# 1 Appendix A - Included Outcome Measures

### 1.1 Table A. 1 Health System Outcomes

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
Health System Outcomes							
A1 - Health function							
A2 - Quality of life							
Patient health-related quality of life - All individuals	Average EuroQol five-dimension (EQ-5D) index (ranging from 1(perfect health) to below 0 (worse than death) for all respondents.	Identified by authors	GPPS	GP practice	Waves (3 Months period)	2011- 03/2016 (10 waves)	04/2016- 2017 (1 waves)
Health-related quality of life for people with long-term conditions	The directly standardised average (mean) EQ-5D™ score for people self-reporting one or more long-term conditions	NHSOF, COIS, Ham et.al, 2015	GPPS	GP practice	Waves (3 Months period)	2011- 03/2016 (10 waves)	04/2016- 2017 (1 wave)
Social care-related quality of life	Based on the Adult Social Care Outcomes Toolkit (ASCOT) measure: 8 domains with responses: no unmet need (3), needs adequately met (2), some needs met (1), and no needs met (0). Summed and adjusted for questions answered.  > Weighted for sampling and non-response	ASCOF	ASCOF	CASSR	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (4 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
A3 - Life expectancy							
Life Expectancy at birth	The average number of years a person would expect to live based on contemporary mortality rates  Numerator: Number of deaths registered in the respective calendar years  Denominator: ONS mid-year population estimates for the respective calendar years	PHOF, NHSOF, Ham et.al, 2015	ONS	Lower- tier LA	Three years combined	2001- 03/2016 (13 waves)	04/2016- 2019 (4 waves)
Healthy life expectancy at birth	The average number of years a person would expect to live in good health based on contemporary mortality rates and prevalence of self-reported good health.  Numerator: Number of deaths registered in the respective calendar years and the weighted prevalence of people reporting good or very good health  Denominator: ONS mid-year population estimates for the respective calendar years, Annual Population Survey sample weighted to local authority population totals.	PHOF, Ham et.al, 2015	ONS	Upper- tier LA	3 years period	2009- 03/2016 (5 waves)	04/2016- 2018 (3 years)
A4 - Well-being	· ·						
Self-reported wellbeing - people with a high anxiety score	The percentage of respondents scoring 6-10 to the question "Overall, how anxious did you feel yesterday?"  Numerator: Weighted count of respondents' (aged 16 and over who live in residential households in the UK) response.  Denominator: Weighted count of all respondents to the question.	PHOF	ONS - Annual personal well- being estimates	Upper- tier LA	Annually (Financial year)	04/2011- 03/2016 (4 years)	04/2016- 03/2020 (4 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
A5 - Health conditions (pre	valence, condition-specific activity, excluding admissio	ns for preven	table conditions)				
Low birth weight of full- term babies	The number of full-term (a gestation period ≥ 37 weeks) live babies that were born weighing less than 2,500g, as a percentage of live full-term births with recorded birth weight that occurs in a year.	PHOF, COIS, Ham et.al, 2015	HES	MSOA	Monthly	04/2013- 03/2016 (36 months)	04/2016- 03/2020 (47 months)
Hospital admissions caused by unintentional and deliberate injuries in children (aged 0-14 years) and young people (15-24 years) – <i>Composite measure</i>	Crude rate of hospital admissions caused by unintentional and deliberate injuries in children aged under 15 years and young people (aged 15-24 years) per 10,000 resident population aged 0-24 years.  Numerator: The number of finished emergency admissions for injuries and other adverse effects of external causes in any diagnostic field position  Denominator: Mid-year population estimates	PHOF, Ham et.al, 2015	HES	Lower- tier LA	Annually (Financial year)	04/2010- 03/2016 (5 years)	04/2016- 03/2019 (3 years)
PHOF - Emergency hospital admissions due to falls in people aged 65 and over NHS Oversight - Injuries from falls in people aged 65 and over	Emergency hospital admissions for falls injuries in persons aged 65 and over, directly age-standardised rate per 100,000.  Numerator: Emergency admissions for falls injuries. Age at admission 65 and over. Excluding regular and day attenders.  Denominator: Local Authority estimates of the resident population.	PHOF, NHS Oversight	HES	Lower- tier LA	Annually (Financial year)	04/2012- 03/2016 (5 years)	04/2016- 03/2019 (3 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
A5 - Health conditions (pre	evalence, condition-specific activity, excluding admissio	ns for prever	ntable conditions)				
Percentage reporting a long term Musculoskeletal (MSK) problem	The percentage of people aged 16+ reporting an MSK condition, long-term back pain or long term joint pain.  Numerator: Weighted count of those who answered "Arthritis or ongoing problem with back or joints" to Q35 ("Which, if any, of the following long-term conditions do you have?").  Denominator: Weighted count of survey participants who gave a valid response to GP Patient Survey Q35.	PHOF	GPPS	GP practice	Waves (3 Monthly periods)	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
TB incidence (three year average)	Three year average incidence of TB per 100,000 population  Numerator: Sum of the number of new TB cases notified to the Enhanced Tuberculosis Surveillance system (ETS) over a three year time period Denominator: Mid-year population estimates	PHOF	PHE: Enhanced Tuberculosis Surveillance system	Lower- tier LA	three years average, Annually (Calendar year)	2000- 03/2016 (14 waves)	04/2016- 2019 (4 waves)
Percentage of 5 year olds with experience of visually obvious dental decay	Percentage of 5 year olds with dental decay extending to the dentine layer which can be detected by visual observation alone  Numerator: Number of 5 year olds in a given area with at least one tooth decayed, missing or filled Denominator: Number of 5 year olds examined for a given area from Dental Public Health Epidemiology Programme for England: oral health survey of five-year-old children	PHOF	Dental Public Health Epidemiology Program for England	Upper- tier LA	Annually (Annually (Academic year) year)	09/2007- 03/2016 (3 Pre 2014/15: Triennial; Post- 2014/15: Biennial)	04/2016- 08/2018 (2 Pre 2014/15: Triennial; Post- 2014/15: Biennial)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
A5 - Health conditions (pre	valence, condition-specific activity, excluding admission	ons for preven	table conditions)			-	
Emergency hospital admissions for intentional self-harm	<b>Numerator:</b> The number of first finished emergency admission episodes in patients with a recording of self-harm by cause code (ICD10 X60-X84) in financial year. Regular and day attenders have been excluded. <b>Denominator:</b> Mid-year population estimates	PHOF	HES	Lower- tier LA	Annually (Financial year)	04/2010- 03/2016 (5 years)	04/2016- 03/2019 (3 years)
Preventable sight loss - age related macular degeneration (AMD) & Preventable sight loss - sight loss certifications Composite measure	New Certifications of Visual Impairment (CVI) due to age related macular degeneration (AMD) aged 65+, rate per 100,000 population.  Numerator: Count of certifications with a main cause of sight loss of AMD  Denominator: Mid-Year Population Estimates aggregated for persons aged 65+	PHOF, Ham et.al, 2015	PHE	Upper- tier LA	Annually (Financial year)	04/2011- 03/2016 (6 years)	04/2016- (3 years)
	New Certifications of Visual Impairment (CVI), rate per 100,000 population.  Numerator: Count of new certifications  Denominator: Mid-Year Population Estimates						

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
A6 - Mortality (overall me	easures of system performance)						
Neonatal mortality and stillbirths (formerly indicator 1.6.ii)	The number of stillbirths and deaths under 28 days, per 1,000 live births and stillbirths.  Numerator: The number of stillbirths and deaths under 28 days occurring during the year.  Denominator: The number of live births and stillbirths occurring during the year.	NHSOF, COIS, NHS Oversight, Ham et.al, 2015	ONS	Lower- tier LA	Calander Annually	01/1999- 03/2016 (17 years)	04/2016- 12/2019 (3 years)
Infant mortality rate	The number of babies dying before the age of one for every 1,000 that were born alive.  Numerator: The number of deaths, aged under one year (infant deaths) during the year.  Denominator: the number of live births occurring during the year.	PHOF, NHSOF, Ham et.al, 2015	ONS	Lower- tier LA	Annually (Calendar year)	01/1999- 03/2016 (17 years)	04/2016- 12/2019 (3 years)
Suicide rate	Age-standardised mortality rate from suicide and injury of undetermined intent per 100,000 population.  Numerator: Number of deaths from suicide and injury of undetermined intent classified by underlying cause of death recorded as ICD10 codes X60-X84 (age 10+ only), Y10-Y34 (ages 15+ only) registered in the respective calendar years.  Denominator: Population-years (aggregated populations for the three years) for people of ages 10+ only, aggregated into quinary age bands (10-14,15-19, 85-89, 90+)	PHOF, Ham et.al, 2015	Office for National Statistics: Suicides in the UK	Lower- tier LA	Three- years combined (calendar)	2001- 03/2016 (13 waves)	04/2016- (4 waves)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
A6 - Mortality (overall m	neasures of system performance)						
Excess Winter Deaths Index	Excess Winter Deaths Index (EWD Index) is the excess winter deaths measured as the ratio of extra deaths from all causes that occur in the winter months compared with the expected number of deaths, based on the average of the number of non-winter deaths.  numerator  Numerator: Total number of excess winter deaths for all ages in defined year 20xx/20xx+1.  Denominator: The average number of deaths for all ages (in defined year 20xx/20xx+1) occurring in the non-winter months.	PHOF, Ham et.al, 2015	Office for National Statistics: Public Health England Annual Births and Mortality Extracts	Lower- tier LA	Annually (August to July)	08/2001- 03/2016 (14 Years)	04/2016- 07/2019 (4 Years)
Mortality rate from causes considered preventable	Age-standardised mortality rate from causes considered preventable per 100,000 population <b>Numerator:</b> Number of deaths that are considered preventable registered in the respective calendar years, aggregated into quinary age bands. <b>Denominator:</b> ONS mid-year population estimates (all ages)	PHOF	PHE, ONS	Upper- tier LA	Three- Annually combined (calendar)	2001- 03/2016 (13 waves)	04/2016- 2019 (4 waves)

#### 1.2 Table A. 2 Social Determinant of Health

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
Social Determinant of Hea	lth						
B1 - Healthy behaviours ar	nd lifestyle						
Chlamydia detection rate / 100,000 aged 15-24	All chlamydia diagnoses in 15 to 24 year olds attending specialist and non-specialist sexual health services (SHSs)*, who are residents in England, expressed as a rate per 100,000 population.  Numerator: The number of diagnoses of chlamydia among 15 to 24 year olds in England.  Denominator: ONS population estimates from respective census	PHOF	The CTAD Chlamy dia Surveill ance System, ONS	Lower- tier LA	Jan-Dec	01/2012- 03/2016 (4 years)	04/2016- 12/2019 (4 years)
Under 18s conception rate / 1,000	Conceptions in women aged under 18 per 1,000 females aged 15-17  Numerator: Number of pregnancies that occur in women aged under 18 and result in either one or more live or still births or a legal abortion under the Abortion Act 1967.  Denominator: ONS population estimates	PHOF, Ham et.al, 2015	ONS	Lower- tier LA	Annually (Calendar year)	01/1998- 03/2016 (18 years)	04/2016- 12/2018 (3 years)
Breastfeeding - Breastfeeding initiation	<b>Numerator:</b> Number of women giving birth who initiate breast feeding in the first 48 hours after delivery <b>Denominator:</b> Number of maternities	PHOF	PHE				

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
B1 - Healthy behaviours ar	nd lifestyle						
Smoking status at time of delivery	The number of mothers known to be smokers at the time of delivery as a percentage of all maternities. A maternity is defined as a pregnant woman who gives birth to one or more live or stillborn babies of at least 24 weeks gestation, where the baby is delivered by either a midwife or doctor at home or in a NHS hospital  Numerator: Number of women known to smoke at time of delivery.  Denominator: Number of maternities where smoking status is known.	PHOF, COIS, NHS Oversight, Ham et.al,2015	NHS Digital return on Smokin g Status At Time of delivery (SATOD	Lower- tier LAs	Annually (Financial year)	04/2010- 03/2016 (5 years)	04/2016- 03/2020 (4 years)
Percentage of physically active adults	The number of respondents aged 19 and over, with valid responses to questions on physical activity, doing at least 150 moderate intensity equivalent (MIE) minutes physical activity per week in bouts of 10 minutes or more in the previous 28 days expressed as a percentage of the total number of respondents aged 19 and over.  Numerator: Weighted number of respondents aged 19 and over with valid responses  Denominator: Weighted number of respondents aged 19 and over, with valid responses to questions on physical activity.	PHOF, Ham et.al, 2015	Active Lives Adult Survey, Sport England	Lower- tier LA	November- November	10/2010- 03/2016 (5 years)	04/2016- 09/2019 (3 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
B1 - Healthy behaviours a	nd lifestyle						
Obesity related admissions	<ul> <li>NHS hospital finished admission episodes with a primary diagnosis of obesity (admissions directly attributed to obesity).</li> <li>NHS hospital finished admission episodes with a primary or secondary diagnosis of obesity (admissions where obesity was a factor).</li> <li>NHS hospital finished consultant episodes with a primary diagnosis of obesity, and a primary or secondary procedure for bariatric surgery (obesity related bariatric surgery).</li> </ul>	Identified by authors	HES	MSOA	Monthly	04/2013- 03/2016 (36 months)	04/2016- 03/2020 (47 months)
PHOF - Admission episodes for alcohol- related conditions (Narrow) CCGOIS - Alcohol-specific hospital admissions CCGOIS - Also see 1.8 and 3.15 relating to alcohol- related emergency admissions	Numerator: Admissions to hospital where the primary diagnosis is an alcohol-related condition, or a secondary diagnosis is an alcohol-related external cause.  Denominator: ONS mid-year population estimates.	PHOF, COIS, Ham et.al, 2015	HES	MSOA	Monthly	2013- 03/2016 (36 months)	04/2016- 03/2020 (47 months)
Smoking Prevalence in adults (18+) - current smokers (APS)	Numerator: The number of persons aged 18 + who are self-reported smokers in the Annual Population Survey  Denominator: Total number of respondents (with valid recorded smoking status) aged 18+ from the Annual Population Survey	PHOF, Ham et.al, 2015	APS	Lower- tier LA	Annually (Calendar year)	01/2011- 03/2016 (5 years)	04/2016- 12/2019 (4 years)

**B2** - Personal resources

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
B3 - Living and working co	nditions (socio-economic)						
School readiness: percentage of children achieving a good level of development at the end of Reception	Numerator: All children defined as having reached a good level of development at the end of the EYFS by local authority. Children are defined as having reached a good level of development if they achieve at least the expected level in the early learning goals in the prime areas of learning and the early learning goals in the specific areas of mathematics and literacy.  Denominator: All children eligible for the EYFS	PHOF	EYFSP	Upper- tier LA	Annually (Academic year)	09/2012- 03/2016 (4 years)	04/2016- 08/2019 (3 years)
Pupil absence	Profile by local authority Percentage of half days missed by pupils due to overall absence (including authorised and unauthorised absence).  Numerator: The number of sessions missed due to overall absence  Denominator: The total number of possible school	PHOF	DoE	Lower- tier LA	Annually (Academic year)	09/2005- 03/2016 (10 years)	04/2016- 08/2019 (4 years)
16-17 year olds not in education, employment or training (NEET) or whose activity is not known	Proportion of 16-17 year olds not in education, employment or training (NEET) or whose activity is not known.  Numerator: The estimated number of 16-17 year olds not in education, employment or training or whose activity is not known.  Denominator: The total number of 16-17 year olds known to the local authority.	PHOF, Ham et.al, 2015	DoE	Upper- tier LA	Annually (Calendar year)	01/2011- 03/2016 (5 years)	04/2016- 12/2018 (3 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
B3 - Living and working co	onditions (socio-economic)						
Sickness absence - the percentage of working days lost due to sickness absence	The percentage of working days lost due to sickness absence in the previous week  Numerator: The weighted number of days lost in the previous week due to sickness absence  Denominator: The weighted total number of days due to be worked in the previous week by adults aged 16+	PHOF, Ham et.al, 2015	Labour Force Survey, ONS	Lower- tier LA	Three years period	2009- 03/2016 (5 waves)	04/2016- 2019 (4 waves)
Percentage of people aged 16-64 in employment	Numerator: Number of people who are in employment (either as an employee, self-employed, in government employment and training programmes or an unpaid family worker - ILO definition of basic economic activity) and are of working age (16-64).  Denominator: Number of people who are of working age (16-64)	PHOF	NOMIS	Lower- tier LA	Annually (Financial year)	04/2012- 03/2016 (4 years)	04/2016- 03/2020 (5 years)
Fuel Poverty	The percentage of households in an area that experience fuel poverty based on the "Low income, high cost" methodology.  Numerator: The number of households in the corresponding geographical area that were in fuel poverty (modelled)  Denominator: The number of households in the	PHOF	BEIS	Lower- tier LA	Annually (Calendar year)	01/2011- 03/2016 (5 years)	04/2016- 12/2018 (3 years)
Economic activity rate	corresponding geographical area Usual residents aged 16 to 74 by economic activity, as at census day includes unemployed population. > Overall > Due to long-term sickness	Identified by authors	NOMIS labour market portal				

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
B3 - Living and working co	nditions (socio-economic)						
Economic productivity	Gross Value Added (GVA) per-head	Identified by authors	NOMIS labour market portal				
Homelessness: Number of Rough Sleepers	Estimated number of people sleeping rough on a single night between 1 October and 30 November each year and some basic demographics details (age, gender, nationality)	PHOF	Rough sleeping snapshot data				
Homelessness: households in temporary accommodation	Households in temporary accommodation, crude rate per 1,000 estimated total households  Numerator: The number of households in temporary accommodation secured by a local	PHOF	Ministry of Housing Commun ities &	Upper- tier LA	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (2/3 years)
Composite measure	housing authority under their statutory homelessness functions. <b>Denominator:</b> The estimated total number of households within each area.		Local Governm ent				
Violent crime - hospital admissions for violence (including sexual violence)	The number of emergency hospital admissions for violence (external causes: ICD-10 codes X85 to Y09). Directly age standardised rate per 100,000 population.  Numerator: The number of first finished emergency admission episodes in patients with a recording violent crime	PHOF	HES, ONS	Lower- tier LA	Three years period	2009- 03/2016 (4 waves)	04/2016- 2019 (3 waves)
First time offenders	Denominator: ONS Mid-year population estimates Rate of first time offenders based on recorded via Police National Computer crime data per 100,000 population Numerator: Total number of offenders recorded as having received their first conviction, caution or youth caution.	PHOF	Ministry of Justice, ONS	Upper- tier LA	Annually (Calendar year)	01/2001- 03/2016 (6 years)	04/2016- 12/2018 (3 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
	<b>Denominator:</b> Population has been based on mid- year population estimates supplied by the Office for National Statistics.						
<b>B4 - Physical environment</b>							
The rate of complaints about noise	Number of complaints per year per local authority about noise per thousand population <b>Numerator:</b> Number of complaints about noise. <b>Denominator:</b> Mid-year population estimates	PHOF	CIEH	Lower- tier LA	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2019 (3 years)
Utilisation of outdoor space for exercise/health reasons	Numerator: The weighted estimate of the proportion of residents in each area taking a visit to the natural environment for health or exercise purposes over the previous seven days.  Denominator: Effective sample size of all survey respondents.	PHOF	MENE	Lower- tier LA	Annually (Calendar year)	2009- 03/2016 (8 years)	04/2016- 2019 (3 years)
Fraction of mortality attributable to particulate air pollution	Fraction of annual all-cause adult mortality attributable to anthropogenic (human-made) particulate air pollution (measured as fine particulate matter, PM2.5).	PHOF	PHOF calculate d using Defra data	Lower- tier LA	Annually (Calendar year)	01/2010- 03/2016 (7 years)	04/2016- 12/2019 (3 years)

## 1.3 Table A. 3 Health Systems Inputs

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
Health System Inputs							
C1 - Leadership and gove	rnance						
Effectiveness of working relationships in the local system	Regional teams will make a judgement in one of four categories: ('outstanding'/'good'/''requires improvement'/'inadequate') in relation to the following statement: 'The CCG leadership actively promotes and develops strong and collaborative partnerships across the STP/ICS (system), at every level, for example in their contribution to Health and Wellbeing Boards and primary care networks, to seek to ensure that its population is getting the best health and care outcomes.'	NHS Oversight	CCG 360 Stakehol der Survey - REQUEST ED	CCG	Wave	2014- 03/2016 (3 years)	04/2016- 2019 (3 years)
C2 - Resources = Job satis	faction						
GP job satisfaction	The proportion of GPs who responded satisfied with their job taking into consideration  Numerator: Number of GPs who responded satisfied with their job taking into consideration  Denominator: All GP responded to the survey	Identified by authors	GP WLS	GP	Wave		

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
C3 - Resources = Workfor	се						
GP headcounts	GP headcounts overall and by gender, age and country of training	Identified by authors	EPRACM EM	GP practice	Monthly		
Nursing and GP practice staffing (Non-GP)	Overall and by gender, age and country of training	Identified by authors	General and Personal Medical Services	GP practice	Annually/Qu arterly		
GP retention rates	Under review	Identified by authors	EPRACM EM	GP practice	Monthly		
Number of NHS Hospital and Community Health Service (HCHS) non- medical staff	Counts of all: qualified nursing, midwifery & health visiting staff, registered midwifes, health visitors, qualified school nurses, Qualified scientific, therapeutic & technical staff, qualifies allied health professionals, qualified healthcare scientists, qualified ambulance staff and support staff.	Identified by authors	Health Educatio n England NHS Workfor ce Statistics	Trust	Monthly		
Social Care workforce headcounts	Counts of Social care workers: senior care workers, community support, counsellors, social workers, occupational therapists. Overall and by service type	Identified by authors	ASC- WFD (formally known as NMDS- SC)	MSOA and Lower- tier LA?	Annually (Financial year)	04/2005- 03/2016 (11 years)	04/2016- 03/2020 (4 years)
Level of staff absenteeism through illness in the period	Numerator: number of days sickness reporting within the month.  Denominator: number of days available within the month	NHS Oversight	NHS Digital Staff manage ment	CCG, trust	Monthly	04/2014- 03/2016 (23 months)	04/2016- 03/2020 (48 months)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
C4 - Resources = Structure	es (e.g. equipment, sites, beds)						
Composition of GP practices	Closures Openings Mergers	Identified by authors	Practice demogra phic date	CCG	Quarterly		
Composition of hospitals	Closures Openings Mergers	Identified by authors	HES	CCG	Quarterly		

## 1.4 Table A. 4 Health System Output

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
Health System Output							
D1 - Access							
Proportion of patients reporting that they saw someone on the same day Ham - % able to get same-day appointments (who wanted one)	<b>Numerator:</b> Number of patients reporting getting same-day appointment, based on the question: How long after initially trying to book the appointment, did the appointment take place? <b>Denominator:</b> Total patients responded to the question	Ham et.al, 2015	GPPS	GP Practice	Waves	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
Composition of GP practice - 7-day access	Numerator: GP Practices that has 7-day access in a CCG Denominator: All GP Practices in a CCG area	Identified by authors	Practice demogra phic date	CCG	Quarterly		
Number of able to get routine appointments in the evenings and weekends	Under Review	Ham et.al, 2015					
Adherence to 15-minute waiting time target for ambulance attendances (A&E)	Total waiting time ambulance attendances (A&E)	Identified by authors	HES				
Adherence to 60-minute waiting time target (A&E)	Total waiting time in A&E	Identified by authors	HES				

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D1 - Access							
Proportion of patients leaving A&E without treatment.	Numerator: Counts of patients leaving A&E without treatment Denominator: Total patients accessing A&E	Identified by authors	HES				
NHS oversight - Patients waiting six weeks or more for a diagnostic test Ham - Percentage of patients waiting 6 weeks or more for a diagnostic test (15 key tests)	<b>Numerator:</b> Number of patients waiting six weeks or more for a diagnostic test <b>Denominator:</b> Total number of patients waiting for a diagnostic test	NHS Oversight, Ham et.al, 2015	NHSE - Diagnosti cs Waiting Times and Activity Return	CCG, Trust	Monthly	01/2006- 03/2016 (123 months)	04/2016- 02/2020 (47 months)
Admitted patients starting treatment within a maximum of 18 weeks from referral NHS oversight - The percentage of patients waiting to start non-emergency consultant-led treatment who were waiting 18 weeks or less at the end of the reporting period	Numerator: Number of incomplete pathways at or within 18 weeks at the end of the reporting period Denominator: Total number of incomplete pathways at the end of the reporting period.	NHS Oversight, Ham et.al, 2015	HES	Trust	Monthly	04/2018- 03/2016 (106 months)	04/2016- 03/2020 (47 months)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D1 - Access							
A&E trolley waits	Total waiting time from decision to admit a patient to admission to a ward	Ham et.al, 2015					
Cancelled Elective Operations	Number of elective operations that are cancelled at the last minute for non-clinical reasons and not re- booked within 28 days	Ham et.al, 2015					
Delayed transfers of care: Adult social care	Delayed transfers of care from hospital that are attributable to adult social care, per 100,000 population	ASCOF	DTOC	LA (CASSR)	Monthly	04/2011- 03/2016 (72months)	04/2016- 03/2020 (47 months)
Antenatal assessments within 13 weeks	The percentage of women who have seen a midwife or a maternity healthcare professional by 12 weeks and 6 days of pregnancy.	COIS, Ham et.al, 2015	HES	Trust			
IAPT waiting times against 6- and 18-week standards	Treatment within 6 weeks for 75% of people referred to the Improving Access to Psychological Therapies programme, with 95% of people being treated within 18 weeks	Ham et.al, 2015	IAPT data	Trust	Monthly	07/2012- 03/2016 (44 months)	04/2016- 03/2020 (47 months)
Access to NHS dental services	Numerator: The weighted number of respondents who tried to get an appointment in the last 2 years and were successful in getting an NHS dental appointment  Denominator: The weighted number of respondents who tried to get an appointment in the last 2 years	NHSOF, Ham et.al, 2015	GPPS / NHSOF	Lower- tier LA	Annually (Financial year)	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
The proportion of people who use services who find it easy to find information about support	Numerator: People who use services who find it easy to find information about support  Denominator: Total people who use the services.	ASCOF	ASCS	CASSR	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (4 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ess and appropriateness						
Cancer screening coverage Composite measure	Breast cancer Cervical cancer (aged 25 to 49 years old) Cervical cancer (aged 50 to 64 years old) Numerator: Number of tested women with result Denominator: Total eligible women in the area for cancer screening.	PHOF, Ham et.al, 2015	PHOF	Lower- tier LA	Annually (Calendar year)	01/2010- 03/2016 (6 years)	04/2016- 12/2019 (4 years)
Abdominal Aortic Aneurysm Screening - Coverage	Numerator: Number of men eligible for the initial screen who have had a conclusive scan result within the screening year plus an additional 3 months Denominator: All eligible men in their 65th year, excluding any who die or move out of the area	PHOF	SMaRT PHE	Lower- tier LA	Annually (Financial year)	04/2012- 03/2016 (3 years)	04/2016- 03/2019 (3 years)
Population vaccination coverage Composite measure	Dtap / IPV / Hib (1 year old) PCV Dtap / IPV / Hib (2 years old) MMR for one dose (2 years old) PCV booster Hib / MenC booster (2 years old) MMR for one dose (5 years old) MMR for two doses (5 years old) Flu (at risk individuals) Flu (aged 65+) PPV Numerator: Number of relevant population who received the vaccine Denominator: Total eligible population	PHOF, Ham et.al, 2015	COVER	Upper- tier LA	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (4 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ss and appropriateness						
Successful completion of drug treatment Composite measure	Opiate users Non-opiate users Numerator: The number of adults who successfully complete treatment in a year and who do not represent to treatment within 6 months.  Denominator: The total number of adults in treatment in a year	PHOF	National Drug Treatme nt Monitori ng System	Upper- tier LA	Annually (Calendar year)	01/2010- 03/2016 (6 years)	04/2016- 12/2018 (3 years)
Successful completion of alcohol treatment	Numerator: The number of adults that successfully complete structured treatment for alcohol dependence in a year and who do not represent to treatment within 6 months.  Denominator: The total number of adults in structured treatment for alcohol dependence in a year.	PHOF	National Drug Treatme nt Monitori ng System	Upper- tier LA	Annually (Calendar year)	-03/2016 (6 years)	04/2016- (3 years)
Cumulative percentage of the eligible population aged 40-74 offered an NHS Health Check who received an NHS Health Check	Numerator: Number of people aged 40-74 eligible for an NHS Health Check who received an NHS Health Check in the five year period  Denominator: Number of people aged 40-74 eligible for an NHS Health Check in the five year period	PHOF, Ham et.al, 2015	NHS health check www.he althchec k.nhs.uk	Upper- tier LA	Annually (Financial year)	-03/2016 (3 years)	04/2016- (3 years)
QOF average population achievement rates	All clinical quality indicators	Identified by authors	QOF dataset	GP Practice			

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ss and appropriateness						
Volume of ambulatory care sensitive emergency admissions per 1,000 practice list size - total NHSOF / COIS - Unplanned hospitalisation for chronic ambulatory care sensitive conditions NHS Oversight - Emergency admissions for urgent care sensitive conditions	NHSOF & NHS Oversight: per 100,000 population  NHSOF: The indirectly standardised rate, per 100,000 population, of emergency admissions for chronic ambulatory care sensitive conditions in the respective financial year or quarter of the financial year for people of all ages.  NHS Oversight: Rate of unplanned hospital admissions for urgent care sensitive conditions, per 100,000 registered patients.	NHSOF, COIS, NHS Oversight, Ham et.al, 2015	HES				
ST report - Total antibiotics prescriptions per 100 STAR-PU's. PHOF - Adjusted antibiotic prescribing in primary care by the NHS NHS Oversight - Antimicrobial resistance: appropriate prescribing of antibiotics in primary care	PHOF: Numerator: Total number of antibiotic items presribed in practices located within the area.  Denominator: Total of STAR-PU units for practices located within the area.  NHS oversight: Similar measure but within CCG	PHOF, NHS Oversight	GPPD	GP Practice	Monthly	04/2012- 03/2016 (46 months)	04/2016- 03/2020 (47 months)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ss and appropriateness						
Short term report - % of antibiotic prescriptions that are broad-based Antimicrobial resistance: appropriate prescribing of broad spectrum antibiotics in primary care	Numerator: Number of prescription items for BNF 5.1.1.3 (sub-section co-amoxiclav), BNF 5.1.2.1 (cephalosporins) and BNF 5.1.12 (quinolones) within the CCG in the previous 12 months.  Denominator: Number of antibiotic prescription items for BNF 5.1.1; 5.1.2.1; 5.1.3; 5.1.5; 5.1.8; 5.1.11; 5.1.12; 5.1.13 prescribed within the CCG in the previous 12 months.	NHS Oversight	GPPD	GP Practice	Monthly	04/2012- 03/2016 (46 months)	04/2016- 03/2020 (47 months)
Volume of hypnotics prescribed	Total hypnotics prescribed per 1,000 STAR-PU's	Identified by authors	GPPD	GP Practice	Monthly	04/2012- 03/2016 (46 months)	04/2016- 03/2020 (47 months)
Prescription correct non-steroidal anti- inflammatory (NSAIDS) drugs	% of NSAID prescriptions that are Ibuprofen/Naproxen	Identified by authors	GPPD	GP Practice	Monthly	04/2012- 03/2016 (46 months)	04/2016- 03/2020 (47 months)
Generic-vs-Branded prescribing	Proportion of total prescriptions that are for branded drugs	Identified by authors	GPPD	GP Practice	Monthly	04/2012- 03/2016 (46 months)	04/2016- 03/2020 (47 months)
Reducing the rate of low priority prescribing (LPP)	The overall LPP Indicator is the weighted average of the individual quality and financial RAG ratings— the weighting is 60% of the quality score and 40% of the financial score.	NHS Oversight	GPPD	GP Practice	Monthly	04/2012- 03/2016 (46 months)	04/2016- 03/2020 (47 months)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ess and appropriateness						
Admission rate	Proportion of attendances concluding with an admission	Identified by authors	HES				
Unplanned follow-up A&E attendance within 7 days of attendance	Number of unplanned follow-up A&E attendance within 7 days of attendance	Identified by authors	HES				
In-hospital and out-of- hospital death within 7 days of attendance	Number of in-hospital and out-of-hospital death within 7 days of attendance	Identified by authors	HES				
Emergency readmissions within 30 days of discharge from hospital	Numerator: The number of finished and unfinished CIP spells intersecting the respective financial year, plus those up to 30 days into the next financial year that are emergency admissions within 0-29 days (inclusive) of the last, previous discharge from hospital.  Denominator: The number of finished CIP spells	PHOF, NHSOF, COIS, Ham et.al, 2015	HES	Trust	Monthly	04/2008- 03/2016 (106 months)	04/2016- 03/2020 (47 months)
	within selected medical and surgical specialties with a discharge date up to 31st March in the financial year of analysis.						
30-day mortality rate	In-hospital or out-of-hospital* death within 30 days of admission.	Identified by authors	HES	Trust	Monthly	04/2008- 03/2016 (106 months)	04/2016- 03/2020 (47 months)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ess and appropriateness						
Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitati on services	Numerator: Number of older people (aged 65 and over) discharged from acute or community hospitals to their own home or to a residential or nursing care home or extra care housing for rehabilitation, with a clear intention that they will move on/back to their own home, who are at home or in extra care housing or an adult placement scheme setting 91 days after the date of their discharge from hospital.  Denominator: Number of older people (aged 65 and over) discharged from acute or community hospitals from hospital to their own home or to a residential or nursing care home or extra care housing for rehabilitation, with the clear intention that they will move on/back to their own home	NHSOF, ASCOF, Ham et.al, 2015	ASCS	CASSR / Lower- tier LA	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (4 years)
Social Isolation: Percentage of adult social care users who have as much social contact as they would like	Numerator: The number of respondents to the Adult Social Care Survey (service users) who responded to the question "Thinking about how much contact you've had with people you like, which of the following statements best describes your social situation?" with the answer "I have as much social contact as I want with people I like".  Denominator: The number of people responding to the question	PHOF, ASCOF	ASCS	CASSR / Lower- tier LA	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (4 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ess and appropriateness						
Proportion of people who use services who have control over their daily life	The proportion of respondents to the Adult Social Care Survey who felt they had control over their daily life by answering 1 or 2 to the question: Which of the following statements best describes how much control you have over your daily life?'  1. I have as much control over my daily life as I want 2. I have adequate control over my daily life 3. I have some control over my daily life but not enough 4. I have no control over my daily life.	ASCOF	ASCS	CASSR	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (4 years)
Emergency C-sections following spontaneous labour	Percentage of births where the mother was admitted as an emergency and had a c-section  Numerator: Births where the mother was admitted as an emergency and had a c-section  Denominator: All births	NHS Oversight	HES	Trust	Monthly	04/2008- 03/2016 (106 months)	04/2016- 04/2008 (47 months)
Percentage of referrals to Improving Access to Psychological Therapies (IAPT) services which indicated a reliable recovery following completion of	Numerator: The number of people who have started treatment (psychological therapies) in the most recent three month period  Denominator: Number of people who have depression and/or anxiety disorders	COIS, NHS Oversight, Ham et.al, 2015	IAPT data	CCG, trust	Monthly	07/2012- 03/2016 (44 months)	04/2016- 03/2020 (47 months)

treatment

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ss and appropriateness						
Oversight: [MENTAL HEALTH] Proportion of discharges from hospital followed up within 7 days Ham et al: Percentage of people under adult mental illness specialities on Care Programme Approach who were followed up within seven days of discharge from psychiatric inpatient care during the period	Numerator: Discharge with follow up Denominator: All discharge from psychiatric inpatient care	NHS Oversight, Ham et.al, 2015	NHSE - Mental Health Commun ity Teams Activity return	CCG, trust	Annually (Financial year)	04/2011- 03/2016 (20 Quarters)	04/2016- 03/2020 (15 Quarters)
Mental health admissions (Public Health England indicator: admission of service users: Standardised percentage of people in contact with mental health services who are admitted)	Under review	Ham et.al, 2015					

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D2 - Quality - Effectivene	ss and appropriateness						
Gate-kept admissions	% (quarterly) admissions to acute wards that were gate-kept by the crisis resolution and home treatment (CRHT) teams	Ham et.al, 2015					
NHSOF - Proportion of older people (65 and over) who were offered rehabilitation following discharge from acute or community hospital ASCOF - The proportion of older people (aged 65 and over) who received reablement/rehabilitati on services after discharge from hospital	Numerator: Number of older people (aged 65 and over) discharged from acute or community hospitals from hospital to their own home or to a residential or nursing care home or extra care housing for rehabilitation, with the clear intention that they will move on/back to their own home (including a place in extra care housing or an adult placement scheme setting).  Denominator: Total number of people (aged 65 and over) discharged alive from hospitals in England between 1 October and 31 December.	NHSOF, ASCOF, Ham et.al, 2015	ASCOF	Lower- tier LAs, CASSR	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (4 years)
Percentage of deaths with three or more emergency admissions in last three months of life	<b>Numerator:</b> Number of deaths with three or more emergency admission in last three months of life <b>Denominator:</b> All deaths	NHS Oversight	HES, ONS	CCG	Monthly	04/2008- 03/2016 (106 months)	04/2016- 03/2020 (47 months)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D3 - Quality – Safety							
Deaths from venous thromboembolism (VTE) related events within 90 days post discharge from hospital	The number of patients who have been admitted to hospital with any cause and die within 90 days of their last discharge from a VTE related event, expressed as a rate per 100,000 adult hospital admissions.	NHSOF, Ham et.al, 2015	HES, ONS	Trust	Monthly	04/2008- 03/2016 (106 months)	04/2016- 03/2020 (47 months)
Patient safety incidents reported (formerly indicators 5a, 5b and 5.4)	<b>Numerator:</b> The number of patient safety incidents from the NRLS <b>Denominator:</b> The total number of admissions or bed days from the NRLS	NHSOF, COIS, Ham et.al, 2015	NRLS	Trust	Apr-Sep & Oct-Mar	04/2008- 03/2016 (15 Semesters)	04/2016- 03/2020 (8 Semesters)
NHSOF / CCGOIS - Incidence of healthcare- associated infection - MRSA NHS Oversight - [ACUTE] Meticillin-resistant Staphylococcus aureus (MRSA) bacteraemia infection rate	Crude count of all reported cases of MRSA delivered at national level and split by provider. At provider level, the number of cases which can be directly associated to the trust is reported.	NHSOF, COIS, NHS Oversight, Ham et.al, 2015	PHE monthly infection data	NHS Acute trust / CCG	Mixed period	05/2003- 03/2016 (19 data points)	04/2016- 03/2020 (4 data points)
Proportion of people who use services who say that those services have made them feel safe and secure	Numerator: Respondents who answered 'Yes' as a percentage of all respondents to the Adult Social Care Survey question 7b - Do care and support services help you in feeling safe?  Denominator: The eligible population of adult social care users	ASCOF	ASCS	CASSR	Annually (Financial year)	04/2011- 03/2016 (5 years)	04/2016- 03/2020 (4 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D4 - Quality - Patient cen	teredness (experience, choice, integrated care)						
Access to GP of choice	The proportion of patients indicating they did not taking appointment they offered based on series of questions:  How long after initially trying to book the appointment, did the appointment take place? Is there a particular GP you usually prefer to see or speak to?  If you did not take any appointments you were offered, why was that?I couldn't see my preferred GP <b>Denominator:</b> Total patients responding to the questions	Ham et.al, 2015	GPPS	GP practice	Wave	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
Patient satisfaction with primary care	Weighted percentage of people who report their overall experience of GP services as 'fairly good' or 'very good' Patient experience of GP services	NHSOF, NHS Oversight, Ham et.al, 2015	GPPS	GP practice	Wave	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
Overall satisfaction of people who use services with their care and support	The percentage of all those responding 'I am extremely satisfied' or 'I am very satisfied', to the Adult Social Care Survey Question 1: 'Overall, how satisfied or dissatisfied are you with the care and support services you receive' and those responding I am very happy with the way staff help me, its really good to Easy Read Adult Social Care questionnaire question 1: 'How happy are you with the way staff help you?'  Denominator: The eligible population of adult social care users	ASCOF	ASCS	CASSR	Annually (Financial year)	04/2010- 03/2016 (6 years)	04/2016- 03/2020 (4 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D4 - Quality - Patient cen	teredness (experience, choice, integrated care)						
Women's experience of maternity services - combined measure	Average weighted score of six questions relating to women's experience of maternity services (score out of 100)	NHSOF, NHS Oversight, Ham et.al, 2015	NHSS	Trust	Waves	2007- 03/2016 (4 years)	04/2016- 2019 (3 years)
Oversight: Choices in maternity services - combined measure	Numerator: The sum of standardised CCG scores for the six specified questions.  Denominator: The number of questions included within the composite indicator (6).  The questions:  1. Were you offered any of the following choices about where to have your baby?  2. Did you get enough information from either a midwife or doctor to help you decide where to have your baby?  3. Were you offered a choice of where your antenatal assessments would take place?  4. Thinking about your care during labour and birth, were you involved enough in decisions about your care?  5. Were decisions about how you wanted to feed your baby, respected by midwives?  6. Were you given a choice about where your postnatal care would take place?	NHS Oversight	NHSS	Trust	Waves	2007- 03/2016 (4 years)	04/2016- 2019 (3 years)
Patient experience of community mental health services	Average weighted score of four questions relating to patients' experience of community mental health services (score out of 100)	NHSOF, NHS Oversight, Ham et.al, 2015	NHSS	Trust	Waves	2003- 03/2016 (13 years)	04/2016- 2020 (4 years)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D4 - Quality - Patient cen	teredness (experience, choice, integrated care)						
Dental health scores from Friends and Family test - % positive	<b>Numerator:</b> Positive response on dental health services from FFT <b>Denominator:</b> All response on dental health services from FFT	Identified by authors	FFT	Practice	Monthly	01/2015- 03/2016 (15 months)	04/2016- 02/2020 (47 months)
Patient experience of NHS dental services	<b>Numerator</b> : Weighted number of people reporting a 'very good' or 'fairly good' experience of NHS dental services <b>Denominator</b> : Weighted number of people who answered the question	NHSOF	GPPS / NHSOF	GP practice	Waves	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
Ability and feeling supported to self-manage condition	The directly standardised proportion of people with a long-term health condition who report having had enough support from local services or organisations to help manage their condition, in the last six months. Patients are asked to consider all services and organisations, not just health services. This is expressed as a percentage.	NHSOF, COIS, Ham et.al, 2015	GPPS	GP practice	Waves (collected over 3 Monthly periods)	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
Proportion of people living with LTC who report having a care plan	Under review	Ham et.al, 2015					
Mental Health Care Plan Approach (comparison to standard)	Under review	Ham et.al, 2015					
Proportion of people with both personal health budget and social care direct payment who have been able to link the two	Under review	Ham et.al, 2015					

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
Proportion of people who die who had a personalised end-of-life care plan	Under review	Ham et.al, 2015					
% of people able to die at home	Under review	Ham et.al, 2015					
D5 - Efficiency and produ	ctivity						
Length of stay inpatient care	Total length of stay in inpatient care	Identified by authors	HES				
Elective day-case rate	Proportion of elective surgeries conducted as a day- case	Identified by authors	HES				
Delayed transfers of care from hospital that are attributable to NHS, per 100,000 population	Delayed transfers of care from hospital that are attributable to NHS, per 100,000 population	Identified by authors	DTOC	Trust	Monthly	04/2011- 03/2016 (72	04/2016- 03/2020 (47 months)
Proportion of New Birth Visits (NBVs) completed within 14 days	Numerator: The number of infants that receive a face to face New Birth Visit (NBV) within 14 days by a Health Visitor  Denominator: The total number of infants who turned 30 days in the reference period (financial year), at a resident population level	PHOF	Health Visitors Service Delivery Metrics	Lower- tier LA	Quarterly	months) 2015- 03/2016 (4 Quarters)	04/2016- 2020 (11 Quarters)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D6 - Activity / utilisation	1						
Prescribing volume	Total volume of all items prescribed and dispensed per 100 ASTRO-PU's.	Identified by authors	GPPD	General practice	Monthly	04/2012- 03/2016 (46 months)	04/2016- 03/2020 (47 months)
GP visits	Proportion of individuals who have visited their GP in the last 3/6/12 months	Identified by authors	GPPS	General practice	Waves (collected over 3 Monthly periods)	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
GP nurse visits	Proportion of individuals who have visited their GP Nurse in the last 3/6/12 months	Identified by authors	GPPS	General practice	Waves (collected over 3 Monthly periods)	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)
A&E attendances	Volume of total, Type 1, Type 2, and Type 3 A&E attendances per 1,000 MSOA population	Identified by authors	HES	MSOA	Monthly		
Inpatient spells Elective Non-Elective	Volume of total, elective and non-elective admissions per 1,000 MSOA population.	Identified by authors	HES	MSOA	Monthly		
Outpatient appointments	Volume of total, first, follow-up, attended and notattended appointments per 1,000 MSOA population.	Identified by authors	HES	MSOA	Monthly		
Admissions to residential or nursing home	Permanent admissions of older people (aged 65 and over) to residential and nursing care homes per 100,000 population	Ham et.al, 2015	HES	MSOA	Monthly		

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D6 - Activity / utilisation							
Social care activity - requests for support	Total number of request for support in social care activity	Identified by authors	HES				
Social care activity - number of completed care episodes	Total number of complete care episodes	Identified by authors	SALT				
Social care activity - number of clients accessing long-term support	Total number of clients accessing long-term support	Identified by authors	SALT				
Average expenditure of birth and delivery spells	Average expenditure of birth and delivery spells	Identified by authors	HES	MSOA	Monthly		
Informal care provision - Any informal care provision	Proportion of reporting any informal care provision	Identified by authors	GPPS	GP practice	Waves (collected over 3 Monthly periods)	2011- 03/2016 (10 waves)	04/2016- 2020 (3 waves)

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
D7 - Expenditure							
NHS primary care expenditure	Under review	Identified by authors					
Prescribing expenditure	Unit-costed (based on BNF codes) expenditure on all items prescribed and dispensed per ASTRO-PU.	Identified by authors	GPPD	General practice	Monthly	04/2012- 03/2016 (46 months)	04/2016- 03/2020 (47 months)
A&E expenditure	HRG tariff-costed expenditure on total, Type 1, Type 2, and Type 3 A&E attendances per 1,000 MSOA population.	Identified by authors	HES	MSOA	Monthly	,	
A&E expenditure per admission	Average cost of each total, Type 1, Type 2, and Type 3 A&E attendance.	Identified by authors	HES	MSOA	Monthly		
Inpatient expenditure	HRG-tariff costed expenditure on total, elective and non-elective admissions per 1,000 MSOA population.	Identified by authors	HES	MSOA	Monthly		
Outpatient expenditure	HRG tariff-costed expenditure on total, first, follow- up, attended and not-attended appointments per 1,000 MSOA population.	Identified by authors	HES	MSOA	Monthly		
Inpatient expenditure per admission	Average expenditure on each total, elective and non- elective inpatient admission.	Identified by authors	HES	MSOA	Monthly		
Outpatient expenditure per appointment	Average expenditure on each total, first, follow-up, attended and not-attended appointment.	Identified by authors	HES	MSOA	Monthly		
Social care expenditure (by type and primary reason)	Total social care expenditure, Total for short-term support, Total for long-term support, Total for "other" support, Total carer support	Identified by authors	SALT				

Measure	Specific Outcome Measure(s)	Source of Outcome	Original source of data	Unit of analysis	Frequency (period)	Pre- devolution period	Post- devolution period
Per capita expenditure in social care	Numerator: Total expenditure in social care Denominator: Total population in the area	Identified by authors	Place- based Longitudi nal Data Resource	Lower- tier LA	Annually (Financial year)	04/2011- 03/2016 (5 years)	04/2016- 03/2018 (3 years)
CCG spend on mental health	Total CCG expenditure on mental health	Identified by authors					
In-year financial performance	In-year financial performance is assessed on a quarterly basis using the forecast outturn financial position alongside other criterion. The RAG rating will be assigned as Green, Amber, Red	NHS Oversight	NHSE - Financial performa nce reports	CCG	Quarterly (Financial year)	04/2013- 03/2016 (11 Quarters)	04/2016- 10/2019 (15 Quarters)
D8 - Multiple			·				
Delayed transfers of care from hospital that are jointly attributable to NHS and Social Care	Delayed transfers of care from hospital that are jointly attributable to NHS and Social Care, per 100,000 population	ASCOF	DTOC	LA (CASSR)	Monthly	04/2011- 03/2016 (72 months)	04/2016- 03/2020 (47 months)
Delayed transfer of care (mental health)	Under review	Ham et.al, 2015				,	