

Impact of economic shock on health and wellbeing

Brexit



Focus

- Identify and describe what is known about unemployment/financial insecurity, caused by economic shock, and its implications for health and wellbeing.
- Produce a tool kit that helps plan services in context of economic shock.



Content

- Evidence of impact
- Theory of Causation
- Framework for intervention



What is known

EVIDENCE REVIEW



Income, employment and health

- Income and employment are key social determinants of population health and health inequalities¹.
- Unemployment contributes to poor health while being in good employment is protective of health.
- The greater one's income the less likelihood of disease and premature death².

¹ Fair Society Healthy Lives, the Marmot Review

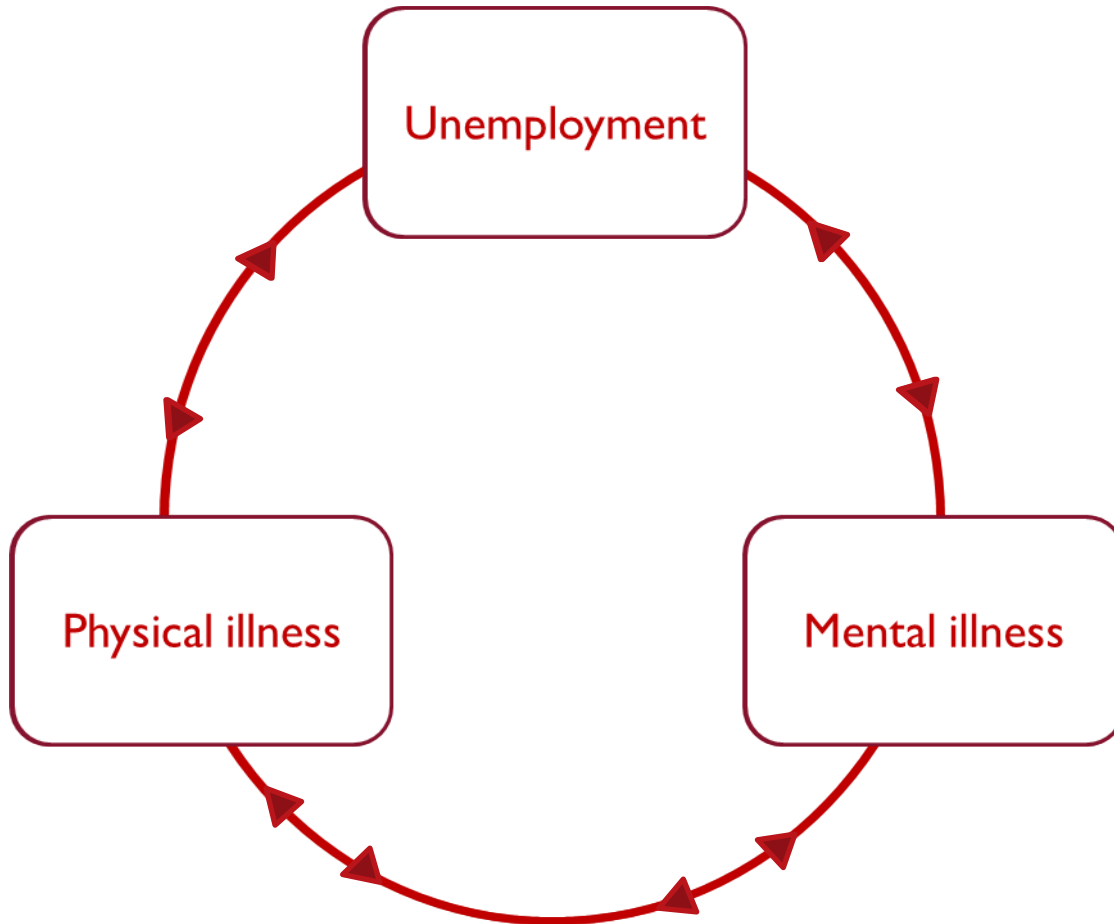
² How are Income and Wealth Linked to Health and Longevity?

Initial findings

EVIDENCE REVIEW



Economic shock health and wellbeing



- Unemployment increases risk for mental illness
- Unemployment increases risk for physical illness

Anxiety and Depression

- In the event of job loss, individuals are on average twice as likely to develop symptoms of anxiety and depression³.
- Transitions to inadequate employment, insecure or temporary employment, and income loss, are reported to all increase symptoms of anxiety and depression. Although the effect is less than that seen in involuntary job loss³.
- Reemployment in the previously unemployed reduces symptoms of depression and reduces the risk of experiencing severe symptoms of depression requiring the need for professional intervention⁴.
- Unemployment and loss of investment income is associated with population level increase in rates of depression⁵.

³ [The Health Effects of Economic Decline](#)

⁴ [Unemployment, Reemployment, and Emotional Functioning in a Community Sample](#)

⁵ [Evidence for the 2008 economic crisis exacerbating depression in Hong Kong](#)



Substance Use and Abuse

- Unemployment increases the use of alcohol, cannabis, and other drugs³.
- Long-term unemployment increases the risk of heavy drinking by about 50%⁶.
- Increased unemployment is associated with excess alcohol related deaths in those under 65⁷.

⁶ Is the duration of poverty and unemployment a risk factor for heavy drinking?

⁷ The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis



Violent behaviour and domestic violence

- Unemployment increases the likelihood of violent behaviour among those laid-off compared to the those remaining in employment⁸.
- Unemployment increase the likelihood of children being hospitalized for abuse and neglect⁹.
- Evidence suggests that increase in male unemployment rate causes a decline in the incidence of physical abuse against women, conversely an increase in the female unemployment rate has the opposite effect¹⁰.
- Domestic abuse (DA) support providers report increase in visits to DA websites and calls to helpline during lockdown.

⁸ Using ECA Survey Data to Examine the Effect of Job Layoffs on Violent Behavior

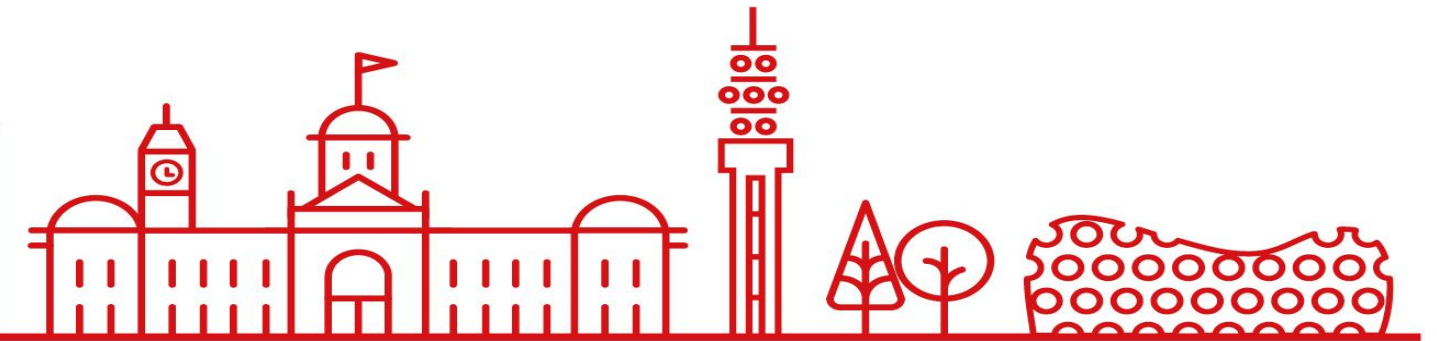
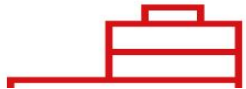
⁹ Growing Up with Unemployment: A Study of Parental Unemployment and Children's Risk of Abuse and Neglect Based on National Longitudinal 1973 Birth Cohorts in Denmark

¹⁰ Unemployment and Domestic Violence: Theory and Evidence



Suicide

- Being unemployed is associated with a two to three-fold increase in suicide compared with the employed¹¹.
- Suicide rates increase as unemployment rises within the population¹².



¹¹ Unemployment and suicide. Evidence for a causal association?

¹² Why are suicide rates rising in young men but falling in the elderly? —a time-series analysis of trends in England and Wales 1950–1998

Cardiovascular disease

- Evidence on association between cardiovascular disease and unemployment varies between Europe and the U.S¹³.
- In Northern European studies job loss is not associated with coronary heart disease mortality. U.S cohorts however demonstrate that involuntary job loss later in life predicts increase risk of heart attack in subsequent years¹⁴.

¹³The effects of workplace downsizing on cause-specific mortality: a register-based follow-up study of Finnish men and women remaining in employment

¹⁴The impact of late career job loss on myocardial infarction and stroke: a 10 year follow up using the health and retirement survey

Birth weight and Infant mortality

- Unemployment or low employment may be associated with increased rates of low birth weight or very low birth weight¹⁵.
- Increasing infant mortality rates is associated with increasing unemployment rates³.



General morbidity and mortality

- Unemployment is associated with increased risk of hospitalization due to alcohol related problems, road traffic accidents, and in men only, self-harm and mental health problems¹⁶.
- Job loss is associated with an increased risk of mortality¹⁷.

¹⁶ Job loss is bad for your health – Swedish evidence on cause-specific hospitalization following involuntary job loss

¹⁷ High local unemployment and increased mortality in Danish adults; results from a prospective multilevel study



Diet

- Unemployment significantly impacts diet composition; effect varies with duration of unemployment¹⁸.
 - Short term
 - Favour discount stores, increase in food expenditure, consumption of animal-based foods, saturated fat, total fat, protein.
 - Medium
 - Decreased food expenditure, consumption of fresh animal-based foods, saturated fat, total fat, protein.
 - Long term
 - Nutrient substituted by carbohydrates and added sugar.
- Impact varies by household: households with children, pensioners, and single parent households experienced greater decline than other households¹⁹



Smoking

- Those who are unemployed are more likely to be current smokers or to have ever smoked than those in employment²⁰.
- Older workers who are former smokers have over twice the odds of relapse following job loss than those who remain in employment. current smokers who do not obtain new employment are more likely to smoke more cigarettes on average following job loss²¹.
- Smokers have a lower likelihood to be reemployed at 1 year and are paid significantly less relative to non-smokers when reemployed²².

²⁰ [Cigarette smoking and employment status](#)

²¹ [The effect of involuntary job loss on smoking intensity and relapse](#)

²² [Likelihood of Unemployed Smokers vs Nonsmokers Attaining Reemployment in a One-Year Observational Study](#)

THEORY OF CAUSATION



Theory of Causation

- Unemployment can be a shock to the whole system. Its loss...
 - Loss of usual source of income
 - Personal work relationships
 - Daily structures
 - Sense of self-purpose
- Experience feelings and stresses similar to any other major loss.



Causation

Decline in living standard	Income insecurity	Stigma and loss of self-esteem	Loss of social contacts
Stress			
Effect budgeting		Frustration aggression	
	Anxiety	Depression, suicide	
Diet	Cardiovascular morbidity	Anti-social, violent behaviour	Domestic abuse
	Gestational and infant mortality		Alcohol and substance misuse



Duration of unemployment

Existing assets, unemployment benefits, income and assets of other household members

Stress;
Frustration-aggression;
Effect budgeting

Unemployment

Loss of Income

Decline in living standards

Insecurity of Income

Stigma/ Loss of self esteem

Loss of Social contacts

Anxiety: length of income loss, risk of future decline in living standards, feelings of life not being under control

Loss of status amongst friends and family. Loss of contact with work colleagues and shrinking social networks, loss of engagement and social capital

Anxiety and Depression

Substance use and abuse

Violent behaviour

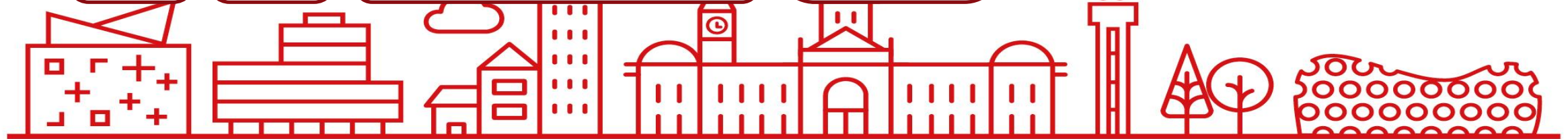
Suicide

Cardiovascular disease

General morbidity and mortality

Gestational mortality and morbidity

Economic shock

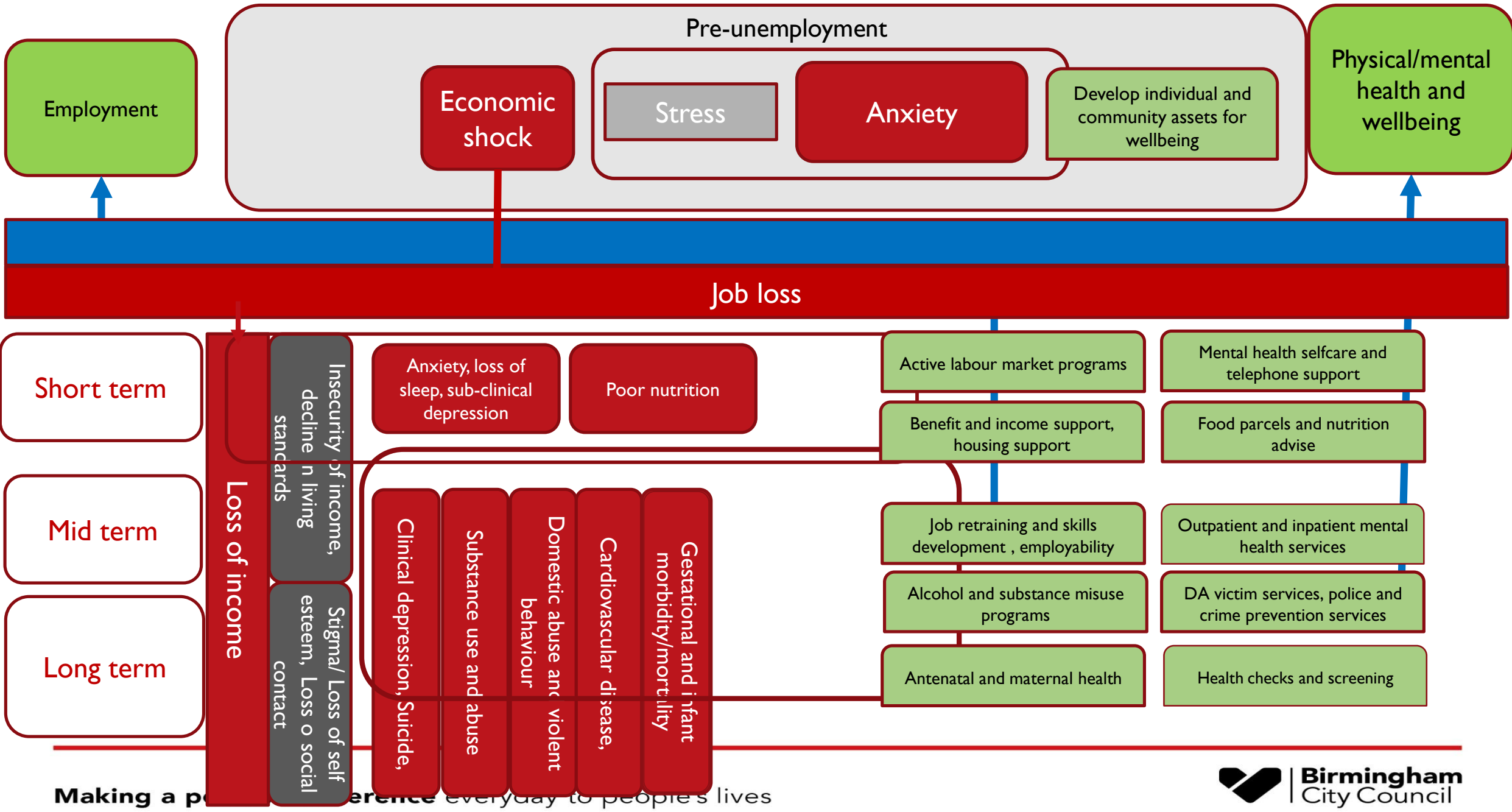


Framework

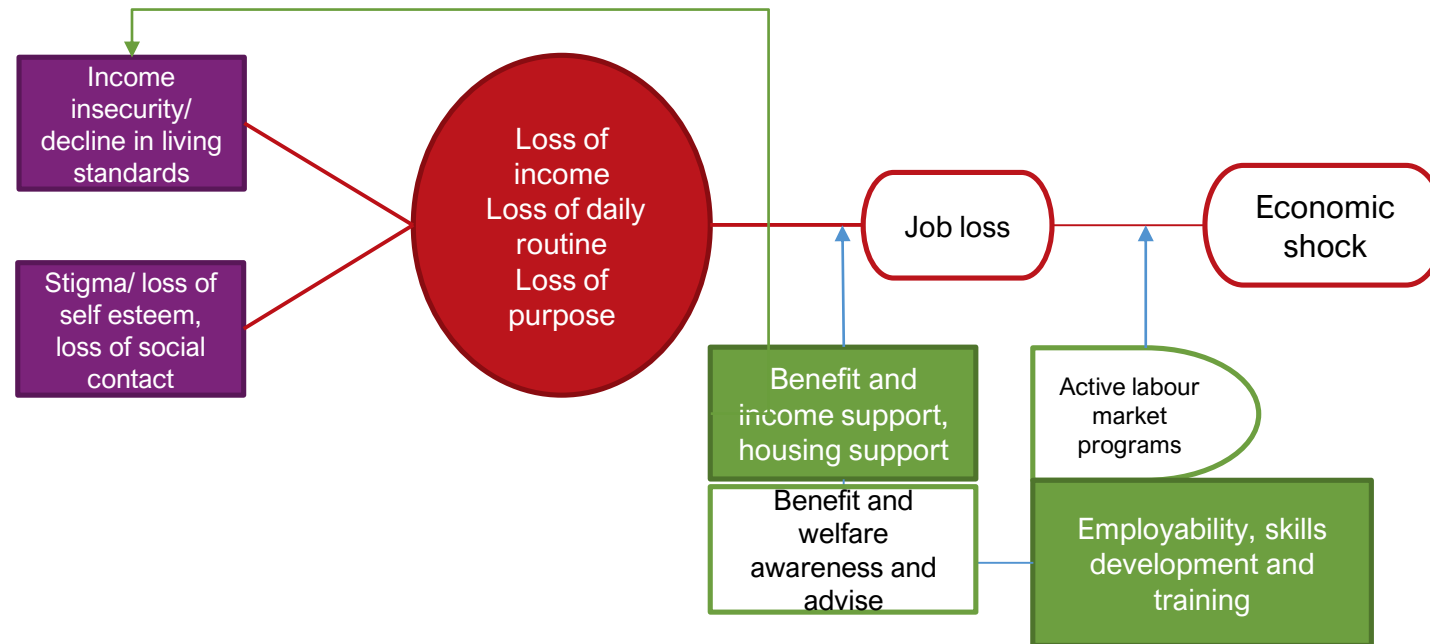
Overview



Making a positive difference everyday to people's lives



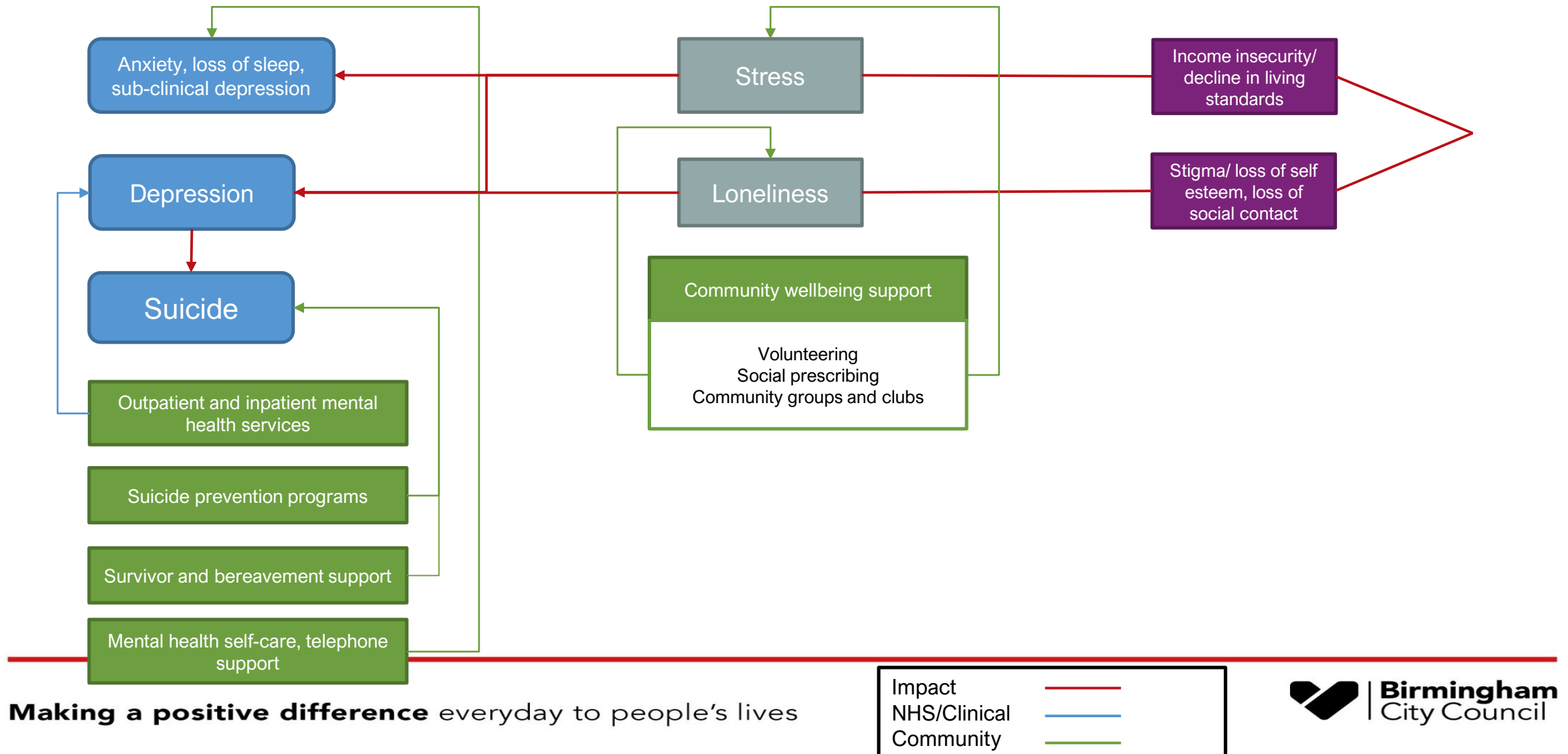
Economic shock, job loss and primary effects



Interventions

Stress	Loneliness	Frustration-aggression	Effect budgeting
<ul style="list-style-type: none"> Talking therapies <ul style="list-style-type: none"> CBT Mindfulness-based stress reduction Ecotherapy Complimentary and alternative therapies <ul style="list-style-type: none"> Yoga and meditation Acupuncture Aromatherapy Massage 	<ul style="list-style-type: none"> Groups or classes focused on activities of interest Volunteering 	<ul style="list-style-type: none"> Assertiveness training Anger management classes 	<ul style="list-style-type: none"> Income support Benefit and welfare awareness and advise Re-employment: employability skills development and training

Anxiety, depression, suicide



Psychological Interventions

■ Anxiety

- Individual non-facilitated self-help¹
- Individual guided self-help^{1,2}
 - Workbooks based on CBT - [Reading Well website](#)
 - Computer based CBT programme and app-based CBT courses - [the NHS apps library](#)
- Psychoeducational groups¹
- Applied relaxation²

■ Depression

- Mild to moderate³
 - Self help
 - Individual guided self-help book or online based on CBT
 - Self-help groups for people with depression
 - Structured group physical activity programme
- Moderate to severe
 - Medication

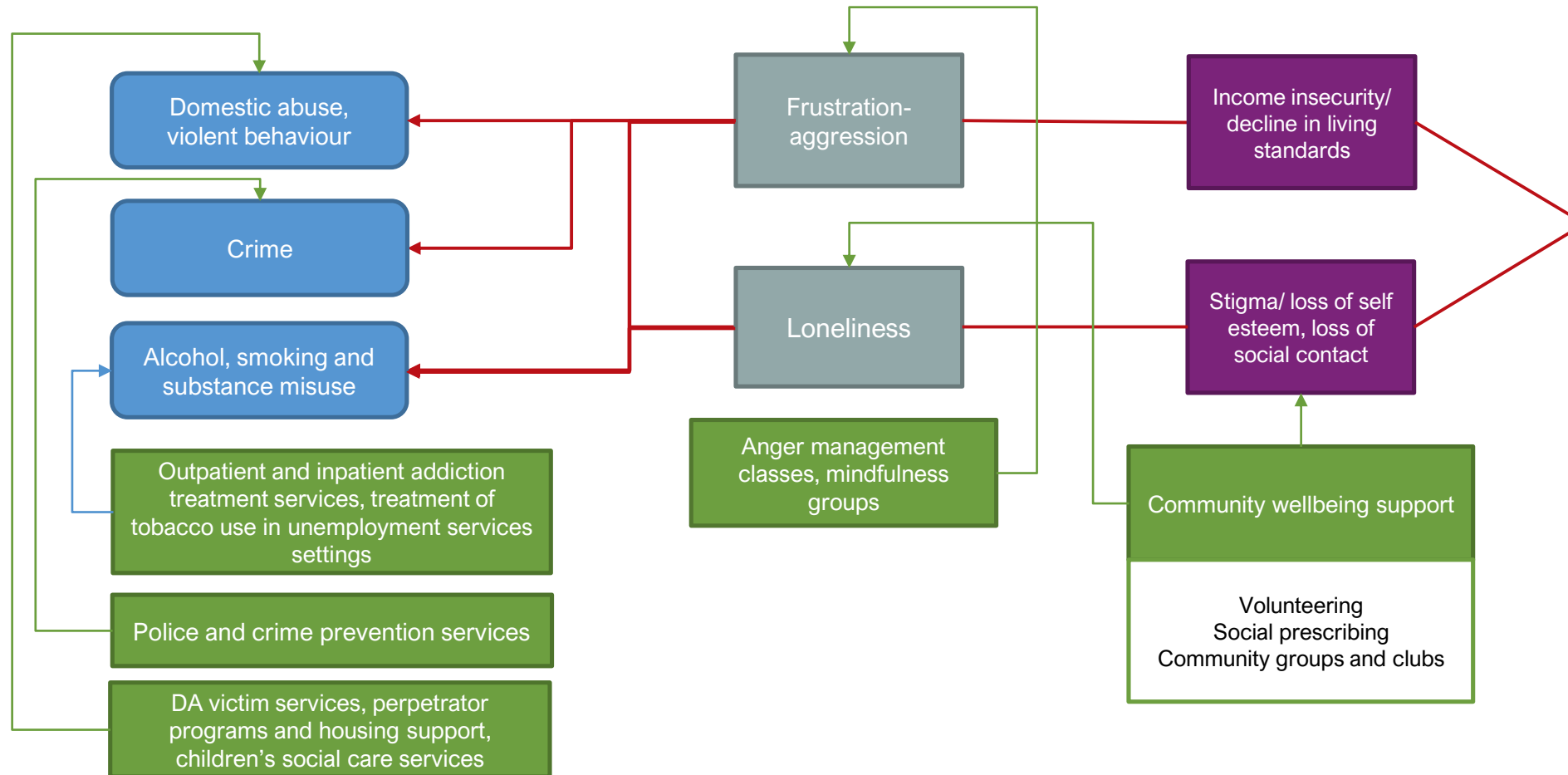
1. [Generalised anxiety disorder and panic disorder in adults: management](#)
2. [Generalized anxiety disorder in adults](#)
3. [Clinical depression: treatment](#)

Suicide prevention

- Suicide prevention partnerships, strategies and action plans¹
- Suicide prevention strategies²
 - Strengthen economic supports
 - Strengthen access and delivery of mental healthcare
 - Create protective environments
 - Promote connectedness
 - Teach coping and problem solving skills
 - Identify and support people at risk
 - Lessen harms and prevent future risk

1. [Preventing suicide in community and custodial settings NICE guideline \[NG105\]](#)
2. [Suicide: Prevention Strategies](#)

Domestic abuse, violent behaviour, alcohol and substance misuse



Making a positive difference everyday to people's lives

Impact
NHS
Community



Domestic abuse - Interventions

■ Victims

- Birmingham Domestic Abuse Prevention Strategy 2018-2023¹
- Victim services provided
- Intimate Partner Violence Prevention Strategies²

■ Programs for perpetrator of domestic violence³

- Experimental
- Based on CBT or Duluth model
- Lack of clear evidence of effectiveness, most research from North America
- More likely to be effective if they are delivered as intended, they contribute to a wider multi-agency approach to risk management; and they apply the principles of Risk, Need and Responsivity.

¹ [Birmingham DAP](#)

M: ² [Intimate partner violence prevention strategies](#)

³ [Intimate partner violence – domestic abuse programmes](#)

At risk groups

- Risk factors for perpetration¹
- Societal Factors
 - Traditional gender norms and gender inequality (for example, the idea women should stay at home, not enter the workforce, and be submissive; men should support the family and make the decisions)
 - Cultural norms that support aggression toward others
 - Societal income inequality
 - Weak health, educational, economic, and social policies/laws

¹ [Risk and Protective Factors for Perpetration](#)

Current services

■ Commissioned

- Domestic Abuse Health and Wellbeing Hub
- Housing Health and Wellbeing Hub
- Emergency Accommodation
- Dispersed Refuge
- Navigator Support
- Singles' complex needs provision

■ Direct

- Sanctuary measures (injunctions, panic alarms etc.)
- Bharosa (support service for south Asian women)

Alcohol, substance misuse and crime - Interventions

■ Alcohol and substance misuse

- Preventing alcohol misuse^{1,2}
- Electronic screening and brief intervention
- Prevention³: Skills training – children and young people
- Counselling
- Talking therapies – CBT
- Medication
- Detoxification
- Self-help – Narcotics Anonymous.
- Harm reduction – HIV, Hepatitis testing and treatment

■ Crime

¹ [Alcohol-use disorders: prevention](#)

² [Preventing excessive alcohol use](#)

³ [Drug misuse prevention: targeted interventions](#)

At risk groups

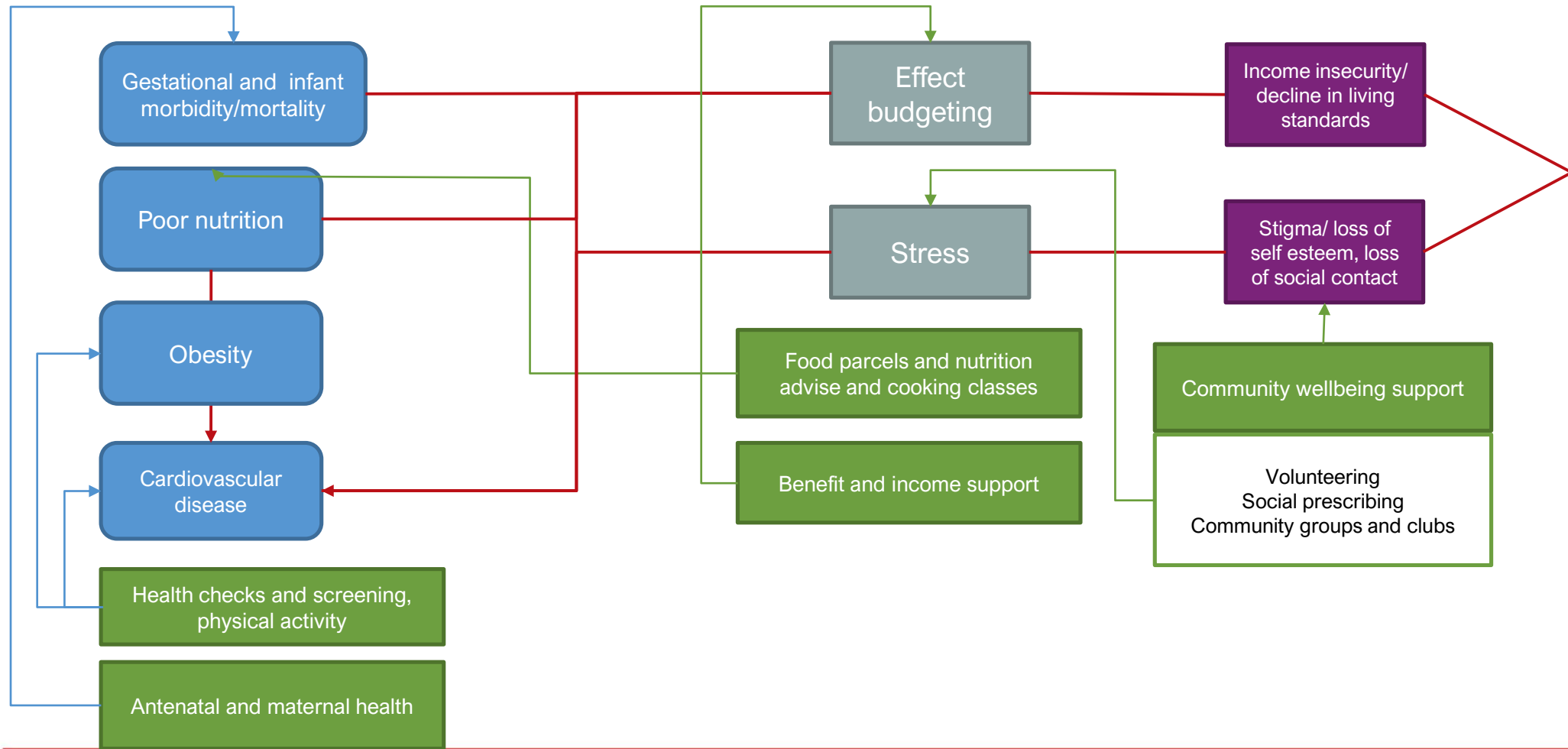
■ Alcohol and substance misuse¹

- Groups at risk of drug misuse, including:
- people who have mental health problems
- people who are being sexually exploited or sexually assaulted
- people involved in commercial sex work
- people who are lesbian, gay, bisexual or transgender
- people not in employment, education or training (including children and young people who are excluded from school or who truant regularly)
- children and young people whose carers or families use drugs
- children and young people who are looked after or care leavers
- children and young people who are in contact with young offender teams but not in secure environments (prisons and young offender institutions)
- people who are considered homeless
- people who attend nightclubs and festivals
- people who are known to use drugs occasionally or recreationally.

■ Crime

¹ [Drug misuse prevention: targeted interventions - NICE guideline \[NG64\] Groups at risk](#)

Poor nutrition, cardiovascular disease, gestational and infant morbidity/ mortality



Making a positive difference everyday to people's lives

Impact
NHS
Community



Intervention

■ Poor nutrition and Obesity

- Eating a balanced diet¹
- Food parcels, nutrition advice, cooking classes
- Lifestyle and behavioural interventions²
- NHS weight management programme³
 - Diet
 - Exercise
 - Medicines
 - Surgery

■ Cardiovascular disease⁴

- Policy
 - Reducing salt, fat, trans fat
 - Marketing and promotion aimed at children and young people
 - Product labelling
 - Physically active travel
 - Public sector catering guidelines
 - Take-away and other food outlets
- CVD prevention programmes
 - NHS health checks
 - Physical activity

¹ [Eating a balanced diet](#)

² [Obesity: identification, assessment and management](#)

³ [Healthy weight](#)

⁴ [Cardiovascular disease prevention](#)

Interventions

- Gestational and infant morbidity and mortality

Quantitative estimates

ECONOMIC SHOCK - HEALTH AND WELLBEING IMPACT



Wider economic environment - UK

- Employment
 - Rising unemployment
 - Large decrease in young people in employment, and increased unemployment.
 - >5M still temporarily away from work (including furlough)
- Claimant count more than doubled since March 2020
- GDP contracted by 19.8% in Quarter 2 of 2020.

Birmingham

■ In employment

- 64.6% of the resident population of Birmingham were in employment April 2019 – Mar 2020. A decrease of 0.9pp when compared to April 2018 – Mar2019 (difference of over 6000 people)¹.

■ Unemployment rate

- 9.0%, April 2019 – Mar 2020 increase of 1.8pp compared to April 2018 – Mar 2019. Translates to about 10,000 people unemployed².

■ Claimant count

- August 2020 – 11.1%. Almost double August 2019 – 6.3%, and significantly rising since March 2020. Another significant rise could be seen in Oct/Nov as the Coronavirus Jobs Retention Scheme closes³.

¹ [All people – Economically active – In employment Birmingham](#)

² [All people – Economically active – Unemployed \(model based\) Birmingham](#)

³ [Claimant count by sex time series – All claimants Birmingham](#)

Macroeconomic conditions and health¹

- Evidence of a counter cyclical effect of economic performance on health outcomes.
- A 5 percent fall in employment could lead to 7-10% rise in prevalence of chronic conditions.
- Translating to about 900,000 more people of working age with chronic diseases

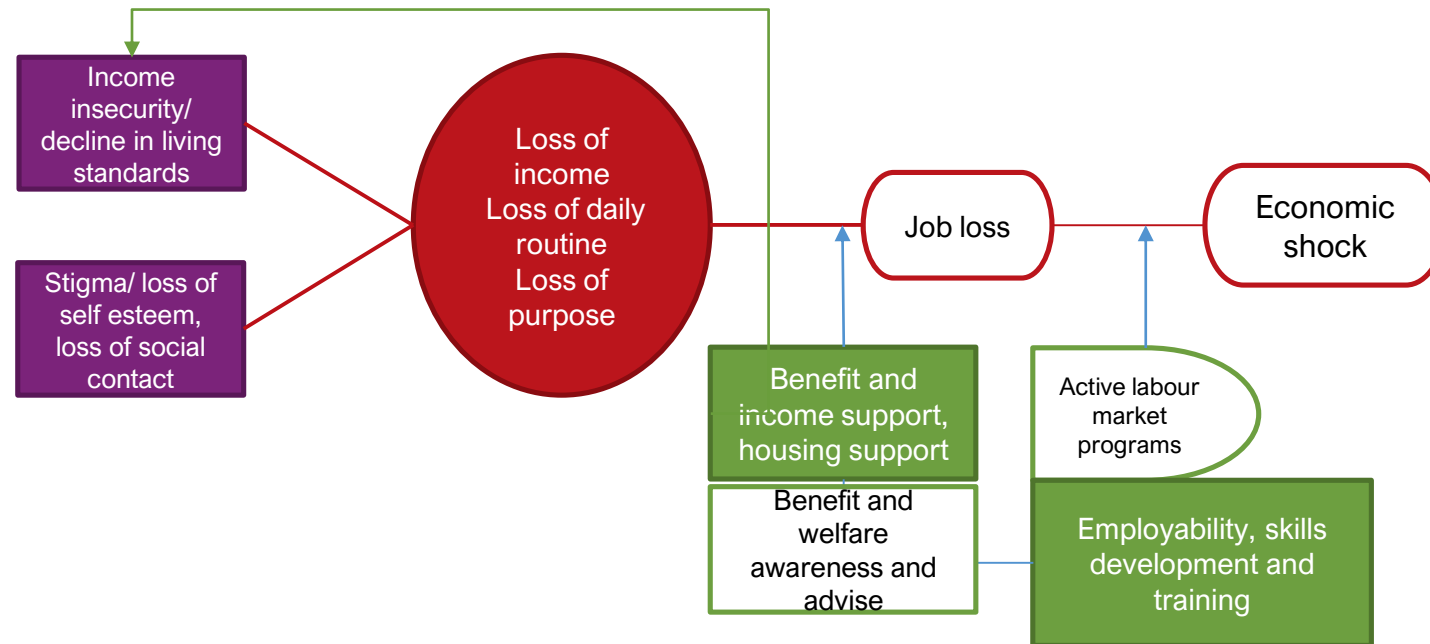
¹ [Macroeconomic conditions and health](#)

Data sources

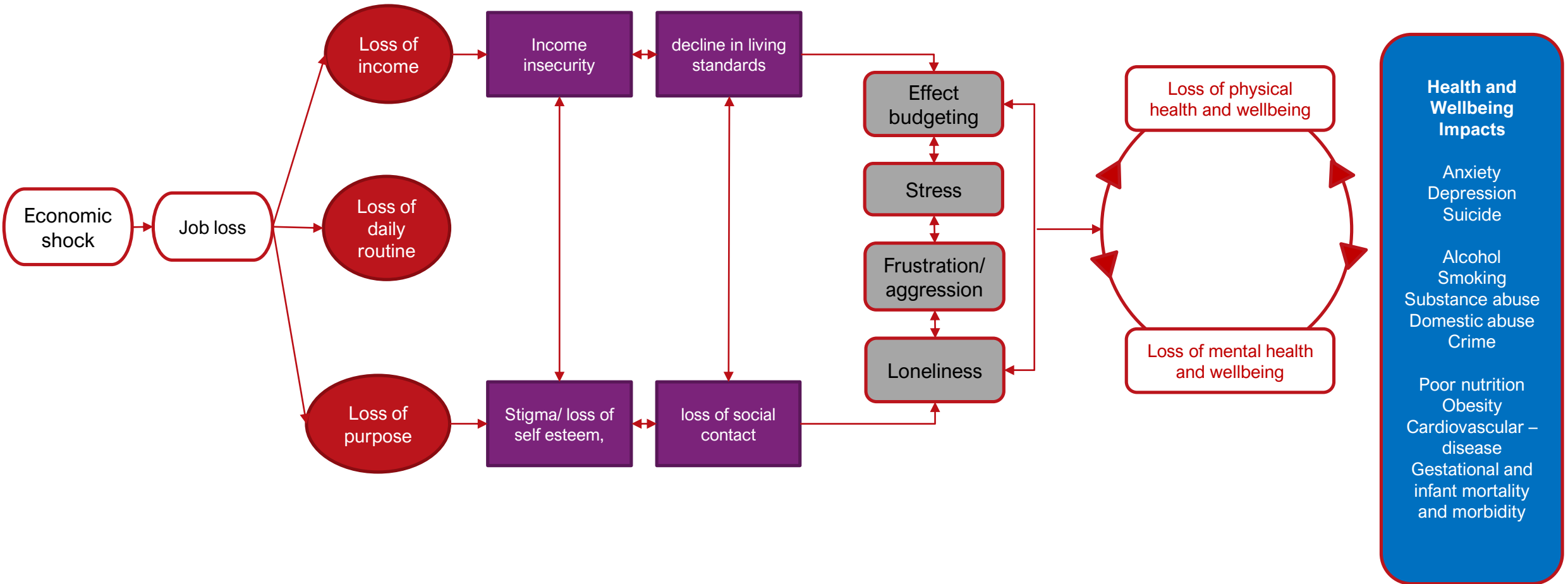
Service	Contact	Data source	External source
Alcohol and Substance misuse	Karl Beese, KEG	CGL	PHE - Finger tips
Sexual Health	Karl Beese, KEG	UHB	PHE - Finger tips
Mental Health			
primary care - Anxiety, depression		PHE - Finger tips, dx prevalence sources, GP practice data	
secondary care		hospital admissions data, CCG - monitor MH during pandemic	
Domestic Abuse	Kalvinder Kholi		
Smoking cessation	Bhavna Taank	Pharmacies, GP	
Violent behaviour		crime data	
Physical activity	Kyle Stott		
Employment and skills	Kam Hundal, Tara Verrelle		

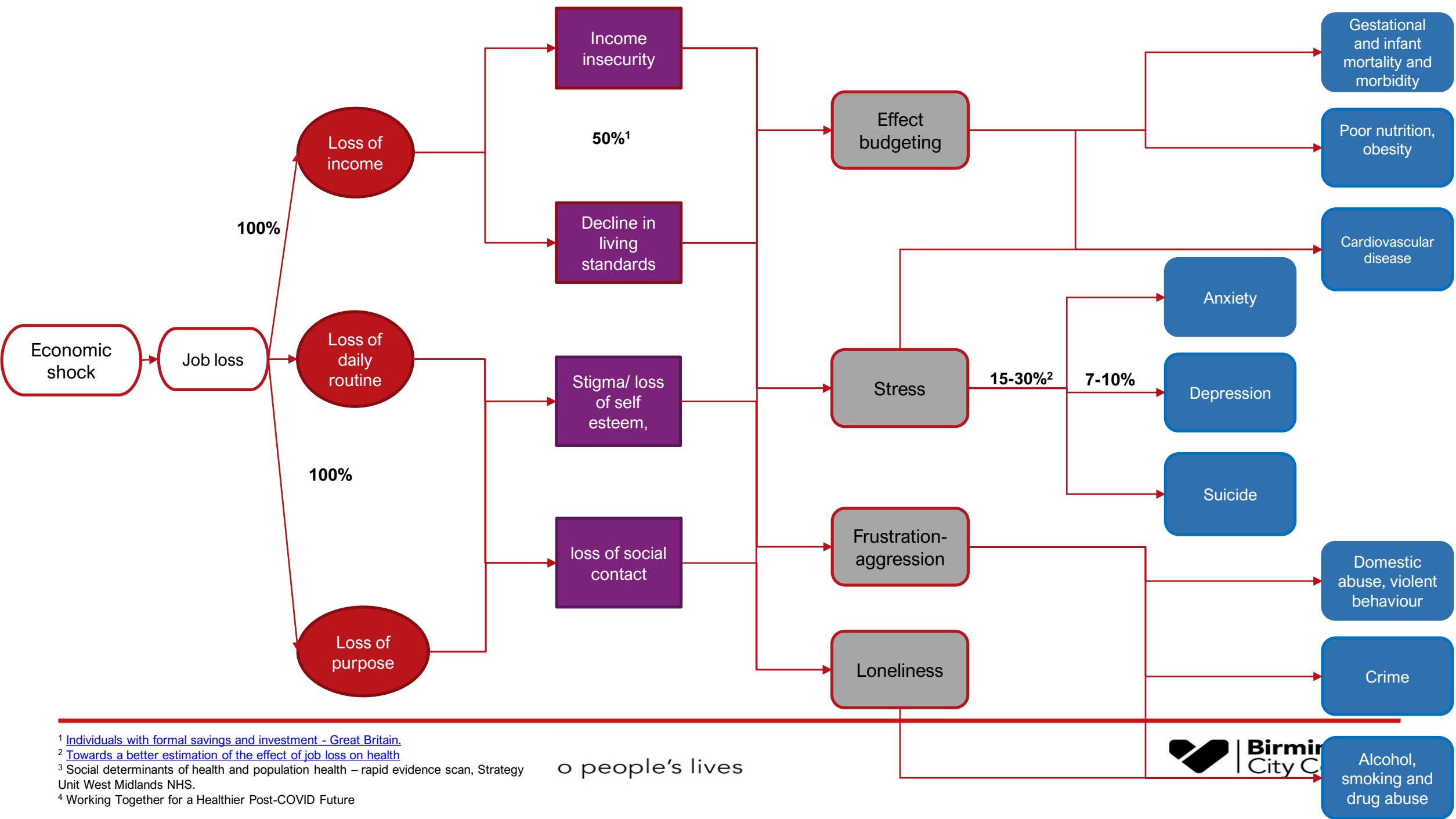
	Unemployment	Claimant count	Public health	Mental health	Alcohol misuse treatment	Drug misuse	Adult services
%	9.0	11.1			12	43	
Population	48,200	81,525			1400	4700	
Financial					15M		
Employment							
7-10% rise							

Economic shock, job loss and primary effects



Economic Shock: Impact on health and wellbeing





¹ [Individuals with formal savings and investment - Great Britain.](#)

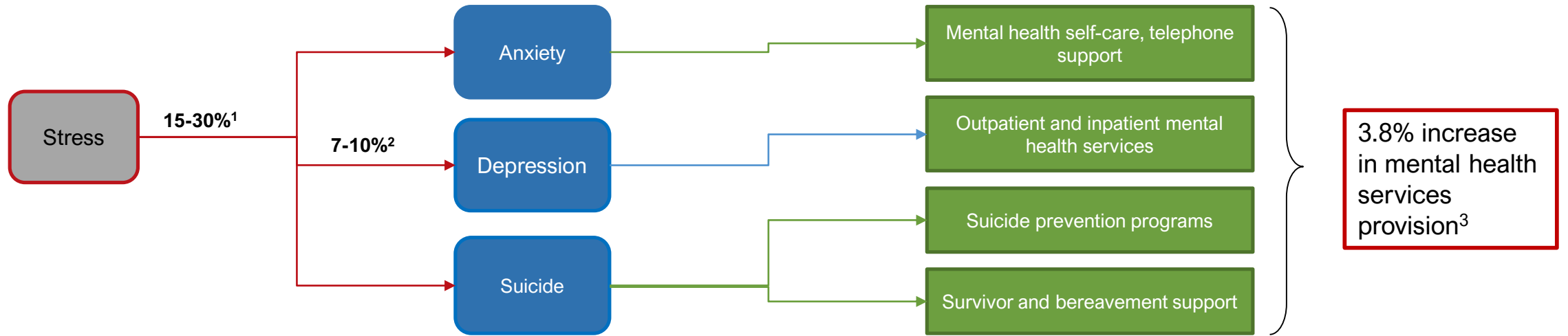
² [Towards a better estimation of the effect of job loss on health](#)

³ Social determinants of health and population health – rapid evidence scan, Strategy Unit West Midlands NHS.

⁴ Working Together for a Healthier Post-COVID Future

Approach

- Quantitative evidence of changes in employment levels and impact on prevalence of chronic diseases and in turn on demand for services.
- Based on framework for intervention, identify data sources required to estimate change in disease prevalence and service demand.
- Required
 - Disease prevalence measures
 - Services activity levels



¹ [Towards a better estimation of the effect of job loss on health](#)

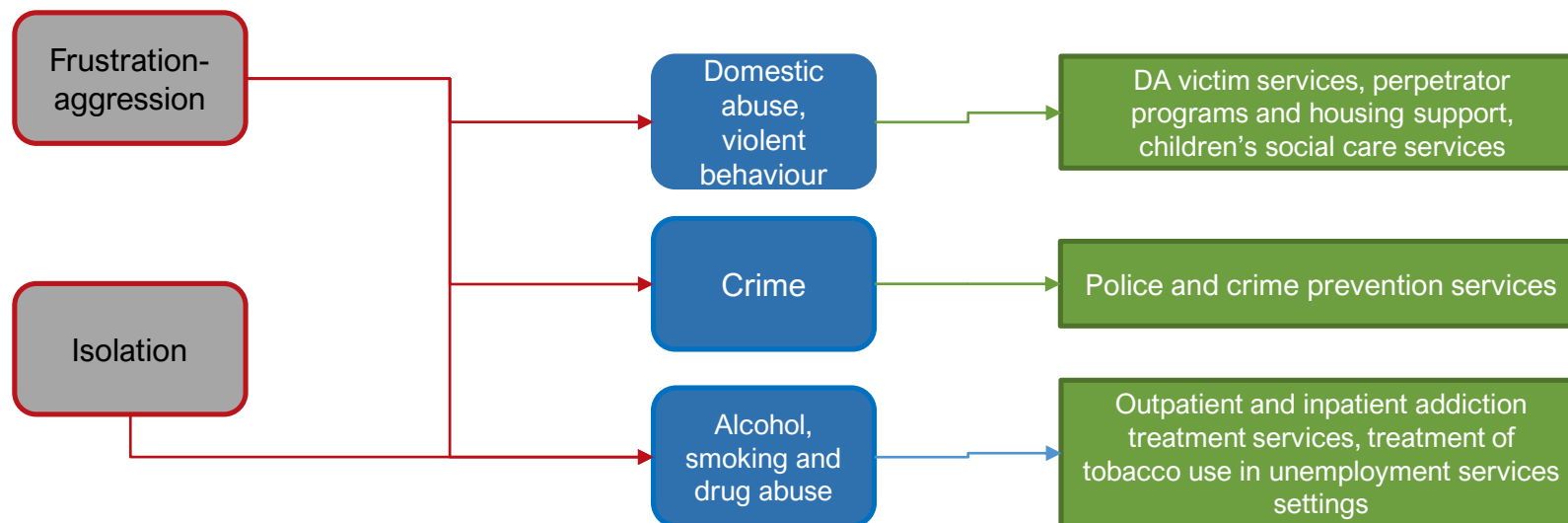
² Social determinants of health and population health – rapid evidence scan, Strategy Unit West Midlands NHS.

³ Working Together for a Healthier Post-COVID Future

Anxiety and depression	Estimated prevalence of common mental disorders: % of population aged 16 & over	21.1	2017	
	Depression and anxiety among social care users: % of social care users 2017	59.1	2017/18	
Depression	Depression: Recorded prevalence (aged 18+)	9.2	2017/18	
	ESA claimants for mental and behavioural disorders: rate per 1,000 working age population	36.0	2018	
Suicide	Suicide registrations in England and Wales by local authority	74	2018	

Mental health

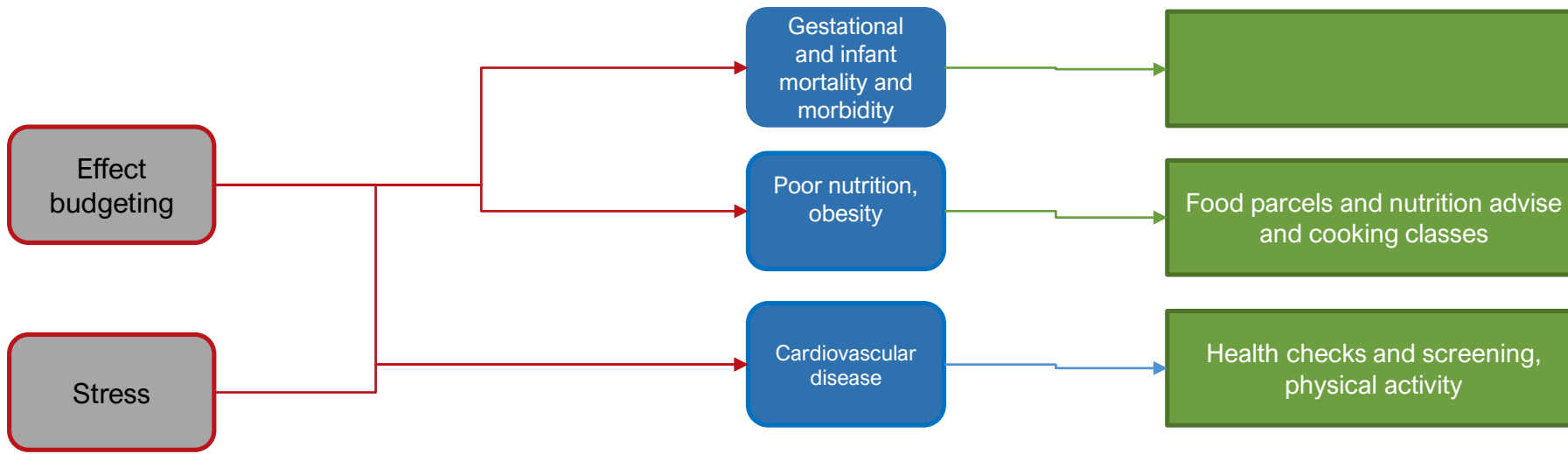
- Modelled service activity levels expected to increase by 10%, 21% and 27% in upside, central and downside scenarios respectively.
- A 4.45% increase in suicides rates is expected as well as increase in suicide attempts.
- 1 percentage point drop in employment growth leads to a 4.2% increase in mental health conditions.
- At Mar 2020, there has been a 0.9 percentage point drop in employment which could lead to a 3.8% increase in prevalence of mental health conditions.
- 2019 levels – actual numbers.
- Projections based on scenarios
- Data sources – PHE fingertips, others



Alcohol and substance misuse	CGL Birmingham Current Clients & Drug Category by Ward at 31/03/20	3813		Users/dependent 2019	Cause specific deaths	% in treatment of users/dependent	% change due to unemployment
Alcohol		330		13,300	373	12	50
Non-opiates		90		10,500	173	43	8-17
Opiates		3310					
Domestic abuse, violent behaviour							
Crime							

Alcohol and substance misuse

- Adult services
 - CGL: 5 year contract up to 2022
 - 2018/19 contract value - £15M
 - Spend per head population - £13.79
- Young people's services
 - Aquarius: 2year contract to 2021
 - 2019/2020 contract value - £673,000
- 50% increased risk of alcohol use in the unemployed – increased spend by over £400K for adult services.



	Indicator	Year	Prevalence	Count	% increase in prevalence	Increased count
Cardiovascular disease	CHD: QOF prevalence (all ages) %	2018/19	2.9	38,496	2.16	831
	CHD admissions (all ages) per 100,000	2018/19	526.3	4,940		106
Obesity	Obesity: QOF prevalence (18+) %	2018/19	10.3	104,382		

Cardiovascular disease

- 1pp drop in employment is modelled to lead to a 2.4% increase in prevalence of Cardiovascular disease. 0.9pp drop in employment at March 2020 could lead to a 2.16% increase in prevalence of CVD.



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