey
		Somewhat, mostly or completely satisfied with their health	Understanding Society: UK Household Longitudinal Study	2009 - 2014	Ward
		Some evidence indicating depression or anxiety	Understanding Society: UK Household Longitudinal Study	2009 - 2014	Ward

Table 15: ONS Measures of National Wellbeing: what we do.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
What we do	What we do	Unemployment rate	NOMIS	2014	Ward
		Somewhat, mostly or completely satisfied with their job	Understanding Society: UK Household Longitudinal Study	2009-2014	Ward
		Somewhat, mostly or completely satisfied with their amount of leisure time	Understanding Society: UK Household Longitudinal Study	2009-2014	Ward
		Volunteered more than once in the last 12 months	Understanding Society: UK Household Longitudinal Study	2009-2014	Ward
		Engaged with/participated in arts or cultural activity at least 3 times in last year	Taking Part Survey, Department for Culture, Media and Sport	2013/14	Survey
		Adult participation in 30 mins of moderate intensity sport, once per week.	Small area estimates, Sport England	2008–10	MSOA

Table 16: ONS Measures of National Wellbeing: where we live.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Where we live	Where we live	Crimes against the person (per 1,000 adults)	Crime Survey for England and Wales, ONS	2013/14	LA (Ward data locally available)
		Felt fairly/very safe walking alone after dark (men/women)	Crime Survey for England and Wales, ONS	2013/14	Household Survey
		Accessed natural environment at least once a week in the last 12 months	Natural England	2012/13	Survey
		Agreed/agreed strongly they felt they belonged to their neighbourhood	Understanding Society: UK Household Longitudinal Study	2009-2014	Ward
		Households with good transport access to key services or work (2011 = 100)	Accessibility statistics, Department for Transport	2015	LSOA
		Fairly/very satisfied with their accommodation	English Housing Survey, Department for Communities and Local Government	2012–13	Household Survey

Table 17: ONS Measures of National Wellbeing: personal finance.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Personal finance	Personal finance	Individuals in households with less than 60% of median income after housing costs	Family Resources Survey, Department for Work and Pensions	2013/14	Household survey
		Median wealth per household, including pension wealth	Wealth and Assets Survey, ONS	2010/12	Household survey
		Real median household income	ONS – small area model based estimates	2011/12	MSOA
		Somewhat, mostly or completely satisfied with the income of their household	Understanding Society: UK Household Longitudinal Study	2009-2014	Ward
		Report finding it quite or very difficult to get by financially	Understanding Society: UK Household Longitudinal Study	2009-2014	Ward
		Individuals in households with less than 60% of median income after housing costs	Family Resources Survey, Department for Work and Pensions	2013/14	Household survey

Table 18: ONS Measures of National Wellbeing: the economy.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
The economy	The economy	Real net national disposable income per head	ONS	2013	Kent
		UK public sector net debt as a percentage of Gross Domestic Product	National Accounts, ONS	2014/15	Local authority
		Inflation rate (as measured by the Consumer Price Index)	Consumer Prices, ONS	July 2015	National

Table 19: ONS Measures of National Wellbeing: education and skills.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Education and skills	Education and skills	Human capital - the value of individuals' skills, knowledge and competences in labour market	Human Capital estimates, ONS	2014	National (possible to apply locally)
		Five or more GCSEs A* to C including English and Maths	Census	2011	Ward
		UK residents aged 16 to 64 with no qualifications	Census	2011	Ward

Table 20: ONS Measures of National Wellbeing: governance.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
Governance	Governance	Voter turnout in UK General Elections	Electoral Commission	2015	Ward
		Those who have trust in national Government	Eurobarometer	Spring 2015	National

Table 21: ONS Measures of National Wellbeing: the natural environment.

ONS			Local application		
Domains	Measure	Indicator	Source	Date	Geography
The natural environment	The natural environment	Total green house gas emissions (millions of tonnes)	Department for Energy and Climate Change (DECC)	2014	National (local authority CO ₂)
		Protected areas in the UK (Millions hectares)	Department for Environment, Food and Rural Affairs	2014	National (SSI units)
		Energy consumed within the UK from renewable sources	Department for Energy and Climate Change (DECC)	2014	National (LSOA fuel consumption data)
		Household waste that is recycled	Department for Environment, Food and Rural Affairs	2012	National (Local authority data available)