Joint Director of Public Health

Annual Report **2012**

1 in 3: The picture of **ill health** in Warwickshire

Every third person in Warwickshire has a chronic health condition.

Why is that and what can we do to prevent it...?

Warwickshire County Council

Warwickshire Joint Strategic Needs Assessment

NHS Warwickshire

Contents:

This report will be published locally to partners through a variety of media, to disseminate messages and implement the findings.

"Progress will be monitored in future reports and your comments and feedback are always welcome. Please direct any comments to: publichealthintelligence@warwickshire.nhs.uk I look forward to hearing your views."

Acknowledgements: I am grateful to my many colleagues for their help in the production of this report:

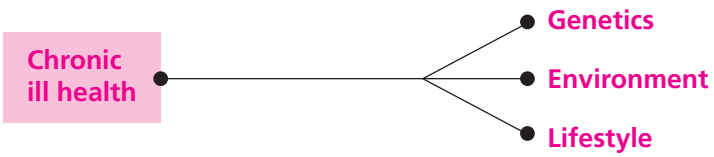
Editorial Team: Mike Caley, Rachel Robinson, Gareth Wrench.
Contributors: Ali Boffin, Mark Chapman, Emmie Fulton, Paul Kingswell, Kathryn Millard, Emily Smith, Caron Williams, Warwickshire Observatory.
Design: Communications, NHS Warwickshire
Telephone: 01926 413775 Fax: 01926 410130.
This report is also available on www.warwickshire.gov.uk/publichealth and www.warwickshireobservatory.org

LARGE TEXT VERSION AVAILABLE ON REQUEST THROUGH PUBLIC HEALTH

Welcome to my Annual Report for 2012

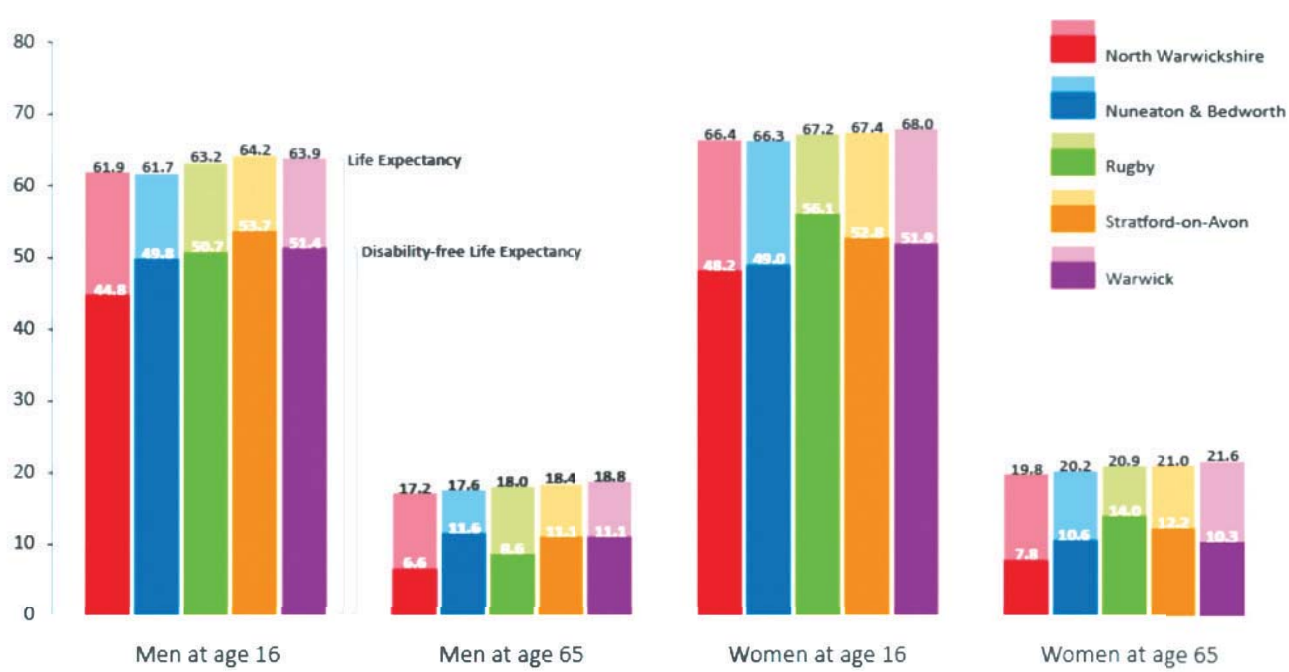
My last report focused on the lifestyle of Warwickshire people and this report begins to look at the effects lifestyle has on our health and wellbeing.

Chronic ill health can affect people at all ages, but predominately exists within older age groups, and can be a major contributor to frailty. We are all living longer, related to our increasing affluence, though not usually into a healthy old age.



Dr John Linnane,
Joint Director of Public Health
john.linnane@warwickshire.nhs.uk

Figure 1: Comparing disability-free life expectancy and life expectancy, 2007-09



Source: Office for National Statistics: http://bit.ly/P24Rwx

Disability free life expectency (DFLE) estimates the average number of years a person could live without a long term condition, assuming that there is no change to future death rates and health status rates in the population.

Why Focus on Long Term Conditions?

A long term condition (LTC) or a chronic condition, is a condition that cannot, at present, be cured but is controlled by medication and/or other treatment or therapies.

Examples of long term conditions, in Warwickshire, include high blood pressure, diabetes, asthma, arthritis, heart disease and chronic obstructive pulmonary disease. People live with these conditions for many years, often decades, which can impact on their quality of life.

People with long term conditions continue to see variation in care and services across the county. Some are intensive users of health and social care services, including community services, urgent and emergency care, and acute services.

The 2009 General Lifestyle Survey showed that, nationally, 15 million people are living with long term conditions which account for:

- 50% of all GP appointments.
- 60% of outpatient appointments.
- 70% of all inpatient bed days.
- Around 70% of the total health and care spend in England (£7 out of every £10) is attributed to caring for people with LTCs. This means that 30% of the population account for 70% of the spend.

Firstly, we look at long term conditions, particularly some of the challenges and solutions, through Primary Care, in the management of these diseases. The next section, highlights the issue of multi-morbidity where an individual is suffering from more than just one long term condition. This is important because it is the norm rather than the exception for many people. It illustrates why care needs to be focused on considering the person and not the services. The third section considers the implications for the wider workforce and the role that it has to play in identification and prevention through the Making Every Contact Count (MECC) agenda. The final section looks at the opportunities presented by influencing the wider determinants of health, with a focus on the role and potential of the health impact assessment process.

The scale of the problem

Long-term conditions have been identified as a priority in the 2011 Annual Review of Warwickshire's Joint Strategic Needs Assessment (JSNA). The purpose of the JSNA is to analyse and examine the current and future health and wellbeing needs of the local population, to inform and guide the commissioning of health, wellbeing and social care services.

The JSNA highlights:

- Around 1 in 3 people, aged over 16, live with at least one long term condition.
- People with long term conditions are more likely to see their GP, be admitted to hospital, stay in hospital longer, and need more help to look after themselves than people without long term conditions. They are also increasingly involved in manageing their own conditions with the support of a health care team.
- High quality management of long term conditions helps to keep people healthier and independent for longer.
- People with long term conditions need to be helped to understand their condition in order to manage it as well as possible, but in Warwickshire we have very few services that can help people learn about their condition, or have the right rehabilitation to improve the management of their condition.
- Warwickshire GPs usually work with people to manage their long term conditions and for the most part this care is very good, but we know that there are some patients who are not getting the treatments that they need, for example:
  - 20% of people with high blood pressure do not achieve the recommended level of control.
  - 11% of people with diabetes have dangerously poor levels of blood sugar control.
  - 10% of people with heart failure are not taking the recommended treatment.
  - 6% of people who have coronary heart disease are not taking blood thinning medication that has been proven to reduce the chance of a heart attack and death.

Figure 2 draws together information from a range of sources to help illustrate and enable us to understand the scale of the problem in terms of need, unmet need and demand. It aims to quantify and provide an overview of the gaps between those who have been diagnosed, with a long-term condition, and those who have not. The prevalence rates used for the population as a whole are all taken from the best sources available.

The health needs of a population derive from the prevalence of diseases, that is the numbers of people suffering from different types of illness. Looking only at the numbers of patients currently being treated for a disease does not show the true prevalence and impact on the population's health. At any given time, there are many people who have a disease but are not aware of it because they have not yet been diagnosed.

The numbers of patients recorded on general practice disease registers in Warwickshire, when compared with the expected numbers of people with specific conditions calculated from prevalence rates, shows that there are potentially large numbers of undiagnosed or unrecorded cases This is especially the case for coronary heart disease, hypertension, diabetes, chronic obstructive pulmonary disease, asthma and chronic kidney disease. For example, in relation to hypertension, it is estimated that there are over 60,000 undiagnosed or unrecorded cases in Warwickshire.

An estimated 16% of total hospital admissions have a primary diagnosis which could be categorised as a long term condition. In some cases patients may have a long term condition, but this may not be the primary cause of admission and therefore would not be recorded as such.

- An estimated 1 in 3 people in Warwickshire, aged over 16, are living with one or more long-term conditions. This equates to 147,000 people. The chronic conditions in the table below account for approximately 21,000 hospital admissions and around 3,000 deaths, on average, each year.
- Hypertension is the most common long-term condition in Warwickshire, in terms of both estimated and actual prevalence.
- The highest average number of hospital admissions and average deaths, per year, are for various types of cancer.

Figure 2: The Burden of Long-Term Conditions in Warwickshire and England, 2010/11

Condition	National Figures (England)	Warwickshire			
	Estimated Number & Prevalence (%)	Estimated Number & Prevalence (%)	GP Practice Disease Registers	Hospital Admissions[17]	Deaths[18]
				Average per year	Average per year
All Conditions				130,000	4,900
All Long Term Conditions	14,187,000 (33%)	147,000 (33% of the adult population)		20,000	2,800
Coronary Heart Disease (CHD)	2,493,000 (5.8%)[1]	25,400 (5.7%)[1]	17,790 (3.2%)[7]	1,500	650
Stroke & Transient Ischaemic Attacks (TIA)	1,075,000 (2.5%)[1]	11,100 (2.5%)[1]	9,464 (1.7%)[8]	1,000	400
Hypertension	13,155,000 (30.6%)[1]	148,000 (33.2%)[1]	80,277 (14.6%)[9]	350	50
Diabetes	3,267,000 (7.6%)[1]	34,800 (7.8%)[5]	23,406 (5.2%)[10]	450	60
Chronic Obstructive Pulmonary Disorder (COPD)	1,548,000 (3.6%)[1]	13,400 (3.0%)[1]	8,106 (1.5%)[11]	850	200
Asthma	4,493,000 people (1 in every 12 adults & 1 in every 11 children)[2]	46,000 (37,100 adults & 8,900 children)[2]	34,209 (6.2%)[12]	500	15
Epilepsy	408,000 people (1 in 130 people)[3]	4,200	3,408 (0.8%)[13]	350	15
Cancer	260,000 cases per year[4]	2,500 cases per year (incidence)[4]	9,379 (1.7%)[14]	15,000	1,400
Hypothyroidism	352,000 (15 in every 1,000 women, 1 in 1,000 men)[3]	3,600 (15 in every 1,000 women, 1 in 1,000 men)[3]	18,479 (3.4%)[15]	12	5
Renal Disease/CKD	3,783,000 (8.8%)[1]	41,900 (9.4%)[6]	21,013 (4.8%)[16]	400	20

Sources: Full details are given in Appendix 2. **Note:** Patients may be present on more than one disease register. Numbers relate to Adults aged 16+ unless stated. Prevelence data is based on the most up to date evidence based

With a growing and ageing population, Warwickshire is predicted to see a significant increase in numbers of long-term conditions. My 2009/10 Annual Report showed almost an estimated 90% increase over 20 years in older people with dementia. In addition, conditions such as diabetes and depression will see more than a 50% increase. This will place an increased burden on future health and social care resources.

In addition, we need to consider people living with multiple conditions, which is the norm rather than the exception. Multi-morbidity is associated with poorer quality of life, higher hospital admissions and mortality. This is explored in more detail in Section 5 on **Multi-morbidity and maintaining independence**.

1. Long Term Conditions (LTCs)

The Challenge: LTCs cannot, at present, be cured but are controlled by medication and/or other treatment/ therapies.

- Nationally, around 1 in 3 people (33% of the population), aged over 16, live with at least one long term condition. In Warwickshire, this equates to an estimated 147,000 people. However, more recent research suggests the rate may be as high as 42%.
- LTCs are increasing, partly a result of the ageing population and unhealthy lifestyle choices.
- The NHS overall helps people maintain a good level of control, however there is variation.
- People with LTCs are 2-3 times more likely to experience mental health issues than those without.

The Opportunities:

- **Early intervention** - It is important that we test people to ensure we diagnose early.
- **Giving people the best treatment** – Good management can reduce complications from long term conditions and help to keep people healthier and independent for longer.
- **Helping people adjust and recover** - Taking the time to teach people about their condition makes big differences to how well people can control their condition.
- **Good mental health** – Is as important as good physical health and influences our physical wellbeing.

Recommendations:

- Roll out NHS Health Checks across the whole of Warwickshire.
- Improve the clinical indicators and outcomes for people with LTCs and reduce the variation in outcomes between GP practices, ensuring the treatments given to patients with LTCs are at recommended levels for all practices.
- Increase the availability of 'expert patient' and rehabilitation programmes.
- Improve the coordination of services for people with more than one condition.
- Increase the availability of services to help with mental wellbeing in people with LTCs.

2. Multimorbidity and Maintaining Independence

The Challenge: Co-morbidity or multimorbidity is the presence of two or more LTCs.

- The latest research suggests that more than 42% of the population could have one or more LTCs, and that more people (23%) have two or more LTCs than have only one.
- As people develop more than one chronic condition, their care becomes more complex and difficult for them and/or the health and social care system to manage.
- Multimorbidity is associated with poorer quality of life, more hospital admissions and higher mortality. This in turn leads to an increase in costs for care.
- Services, particularly health services, are largely organised to provide care for single diseases.

The Opportunities:

- **Risk profiling** - Using risk profiling to ensure that commissioners understand the needs of their population and manage those at risk (e.g. the risk stratification tool).
- **Neighbourhood care teams** - The creation of integrated health and social care teams based around a locality to provide joined up and personalised services.
- **Self care / shared decision making** - There needs to be a transfer of knowledge and power to patients to empower them to maximise self-management and choice.

Recommendations:

- Seek to improve data collection on co-morbidities and analyse data across all long term conditions including capturing hypertension and mental health.
- Adopting an integrated pathway, rather than an organisational response, is key to delivering high quality services that meet the needs of patients/clients.
- Shifting the emphasis of self care towards community and network centered approaches. This may also prove appropriate to engage people in socially and economically deprived contexts.

3. A Health Promoting Workforce: Making Every Contact Count (MECC)

The Challenge:

- More than 50% of premature deaths in western countries are attributable to lifestyle.
- A few minutes of personalised feedback can be as effective as longer interventions.

The Opportunities:

- Brief opportunistic advice usually lasts up to 5 minutes. It involves raising a lifestyle issue with an individual, where appropriate, and signposting them to further information. This can be used by anyone engageing with members of the public alongside their everyday work.

Recommendations:

- All agencies/partners are aware of and adopt the MECC philosophy.
- To maintain a consistent approach to delivery that meets the competency framework and to ensure all MECC work is captured; we recommend that all MECC activity is co-ordinated through the Warwickshire MECC Implementation Group and via this group to the Arden Strategic Group.
- That all organisations within and outside of the NHS, have a Board level commitment to the delivery of MECC and that this is implemented through a local action plan overseen by the implementation lead.
- The use of contractual arrangements to ensure that organisations sign up and deliver the MECC.
- As a basic requirement to be considered competent, as an individual and organisation to deliver MECC, staff should undergo Level 1 NHS Local (e-learning) training.
- Development and securing of additional resources to support the implementation of MECC, through local pilots and match funding commissioning for training where appropriate.

4. The Wider Determinants of Health: Health Impact Assessments

The Challenge:

- Poor health and wellbeing is a result of a variety of factors that people experience throughout their life. Many of these factors are related to people's surroundings and their communities. It is important that the health impacts of such factors are considered when making decisions about care needs.

The Opportunities:

- One way to ensure that health and wellbeing are explicitly considered when making these decisions is for organisations to carry out "Health Impact Assessments".
- Health Impact Assessments (HIAs) consider any proposed change. This could be anything from a new housing development or new policy, and assess what the likely positive and negative consequences for health and wellbeing will be. Recommendations are then made on how to enhance the positive consequences and reduce the negatives.
- Types of developments or changes that may warrant an HIA include: large housing development, major commercial or industrial development, significant changes to the way public services are delivered and significant changes to public infrastructure.
- The six steps of Health Impact Assessment are screening, scoping, assessment, recommend, communicate, evaluate.

Recommendations:

- All public sector organisations, in Warwickshire, commit to carrying out Health Impact Assessments of all new major plans and policies to ensure that the maximum health gain is achieved.
- Health and wellbeing should be included, as core considerations, in every planning and transport policy in Warwickshire and as part of the District and Borough Council's Core Strategies and Neighbourhood Plans.
- Some funding from Community Infrastructure Levies on new developments is used to address local health and wellbeing issues and where necessary carry out more in depth HIAs.
- The Warwickshire Health and Wellbeing Board champions the use of HIAs as a way of addressing the social determinants of health and reducing health inequalities.

Section Three: Annual Review and Health Profile for Warwickshire

"While there are still significant health concerns within Warwickshire as highlighted in the updated Health Profile (Figure 3), major achievements have been made in core areas of public health during the last 12 months."

Health Protection:

- 76,995 people aged 65 and over were immunised against seasonal flu.
- 5,996 one year old babies were fully immunised against serious infection.
- 2,319 girls have been fully immunised against HPV, the virus that causes cervical cancer.
- Well over 95% of all children are fully immunised against serious infection, some of best results in the West Midlands.
- With the Health Protection Agency and Environmental Health colleagues, we managed 78 separate communicable disease outbreaks and environmental incidents.
- We carried out 10,124 NHS Health Checks and found 1,341 people with an undiagnosed chronic health condition.
- We screened 6,024 newborn children for serious genetic disorders.
- We screened over 18,000 people for bowel cancer and detected 261 cancers early.
- We screened 18,208 diabetics for eye disease.
- We launched a new screening programme to detect abdominal aortic aneurysms, in men aged 65, and have screened more than 630 men to date.
- We treated 23,941 people in sexual health services.
- We reduced teenage pregnancies by 6% compared to the previous year.
- We led the work to agree the building of a sexual assault referral centre at George Eliot Hospital.

Health Improvement:

- We helped 3,646 people quit smoking.
- We treated 2,015 people for alcohol and drug misuse.
- We jointly, with district colleagues, funded £40,000 worth of grants to community groups to improve health in Warwick and Stratford.
- We were awarded £70,000 to develop a mobile phone app to help young people access services and improve their sexual health.
- We successfully bid for £68,000 from the Department of Health to reduce fuel poverty.
- "Sorted!" our programme to improve the mental health of young people won the Innovation in Public Health category at the West Midland Public Health Conference.
- We weighed and measured over 11,000 children as part of the National Child Measurement Programme.
- A total of 635 referrals have been made to the Exercise Referral programme since May 2011.
- A total of 532 families, of primary school age children, took up the family Change4life service (around weight management).

Wider Determinants and Population Health

- We launched the updated Warwickshire Joint Strategic Needs Assessment (JSNA) www.warwickshire.gov.uk/jsna.
- We helped establish the Warwickshire Health and Wellbeing Board and launched the Warwickshire Health and Wellbeing Strategy consultation.
- We worked with Warwickshire Road Safety Partnership and GPs to develop an 'in car safety' pack around child car seats. It will be distributed to 7,000 Warwickshire new parents.
- We liaise with other Responsible Authorities, across the County, to understand partners positions on licensing decisions, making representations against license applications where appropriate.
- Public Health are working with District and Borough partners on agreeing Supplementary Planning Guidance around healthy urban and rural planning.
- Together with Warwickshire Country Parks we are exploring the development of 'trim trails'.
- Warwickshire's 'Books on Prescription' scheme is being developed to include books for people with dementia and their carers. These texts will be available from Autumn 2012.
- We are working with partners in the Districts/Boroughs to encourage them to include measured miles and Green Gyms as part of their planning process.
- We continue to advise the three emerging Warwickshire Clinical Commissioning Groups on Public Health issues and work closely with the five District and Borough Councils.
- Public Health Warwickshire has successfully moved offices from NHS Warwickshire to Warwickshire County Council.

Figure 3: Health Profile for Warwickshire

Domain	Indicator	Warwickshire 2012	England 2012	Trend	Variation across Districts	Data
Communities	Deprivation	5.6	19.8	→	0.0-18.4	% living in deprivation
	Children in poverty	15.0	21.9	↑	10.7-20.9	%
	Statutory homelessness	1.6	2.0	↑	0.8-2.1	Rate per 1,000 households
	GCSE achieved (5A*-C inc Eng & Maths)	60.5	58.4	↑	49.1-70.0	%
	Violent crime	10.0	14.8	↓	7-14.5	Rate per 1,000
	Long term unemployment	3.3	5.7	n/a	1.7-5.1	Rate per 1,000
Children's and young people	Smoking in pregnancy	16.7	13.7	↑	n/a	%
	Breast feeding initiation	71.6	74.5	↓	n/a	%
	Obese children (Year 6)	16.2	19.0	↑	13.9-19.5	%
	Alcohol-specific hospital stays (under 18)	63.9	61.8	n/a	44.1-82.1	Rate per 100,000
	Teenage pregnancy (under 18)	36.0	38.1	→	23.7-48.8	Rate per 1,000
Adult's health and lifestyle	Adults smoking	19.3	20.7		15.5-22.4	%
	Increasing & higher risk drinking	23.3	22.3	n/a	22.1-24.0	%
	Healthy eating adults	28.2	28.7	→	22.6-32.6	%
	Physically active adults	10.6	11.2	↓	9.5-13.3	%
	Obese adults	25.5	24.2	→	21.4-29.8	%
Disease and poor health	Incidence of malignant melanoma	13.1	13.6	→	6.7-17.0	Rate per 100,000
	Hospital stays for self-harm	189.3	212.0	n/a	120.1-257.2	Rate per 100,000
	Hospital stays for alcohol related harm	1,693	1,895	↑	1519-1935	Rate per 100,000
	Drug misuse	6.0	8.9	n/a	3.2-8.4	Rate per 1,000
	People diagnosed with diabetes	5.2	5.5	↑	4.6-6.3	%
	New cases of tuberculosis	9.7	15.3	→	3.4-18.2	Rate per 100,000
	Acute sexually transmitted infections	664	775	n/a	445-862	Rate per 100,000
	Hip fracture in over-65s	465	452	→	413-555	Rate per 100,000
Life expectancy and causes of death	Excess winter deaths	17.9	18.7	→	14.2-24.5	Ratio
	Life expectancy – male	79.1	78.6	↑	77.5-80.4	Years at birth
	Life expectancy – female	83.0	82.6	↑	81.9-84.3	Years at birth
	Infant deaths	5.0	4.6	↑	2.8-6.4	Rate per 1,000
	Smoking related deaths	178	211	→	146-226	Rate per 100,000
	Early deaths: heart disease & stroke	57.5	67.3	↓	41.9-75.5	Rate per 100,000
	Early deaths: cancer	101.6	110.1	→	95.2-111.5	Rate per 100,000
	Road injuries and deaths	59.6	44.3	↓	39.9-89.4	Rate per 100,000
Health Protection	Chlamydia	218.8	351.4	↓	139.5-298.7	Rate per 100,000
	Gonorrhoea	27.6	39.1	↑	7.6-60.5	Rate per 100,000
	Syphilis	3.3	5.4	→	0.8-5.3	Rate per 100,000
	Herpes	61.5	58.1	↑	41.2-73.7	Rate per 100,000
	Warts	134.1	141.8	↓	98.6-159.6	Rate per 100,000
	Flu vaccinations in over 65s	74.6	n/a	↑	59.6-89.9	%

Source: APHO Health Profiles and Health Protection Agency
More detailed indicator notes see references and key documents

Finances

Many of the achievements, of the last 12 months, have been made possible through services directly commissioned from the public health budget.

The overall Public Health budget for 2012/13 is £37 million. In April 2013, almost £20 million of this money will move with Public Health to Warwickshire County Council. Other Public Health budgets will transfer to the NHS Commissioning Board (NHSCB), Public Health England (PHE) and Clinical Commissioning Groups (CCGs).

The estimated spends by CCGs based on 2012/13 allocations are:

Figure 4: Public Health Spending 2012/13, Budget Breakdown by CCG

	Warwickshire North	Coventry & Rugby (excluding Coventry)	South Warwickshire
Total Spend	£7,012,258	£3,485,556	£9,451,944
Estimated spend per head of pop	£37.44	£34.82	£36.85

Source: Public Health and PCT Finance 2012

Figure 5 shows the priority investment of £4.7 million from a health improvement perspective.
The programmes will be funded over a number of years in order to ensure improvements in longer term health outcomes. All of these programmes are being delivered with partners and are available in local communities across Warwickshire.

Figure 5: Priority Investment for Public Health across Warwickshire as at 2012/13

Investment Area	Funding 2012/13
Smoking cessation; Smoking in pregnancy	£105,000
Reinstating growth programme including (MECC)	£150,000
Improving/tracking data and patient impact	£20,000
Contingency for over performance	£25,000
Tobacco Control	£75,000
DAAT allocation for 2013	£2,970,000
Sexual Assault Referral Centre	£50,000
Affordable Warmth	£60,000
Health checks	£320,500
Weight Management	£445,000
Health visitors/ Family Nurse Partnership	£495,000
Total	**£4,715,500**

Source: Public Health and PCT Finance 2012

The spend for health improvement programmes reflects the inequalities across the county, for example we will spend more in areas where there are greater needs for services than in other areas. Some programmes will focus on specific areas of the county such as the Health Check Programme which has screened over 10,000 otherwise healthy people, and found for example 688 people with high blood pressure. Other programmes such as Smoking Cessation is a universal service across Warwickshire. Figure 6 illustrates how much we spend annually on helping people to give up smoking, which remains our number one cause of mortality.

Figure 6: Warwickshire Smoking Cessation Services, Budget Breakdown by District

	North Warwickshire	Nuneaton & Bedworth	Rugby	Stratford	Warwick	TOTAL
Total Spend	£82,950.00	£193,520.00	£131,991.00	£147,010.00	£155,015.00	£710,486.00
Estimated spend per head of population (2010/11)	£1.34	£1.54	£1.32	£1.22	£1.14	£1.31

Source: Warwickshire Smoking Cessation Service, 2012 Notes: Figures given for the Central Service and Stop Smoking in Pregnancy Service are estimates Payments to Service Providers are by case

Section Four: Long Term Conditions

Long term conditions are medical conditions that cannot, at present, be cured but can be controlled by medication and other treatments.

Examples of common long term conditions in Warwickshire include high blood pressure, diabetes, asthma, heart disease and chronic obstructive pulmonary disease. People live with these conditions for many years, often decades, and they can impact on their quality of life by causing disability, loss of independence and early death.

Why are Long Term Conditions Important?

In Warwickshire we estimate that about 1 in 3 people, aged over 16, live with a long term condition, an estimated 147,000 people.

People with long term conditions are more likely to see their GP, be admitted to hospital, stay in hospital longer, and need more help to look after themselves than people without long term conditions. Some people have more than one long term condition which increases the impact on their overall quality of life (Section 5). However, we know that giving people the best care and helping them to take control and manage their own condition, with the help of health services, we can improve people's quality of life, reduce their need for health services and reduce the number who die early as a result of their condition.

Early Intervention

People can have long term conditions, such as high blood pressure or diabetes, for many years and not have any symptoms. This means that whilst they think they are healthy, the condition is not being treated and causing damage. For these conditions, it is important that we take appropriate opportunities to test people, ensuring that we diagnose them.

Case Study: NHS Health Checks

People, between the ages of 40 and 74, are invited every five years to have their blood pressure, cholesterol, blood sugar and kidney function checked. People are also asked about smoking, alcohol use and exercise.

Health checks are only available, at the moment, in North Warwickshire and Nuneaton. We want to be able to roll this out to everyone in Warwickshire. This year through NHS Health Checks:

- 10,124 otherwise healthy people were screened
- 668 had high blood pressure
- 213 people were found to have diabetes
- 114 people had chronic kidney disease
- 51 people had heart disease
- 31 people had an abnormal heart rhythm

Figure 7 shows the ratio of reported to expected prevalence for a number of long-terms conditions for each of the Clinical Commissioning Groups (CCGs) across Warwickshire. A more detailed breakdown is given in Appendix 3.

Ratios are lower for conditions including heart failure, chronic kidney disease, hypertension and chronic obstructive pulmonary disorder. Where ratios are lower, it could be interpreted that there is a lower than expected underlying risk, ineffective case finding, effective prevention of incidence or coding issues.

Conversely, if the ratio is high, it could be interpreted that there is a higher than expected underlying risk, effective case finding, ineffective prevention of incidence or coding issues. Ratios in Warwickshire are highest for epilepsy and stroke.

There is some variation in terms of the ratios across Warwickshire's CCGs for each of the long-term conditions but this is particularly pronounced in terms of diabetes.

Figure 7: Ratio of Reported to Expected Prevalence by Clinical Commissioning Group (CCG)

Long-Term Condition	Rugby (excluding Coventry) CCG	South Warwickshire CCG	Warwickshire North CCG	Warwickshire	West Midlands Region	England
Coronary Heart Disease	0.78	0.81	0.74	0.78	0.74	0.80
Stoke & TIA	0.86	0.93	0.80	0.87	0.82	0.85
Hypertension	0.58	0.58	0.59	0.58	0.57	0.55
Diabetes (Aged >=17)	0.81	0.68	0.92	0.78	0.95	0.88
Chronic Obstructive Pulmonary Disorder	0.61	0.57	0.67	0.61	0.47	0.52
Epilepsy (Aged >=18)	0.98	0.80	0.93	0.87	0.95	0.87
Asthma	0.71	0.71	0.67	0.70	0.67	0.64
Heart Failure	0.47	0.47	0.55	0.50	0.54	0.51
Chronic Kidney Disease (Aged >=18)	0.42	0.44	0.50	0.46	0.48	0.47

Source: NHS Comparators (more detail in Appendix 3)

N.B. A ratio of less than 1 indicates that the expected count is higher than the reported count and a ratio of more than 1 indicates that the reported count is higher than the expected count.

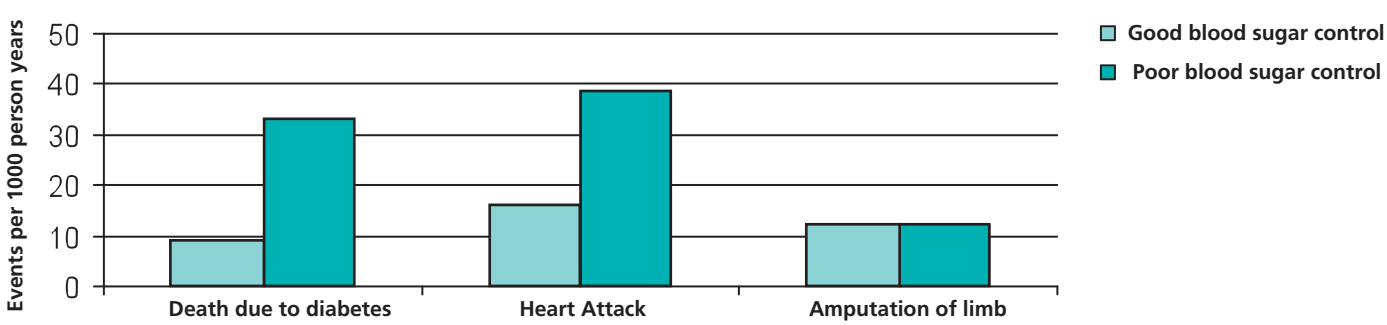
Giving People the Best Treatment

We know that excellent management can reduce the complications from long term conditions and help to keep people healthier and independent for longer.

Good control and treatment, over many years, can make real differences to people's health and wellbeing. For example, we know that people with diabetes who have very good blood sugar control are at less than half the risk of having a heart attack compared to people with poor blood sugar control (Figure 8).

In Warwickshire:
- 1 in 6 adults are diagnosed with high blood pressure.
- 1 in 19 adults have a diabetes diagnosis.
- 1 in 23 adults are recognised as having heart disease.

Figure 8: Comparison of Good and Poor Blood Sugar Control of events per 1,000 person years



Source: http://www.bmj.com/content/321/7258/405.pdf%2Bhtml

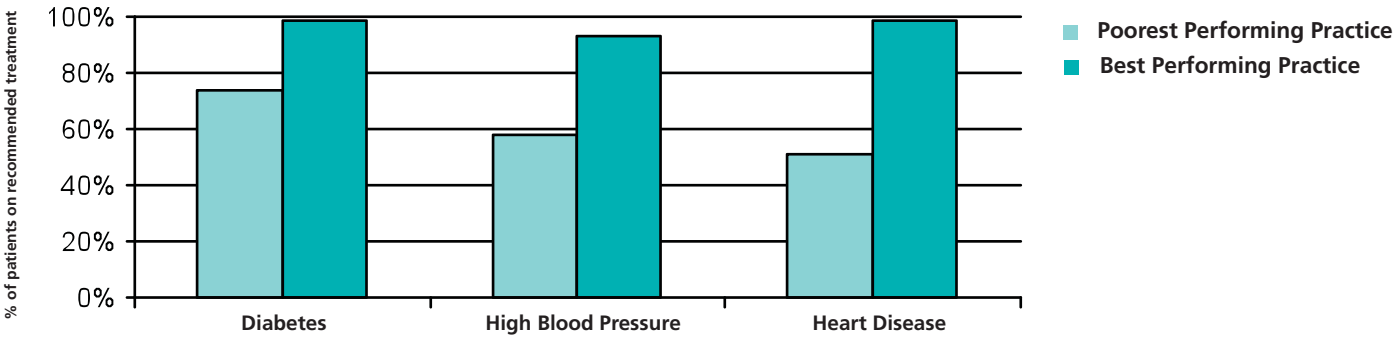
The NHS can, and overall does, help people maintain a good level of control of their conditions. Many people have excellent control; however, care differs depending on where people are looked after. For example, there is a large variation between the outcomes for patients at different GP surgeries across Warwickshire. Some surgeries manage to treat almost all their patients to the recommended level for certain long term conditions. However, some surgeries struggle to achieve this high level of performance. Overall, in Warwickshire, we have thousands of people with common long term conditions who are not receiving the recommended treatment. In some cases, this can be because patients are not following the prescribed treatments or the condition is difficult to control, but sometimes it may be because the NHS needs to do more to help people manage their condition better.

Figure 9: Patients with Long Term Conditions in Warwickshire by recommended treatment level

	People with Condition in Warwickshire	People not treated to recommended level	% not treated to recommended level
High Blood Pressure	79,297	16,422	21%
Diabetes	22,190	3,157	14%
CHD on beta blocker	17,993	5,667	31%

Source: Quality & Outcomes Framework (QOF) 2010/11

Figure 10: Variation in the percentage of patients on recommended treatment for three long term conditions by best and poorest performing practice in Warwickshire



Source: QOF 2010/11

Helping People Adjust and Recover

Being diagnosed with a long term condition can be daunting to deal with. The evidence shows, that taking the time to teach people about their condition makes big differences to how well people can control their condition. For example, people that take part in "expert patient programmes" to teach them about their condition are more likely to be able to manage their condition better and have better outcomes.

Case Study:

DESMOND (Diabetes Education and Self Management for Ongoing and Diagnosed) Programme

People with diabetes that attend the DESMOND education programme:

- Have lower blood sugar levels.
- Lose more weight.
- Better understand their condition and how to manage it.
- Have lower blood pressure.
- Are less likely to need medication.

Helping people recover after a period of illness or injury can also dramatically improve their recovery, reduce the likelihood of getting ill again and improve their ability to look after themselves. For example, after a heart attack having a period of cardiac rehabilitation can reduce death rates by more than a quarter compared to people that do not take part in rehabilitation programme. In Warwickshire, we currently have only a small number of rehabilitation programmes:

Recommendations

- Roll out NHS Health Checks out across the whole of Warwickshire.
- Improve the clinical indicators and outcomes for people with long term conditions and reduce the variation in outcomes between GP practices.
- Ensure that the treatments, being given to patients with long term conditions, are as good as recommended levels for all general practices in Warwickshire.
- Increase the availability of expert patient and rehabilitation programmes.
- Improve the coordination of services for people with several different long term conditions.
- Increase the availability of services to help with mental wellbeing in people with long term conditions.

Living with multiple conditions is the norm rather than the exception for many people.

Multi-morbidity is associated with poorer quality of life, higher hospital admissions and mortality. Health services in particular, are largely organised to provide care for single diseases.

As people get older they are more likely to develop a long term condition and to experience multi-morbidity, the numbers therefore are expected to increase significantly over the next two decades. Many people with long term physical health conditions also have mental health problems.

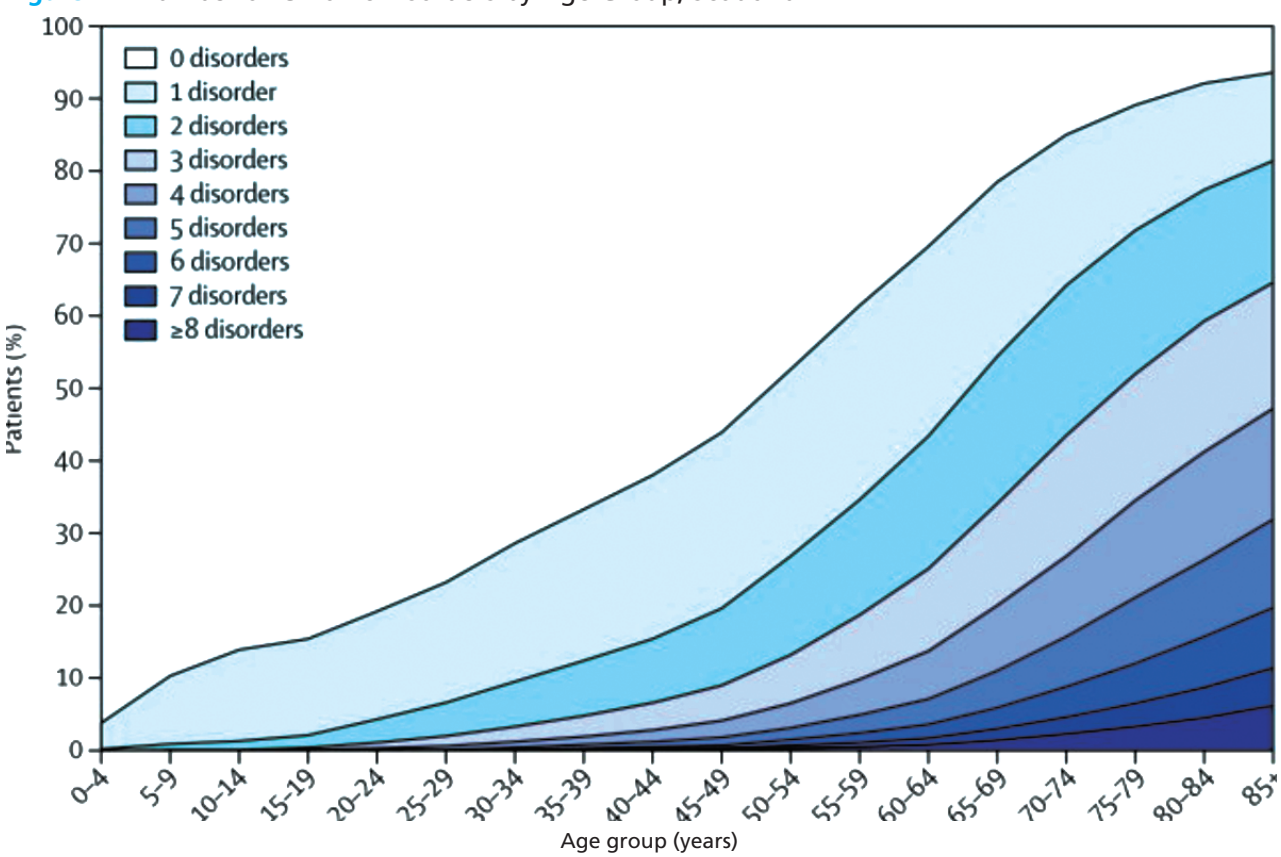
Co-morbidity or multi-morbidity is the presence of two or more long term conditions.

Management of the increasing prevalence of long term conditions is a major challenge for health and social care systems. As people develop more than one chronic condition, their care becomes disproportionately more complex and difficult for them and/or the health and social care system to manage. Multi-morbidity is associated with poorer quality of life, more hospital admissions and higher mortality. This in turn leads to an increase in costs for care. Services and particularly health services, are largely organised to provide care for single diseases. An integrated pathway rather than an organisational response is key to delivering high quality services that meet the needs of patients/clients.

The invisible epidemic?

Multi-morbidity is important because it is the norm rather than the exception. Some of the most recent research suggests that over 42% of the population have one or more long term condition and that more people (23%) have two or more than have only one (Figure 11). This is higher than previously thought (1 in 3).

Figure 11: Number of Chronic Disorders by Age Group, Scotland



Source: The Scottish School of Primary Care, Multi-morbidity in Scotland, Barnett et: http://press.thelancet.com/morbidity.pdf

Case Study: Warwickshire Risk Stratification Tool Analysis

In Warwickshire, while data is available on both predicted and actual prevalence of individual disease groups (Appendices 2 and 3), data is not available on multi-morbidities across all long term conditions. Data is, however, available through the risk stratification tool, on five of the most common long term conditions (diabetes, COPD, CHD, Chronic Heart Failure and Asthma). Data is currently extracted from 59 practices across Warwickshire to identify patients at risk from admission to hospital. This data, is limited and is currently being updated. However, it illustrates some of the patterns in multi-morbidity across the County and many of the trends and patterns identified in the Scottish research are also reflected in Warwickshire.

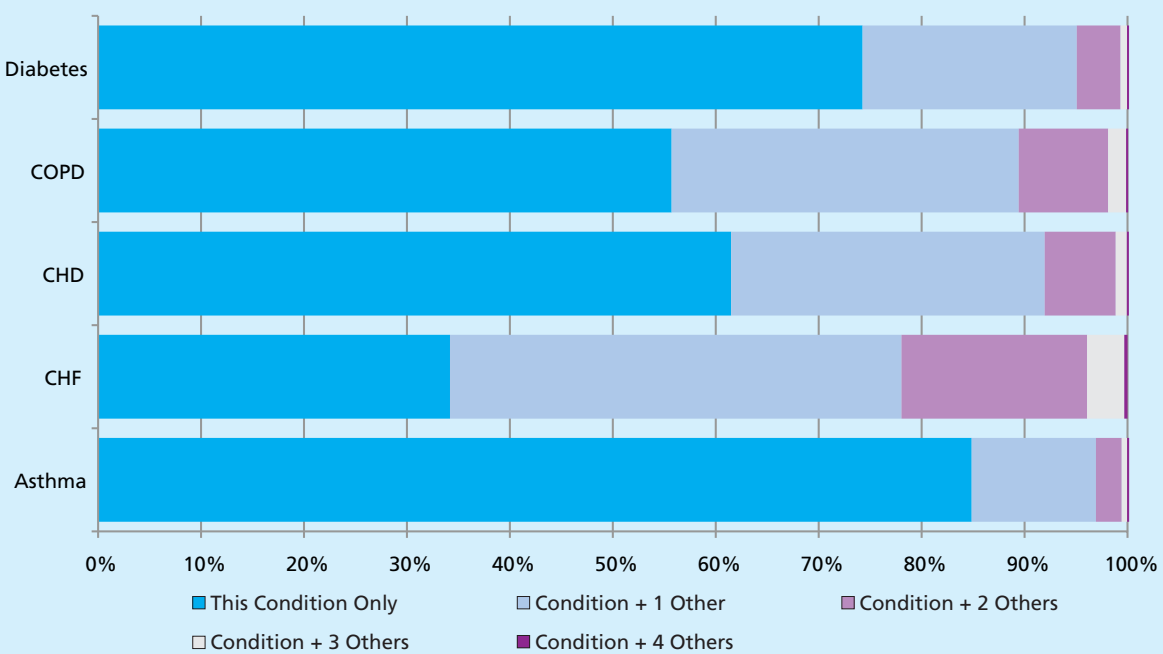
Warwickshire data collated on five of the most common long term conditions from the 59 out of the 76 practices shows there are 58,429 people in Warwickshire diagnosed with one or more of the following long-term conditions; asthma, chronic obstructive pulmonary disorder, coronary heart disease, chronic heart failure and diabetes. 49,362 people (84.5%) are diagnosed with a single condition, with 9,067 (15.5%) having two or more long-term conditions. The data calculates 2.4% of patients, aged over 16, in Warwickshire have two or more conditions. Patients with Chronic Heart Failure are more likely to have two or more conditions, although in absolute numbers there are more patients with CHD and diabetes who have multi-morbidities.

The most commonly diagnosed long-term condition in Warwickshire is asthma. Asthma patients were the least likely to be diagnosed with an additional disease – only 15% also had a further long-term condition. This is in contrast to heart failure patients, where nearly two thirds were living with an additional long-term condition, and over 20% had two or more further conditions.

Figure 12: Long-Term Conditions in Warwickshire, March 2012

Number of Long-Term Conditions	Number of Patients	Proportion of Total Patients
1	49,362	84.5%
2	7,673	13.1%
3	1,222	2.1%
4	162	0.3%
5	10	0.0%
Total	58,429	100.0%

Figure 13: Proportion of patients with one or more long term condition, by condition, Warwickshire, March 2012



Note: Risk Stratification Tool includes the following Long-Term Conditions only: Asthma, Chronic Obstructive Pulmonary Disorder, Coronary Heart Disease, Chronic Heart Failure and Diabetes.

Source: Risk Stratification Tool, NHS Warwickshire Intelligence Department

Section Five: Multi-morbidity and Maintaining Independence

The number of people in Warwickshire living with one or more long term condition is increasing. One of the main reasons for this is the changing demographics of the population. People are now living longer and over the next 20 years the numbers of people over 75 years of age will more than double. The prevalence of multi-morbidity increases with age. As people get older they are more likely to develop a long term condition or to experience multi-morbidities. In Warwickshire over 75% of the multi-morbidities from the risk stratification data were in people over 65. As a result, their need for health and social care interventions increases significantly and this has implications for the delivery of health and social care. [6,7]

The evidence shows that people living in deprived areas are likely to develop multi-morbidity 10 years before those living in the most affluent areas.

There is a strong relationship between the number of physical conditions that people have and mental health problems, particularly in deprived areas.[10]

Good Mental Health

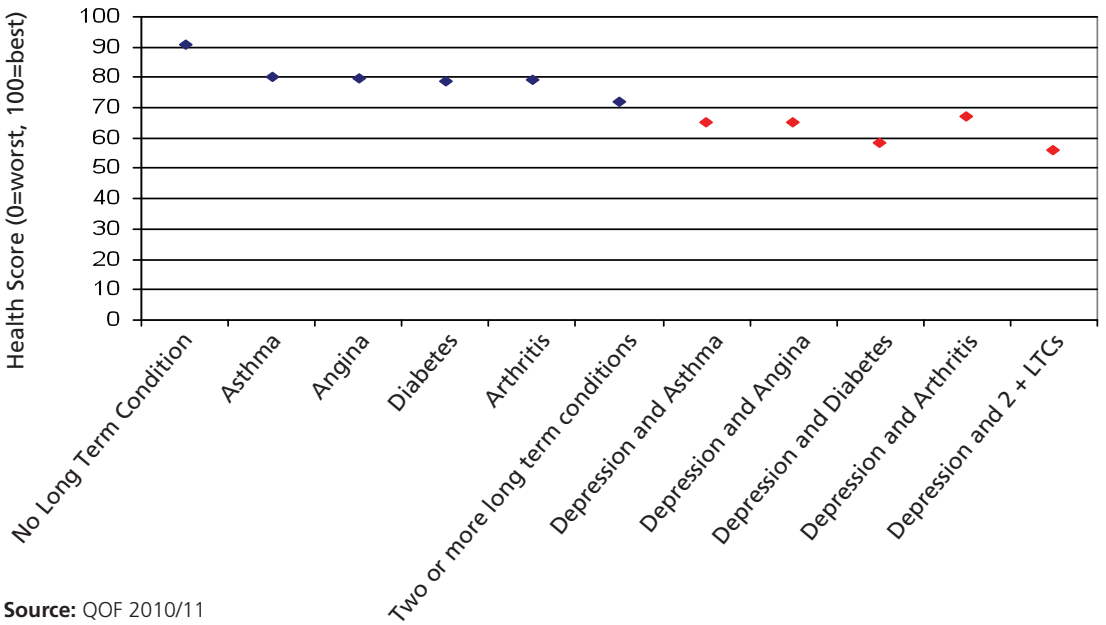
As well as making sure that people with long term conditions get the best treatment and support for their physical health we must also remember the importance of being mentally healthy. Having a long term condition can have serious impacts on people's health, their ability to do things and look after themselves and have unpleasant symptoms that they find distressing. Many long term conditions can lead to the prospect of an early death. These issues can make people feel anxious, stressed or depressed which can severely affect their quality of life.

Case Study: The Improving Access to Psychological Therapy (IAPT)

The IAPT Service, in Warwickshire, is delivered jointly by Coventry and Warwickshire Partnership Trust and Coventry and Warwickshire MIND, and is funded by NHS Warwickshire. Clients are supported to develop their skills to self-manage their condition, and to enhance their psychological resilience. The service provides assessment and access to two levels of intervention. Lower intensity treatments include: computer based Cognitive Behavioural Therapy, stress control courses, low mood groups, telephone and face to face therapy. Higher Intensity Workers provide access to more intensive therapy, including up to 20 sessions of Cognitive Behavioural Therapy. Over 11,000 people have been referred since 2010/11.

People with long-term conditions are two to three times more likely to experience mental health problems than the general population. These are usually conditions such as depression and anxiety. However, because long term conditions are more common in older people, dementia is also common. Mental health problems are particularly common in people with cardiovascular diseases, diabetes, chronic obstructive pulmonary disease (COPD) and musculoskeletal disorders. Cardiovascular patients with depression experience 50% more acute exacerbations per year and have higher mortality rates. Patients with chronic heart failure are eight times more likely to die within 30 months if they have depression. Katon et al (2004) reported that people with diabetes and co-morbid depression have a 36% to 38% increased risk of all-cause mortality over a two-year follow-up period. Co-morbid mental health problems are associated with poorer glycaemic control, more diabetic complications and lower medication adherence.

Figure 14: Management of mental health problems in long term conditions



Source: QOF 2010/11

Poor Co-ordination of Care and Higher Admissions

International evidence shows that people with multi-morbidity experience more problems with the co-ordination of their care and more medical errors.[12]

People with more than one condition are more likely to have emergency and potentially preventable admissions. People in hospitals and institutional care have an increased risk of their condition worsening or secondary conditions taking hold. Currently patients with long-term conditions account for 70% of overall healthcare spending. They are disproportionately higher users of health services representing 50% of GP appointments, 60% of outpatient and A&E attendances and 70% of inpatient bed days. By placing people in hospital we increase the risk of the need for greater intervention from health and social care services following discharge.[14,15]

The LTC Quality, Innovation, Productivity and Prevention (QIPP) workstream seeks to improve clinical outcomes and experience for patients with long term conditions in England.[14] A reference panel agreed a model of care for LTCs based on the following 3 key principles, which are the fundamental features of all best practice LTC care programmes both here and abroad:

- **Risk profiling** - Using risk profiling to ensure that commissioners understand the needs of their population and manage those at risk. This will assist in preventing disease progression and will allow for interventions to be targeted and prioritised (e.g. the risk stratification tool).

- **Neighbourhood care teams** - The creation of integrated health and social care teams based around a locality (or neighbourhood) to provide joined up and personalised services. These generic teams pull in specialist services when necessary, but treat a patient holistically, regardless of their condition(s). This is not to say that in the integrated teams, there will not be a specialist nurse; rather they will be embedded in the team that possess the skills best suited to manageing what will be a majority of their patients; people with multiple conditions. Each patient has a key worker within the team who co-ordinates their care and acts as the point of contact. The benefits are particularly strong where jointly delivered rapid and flexible response services are in place, targeted at older people with mental health needs.[15]

- **Self care / shared decision making** - There needs to be a systematic transfer of knowledge to patients to empower them to maximise self-management and choice. This includes ensuring; that patients engage in shared decision making in order to co-produce a care plan, that both patients and their carers have access to the appropriate information about how to manage their condition and that there is 'no decision about me without me' and that patients are active participants in all decisions about their care. For example, many long-term conditions can be self-managed, particularly through the use of technology, for example, through developing our approach to telecare and telehealth.

An element of self management highlighted in several documents including the Scottish Self Management Strategy for Long Term Conditions is the role of improving social capital, particularly through involving the voluntary sector. This view is supported in subsequent research including work by Vassilev et al around social networks, social capital and chronic illness self management, which indicated that social networks play an important part in the management of long term conditions.[17]

Case Study: The joint benefits of physical health and mental health

A client started with the Brunswick Gets Physical programme in October 2010, who had a number of chronic conditions including issues around low self esteem and highly significant confidence challenges. The client attended numerous classes, with one to one emotional support provided, to prompt further development in confidence. He/she has intergrated into group activities well and taken a huge step in participating in a gym on a solo basis. Other positive changes noted are the client's drop of excessive weight, their blood sugar is in a healthy & manageable level (previously at double figures and now stabilised at 6.4) and has become instrumental in the promotion of physical activity to other members in our community.

Integrated Discharge Pathways in Warwickshire

In Warwickshire, work is currently underway to align and integrate appropriate services for all adults who require a supported discharge from hospital. This meets the requirements of the Kings Fund and the Quality, Innovation, Productivity and Prevention (QIPP) Programme.

The programme will establish three pathways of care based on risk and complexity. These pathways will be established to meet the needs of low to moderate complexity, median to high complexity and very complex cases. They will include people who can recuperate/rehabilitate at home or who have night needs and require a different setting, to manage their care, and people who might be subject to continuing healthcare needs if they are not given a full opportunity to recover prior to assessment.

The model for social care has changed emphasis to focus more on prevention, reablement and recovery. Through this approach it is envisaged that there are likely to be fewer older people accessing social care support and for shorter periods. A further key change will be the roll out of personal budgets across the county, initially for new service users. More integrated intermediate care and re-ablement services are planned through joint work on Cutting the Cost of Frailty.

The pathways will combine the health and social care contributions (some examples are given in the case studies on page 17) and will provide the basis of the offer contained within the discharge to assess process.

Case Study: Examples of good practice to support independent living in the community and not a hospital setting

Telehealth/Telecare

There is an increasing demand for care close to home and for it to be case managed in new and innovative ways. The evidence around telehealth is growing. Its success varies depending on a number of factors including the intervention, context, the patients involved and the disease.[18]

Telehealth is the remote monitoring of a patient's medical condition. With modern technology, patients can be monitored in their own homes without having to visit their GP surgery or local hospital. Telecare relates to the combination of equipment, monitoring and response that is needed to make a home a place of safety. It can help individuals maintain independence, increase safety and confidence and support carers alongside traditional healthcare, social care and housing initiatives.

Virtual Wards

The Virtual Ward provides a community-based service using systems, processes and staffing similar to a hospital ward but without the physical building. The average length of stay for a patient on the Virtual Ward is twelve weeks. The Virtual Ward is staffed by a team of nurses who work closely with a patient's own GP and a range of health and social care professionals to improve the quality of life, reduce unplanned hospital admissions, facilitate patients to self-care and provide appropriate end of life care and support personalised self-management plans.

Self Directed Support and Personal Budgets

Self-directed support allows you to have more flexibility and choice in arranging the services you need, for example, who provides them and when they are provided. Warwickshire County Council (WCC) recognise that you are in the best position to know what kind of support will enable you to live as independently as possible. It's your care... and your choice.

Case Study: BoroughCare 24 hour Community Alarm Service

Being able to live independently at home and feeling safe is important for everyone, whether you are an older person, frail, disabled or isolated. This service is for any person living in North Warwickshire and paying Council Tax to North Warwickshire Borough Council (private/rented/owner occupier) who feels vulnerable or at risk.

It is an emergency alarm unit and personal trigger that connects to an existing telephone, linking to the Council's Central Control. Fully trained staff guarantee a rapid response. BoroughCare are on call 24 hours a day, 365 days a year to offer help and advice. Control Centre staff can contact a nominated key holder, call emergency services, send staff to visit or offer other types of assistance. The service is free to those who are 62 or over and there is a modest charge for those younger if they do not qualify for a subsidy due to low income.

For more information contact: 01827 711560 - 24 hours or **communitysupport@northwarks.gov.uk**

Recommendations

- Seek to improve data collection on co-morbidities and analyse data across all long term conditions including capturing hypertension and mental health.
- Adopting an integrated pathway rather than an organisational response is key to delivering high quality services that meet the needs of patients/clients.
- Shifting the emphasis of self-care towards community and network centred approaches, this may also prove appropriate to engage people in socially and economically deprived contexts.[17]

Section Six: A Health Promoting Workforce: Making Every Contact Count

More than 50% of premature deaths in western countries are attributable to lifestyle. Every day there are thousands of contacts between the public sector, business and voluntary sector staff and individuals in Warwickshire.

We need to use these opportunities, where appropriate, to support individuals to consider the possible impact of their lifestyle on their health and be given the opportunity to change.

Making Every Contact Count is a long term strategy that aims to help us create a healthier population and reduce costs.

A few minutes of personalised feedback can be as effective as longer interventions.
This is a new way of working but it will make a real difference to the health and wellbeing of the people of Warwickshire.

The 2011 Director of Public Health Annual Report identified 'Making Every Contact Count' (MECC) as a priority for all public health staff, agencies and partners in Warwickshire. MECC is a solid investment that will improve health outcomes and save money in the long term. The report states that "all agencies/partners shall be aware of and adopt the 'Making Every Contact Counts' philosophy where every opportunity to reinforce advice about healthy lifestyles and/or signpost to the relevant services is exercised". This aspiration was restated in the 2012 Warwickshire Public Health Transition Plan.

"This is the Public Health Core offer: that we can improve the health of our population, increasing life expectancy and reducing inequalities by working together, investing in prevention and making every contact count."

The Making Every Contact Counts ambition is focused on ensuring that the promotion of health and wellbeing is embedded in service design and organisational culture. The current expectation is that all NHS organisations will commit to training their front-line staff in delivery of brief opportunistic healthy lifestyle advice – so that every contact has the potential to promote health. In Warwickshire, we have extended our vision beyond the NHS to partner organisations and their staff.

Brief opportunistic advice usually lasts up to 5 minutes. It involves raising a lifestyle issue with an individual, where appropriate, and signposting to further information. This can be used by anyone engageing with members of the public alongside their everyday work. It is an opportunity to dispel myths and give accurate advice.

Size of the problem – What could we achieve through MECC?

Unhealthy lifestyle behaviours create a financial and resource burden on the NHS and society as a whole and generates inequalities in health outcomes.

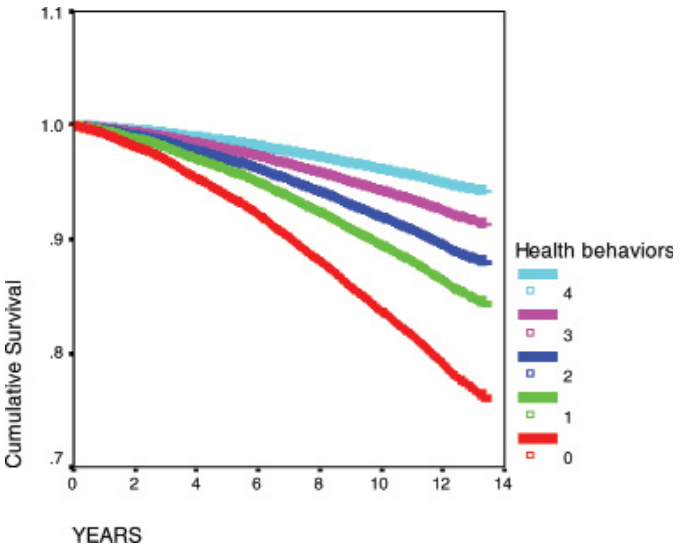
Within Warwickshire:

- **Smoking** – 19% of our population smoke.
- **Alcohol** – 22% are drinking at increasing risk or high risk levels.
- **Obesity** – 26% of adults are obese.
- **Physical Activity** – Only 11% of adults achieve recommended levels of physical activity.
- **Diet** – 28% of adults eat healthily.
- **Mental Health** – An estimated 25% of people will have a mental illness during their lifetime.
- **By District/Borough** – Life expectancy ranges from 77 to 84 years.

Source: Health Profiles 2012

Research by Khaw et al (2008) shows that people who are non-smokers, drink less than 14 units a week, are active and have 5 servings of fruit and vegetables daily, live 14 years longer on average than those who follow none of these healthy behaviours (Figure 15).

Figure 15: Survival in 20,244 healthy adults aged 40-79 by health behaviours



Health Behaviours:
1 Non smoker
2 Alcohol <14 units/wk
3 Not inactive
4 Blood vitamin C >50 mmol/l
(5 servings fruit and veg daily)

Overall impact:
14 year difference in life expectancy

Source: Khaw et al. PLoS Medicine 2008 Jan 8: 5 (1), http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0050012

Across the NHS, public services and voluntary sectors in Warwickshire, there are over 33,000 staff who collectively have millions of contacts with the public every year.

- If each staff member delivers MECC just 10 times a year, there would be a third of a million opportunities to change behaviour each year.
- If even 1 in 20 of these goes on to make a positive change to their behaviour a total of 16,500 people would be improving their health and wellbeing.
- It is not just service users who could benefit; MECC has the potential to influence staff's own health and wellbeing.

Strong evidence base
- Recommended in national guidance.
- Lord Darzi's work highlighted the need to put prevention first.
- The Marmot Review has an objective to strengthen the role and impact of ill health prevention.
- Healthy Lives, Healthy People: Public Health White Paper emphasises the need for personalised preventive services that are focused on delivering the best health outcomes.
- Liberating the NHS - White Paper emphasising the importance of giving patients access to information which enables them to make their own healthy choices.
- QIPP Framework (2010) recognises the need for transformational change and emphasises quality, innovation, productivity and prevention within the NHS today.

There is a great deal of research which tells us that working in this way makes a difference. The evidence largely relates to specific lifestyle behaviours being delivered by defined clinical staff, in defined clinical circumstances, specifically:
- Smoking
- Physical activity
- Alcohol use
- Sexual health

Evaluating behaviour change is very complex, as it is very difficult to prove that a certain type of strategy was the only influence that helped an individual change their behaviour. However, it has been recognised that a supportive conversation from a frontline worker given consistently and respectfully will encourage reflection and change in up to 20% of patients/clients.[24]

Benefits of MECC - MECC has the potential to deliver better quality at lower cost.

- Patient/service user benefits - Better health and longer, healthier lives for the people of Warwickshire. By providing advice and support for behaviour change, we reduce the causes of cancers and coronary heart disease. These diseases are the biggest killers and are also the cause of years of disability for many people.
- Quality benefits - One of the main principles of the MECC framework is to work with individuals and communities from their perspective. This requires being understanding, responsive and offering advice tailored to circumstances. This is both more effective and will make advice and support services more accessible, and community and patient focused.
- Efficiency benefits - This approach uses the everyday contacts patients have with a range of services. This workforce transformation will be a big step in moving Warwickshire towards the 'fully engaged' scenario described in the Wanless Report as the best way to deliver productivity as well as better health.

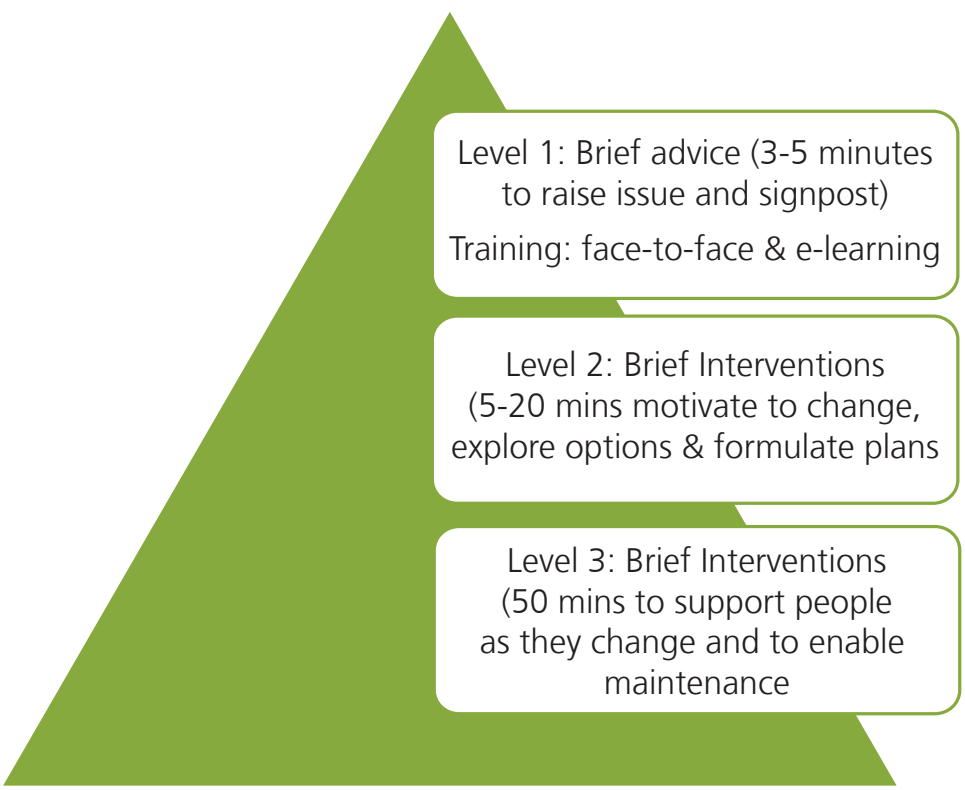
Implementing MECC in Warwickshire

There are four recognised levels of MECC, which are commonly mapped against 4 competency/training levels illustrated in Figure 16.

At its centre, MECC is about all organisations having a health promoting role as part of their core culture. This applies to their staff as well as customers/clients and patients

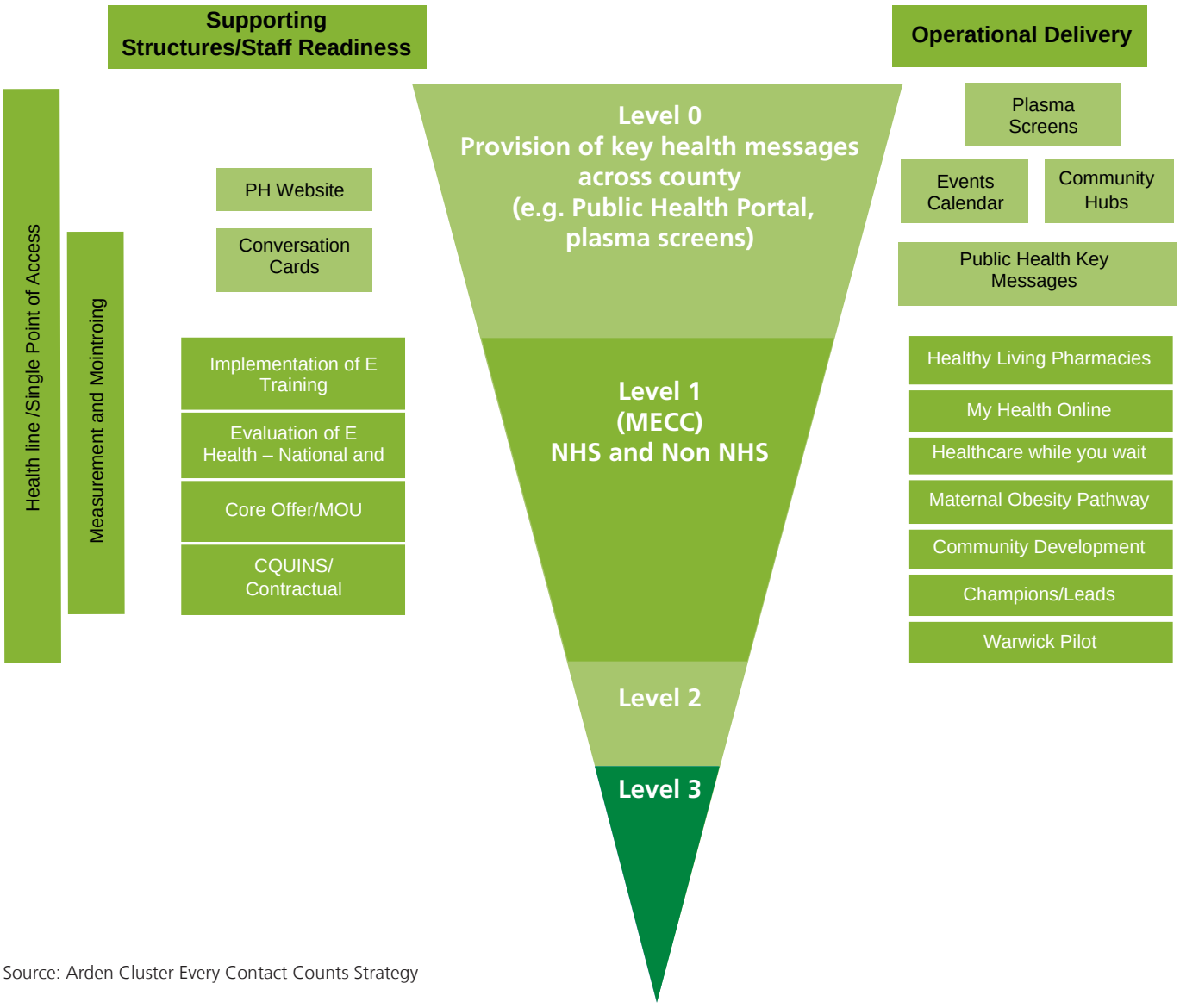
Figure 16: Proposed training levels based on competency

In Warwickshire, we have added Level 0 which is around opportunities which are not face to face, including using technology such as websites, plasma screens and tablets as well as the more traditional leaflets and posters. At this stage, in Warwickshire, we are focusing on implementing Level 0 and Level 1 MECC, and developing the supporting tools required to ensure that this can be achieved. A summary is provided in Figure 17 and the full plan is available in the Arden Strategy and Warwickshire Implementation Plan.



Source: SHA Midlands and East

Figure 17: Delivery of MECC in Warwickshire mapped against competency levels



Source: Arden Cluster Every Contact Counts Strategy

Frontline Workers Role

- Identify lifestyle cues and permission to raise issues.
- Provide opportunistic information (see Key Messages).
- To be enthusiastic about the benefits of change.
- Consider their readiness to change.
- Respond accordingly.
- Signposting to www.warwickshire.gov.uk/publichealth or Warwickshire HealthLine 0300 247 111.

Not your Role

- To approach people directly.
- To give detailed specialist knowledge or prescribe.
- To assist them through a programme or monitor outcomes.
- To act as counsellor / or advise.
- To tell them what to do and set goals for them.
- To talk about your own previous issues.

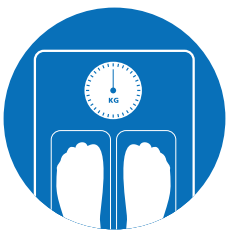
Use the 3 A's to help you:

- Ask
- Assess
- Advise

Key Messages:

Stopping smoking

The single most important thing you can do to improve your health.
You are up to 4 times more likely to quit if you get help from the NHS Stop Smoking Service. To find your local service call 0800 085 2917 or text LIFE to 80800.



Maintain a healthy weight

Maintain, or aim for, a healthy weight (BMI 20-25). Eating a healthy diet - Eating at least 5 portions of fruit & vegetables each day and cutting down on fat, salt and added sugar is the most effective way to loose weight if you are overweight or obese.

Being physically active

Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more, one way to approach this is to do 30 minutes on at least 5 days a week. Exercise is important for everyone in staying healthy and maintaining a healthy weight.

If you drink, keep within sensible limits

If you drink alcohol, have no more than 2-3 units a day (women) or 3-4 units a day (men), with at least 2 alcohol free days per week. You can use this website to calculate your units and keep track of your drinking: http://www.nhs.uk/Livewell/alcohol/Pages/Alcoholtracker.aspx

Look after your sexual health

This means enjoying the sexual activity you want, without causing yourself or anyone else any suffering, or physical or mental harm. Sexual health is not just about avoiding unwanted pregnancy or sexually transmitted infections - but using a condom will help with both.

Mental Health

Manage your stress levels. Talking things through, relaxation and physical activity can help. Have a good work/life balance. Developing interests outside of work can help reduce stress and improve productivity.

Taken from the 12 key Public Health Messages, for full list see pull out poster

Case study: Healthy Living Pharmacies in Warwickshire

The public recognise the pharmacy as a place that provides general advice on leading a healthier lifestyle and take a holistic approach in improving general health and wellbeing. In Warwickshire, we are currently in the first stages of our Healthy Living Pharmacies (HLP) programme and have embedded MECC training into the HLP development framework. The response from staff and patients so far has been extremely positive.

Staff involved in the Warwickshire Healthy Living Pharmacy scheme are required to complete Module 1 Brief Opportunistic Advice MECC Training (www.education.nhslocal.nhs.uk) in order to reach Level 1 accreditation. Public health issues relevant to Level 1 accreditation are smoking cessation, emergency hormonal contraception and chlamydia testing.

"Having completed the every contact counts training I have changed my opinion on the role of pharmacists and the part they play in delivering public health messages. I have always felt uncomfortable discussing intimate lifestyle choices such as eating habits, smoking or sexual health. However having completed this short piece of training I feel equipped with the skills to raise these difficult topics with the patient groups where Brief Opportunistic Advice could make a difference. This is particularly useful for pharmacists delivering medicine use reviews and the new medicine service. I believe that every member of the pharmacy team has a part to play in voicing these important messages"
Warwickshire Pharmacist

Pharmacies from across the county have signed up to participate in the Healthy Living Pharmacy scheme which has been rolled out across Warwickshire since May 2012.

Case Study: Warwick District Housing Pilot

A half day training in Making Every Contact Count was piloted with 16 housing officers in Warwick. The aim of the training was to build on what is offered in the NHS local e-learning tool. This would include giving staff an opportunity to role play before putting the learning into practice. The session also aimed to engage and problem solve around how MECC can be adapted and embedded in the roles of non-NHS staff.

The training included:

- Background to MECC and its importance.
- Why we need to work together on this agenda.
- Practicing raising the issue about healthy lifestyle change.
- Ways to embed MECC in individual job roles.

Feedback from the training was positive and it acted as a useful forum for the generation of ideas that will be used to inform the MECC Implementation Plan and signposting resources. Evaluation questionnaire scores showed improvements in understanding about MECC, confidence to raise the issue and embed MECC; and knowledge about signposting.

Recommendations: All agencies/partners are aware of and adopt the MECC philosophy

Every opportunity and contact with healthcare professionals and other frontline staff, is seen as an opportunity to reinforce advice about healthy lifestyles and/or signpost to the relevant services. It should be part of all routine services.

This includes staff in:

- Primary and Secondary Care
- Primary Care Commissioning (Clinical Commissioning Groups)
- County Council
- District and Borough Councils
- Public Health Professionals
- Schools and Colleges
- Business
- Voluntary Organisations

- That all organisations within and outside of the NHS, have a Board level commitment to delivery of MECC and this is implemented through a local action plan overseen by the implementation lead.

- The use of contractual arrangements to ensure that organisations sign up and deliver the MECC ambition.

- As a basic requirement to be considered competent as an individual and organisation to deliver MECC, staff should undergo Level 1 NHS Local training (Brief Opportunistic Advice). All frontline staff across Warwickshire to be trained in MECC over the next 5 years.

- Include MECC training in induction and mandatory training and in the undergraduate curriculum.

- Develop and secure additional resources to support the implementation of MECC, through local pilots and match funding commissioning for training where appropriate.

- Develop clear pathways into services that provide a holistic response and single point of access.

MECC will help public and voluntary service staff adjust the way we work, to engage and encourage people to make positive changes in their lives. The people of Warwickshire will then have consistent messages, information and support to make positive changes to their lives, whichever service they are in touch with.

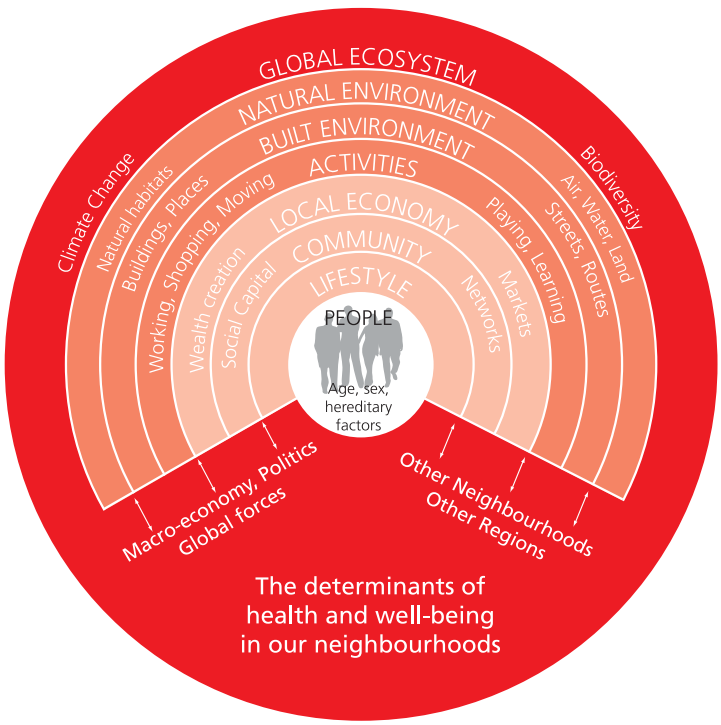
Poor health and wellbeing is a result of a variety of factors that people experience over the course of their life.

Many of these factors are related to people's surroundings and their communities. Factors such as housing, our built environment, transport, education, employment and community cohesion are some of the most important "social determinants of health" (Figure 18).

Healthcare services only contribute about a quarter of the health benefit when compared to some of these other factors (Figure 19). This is why it is important that the health impacts of the factors are considered when making decisions.

People who suffer more negative impacts on their life are often those we think of as more deprived. Deprivation means that people often have fewer life chances and fewer opportunities to lead a flourishing life. They also have worse health. The two are linked: the less favoured people are, socially and economically, the poorer their health. This link between social conditions and health is not a footnote to what some consider the "real" concerns with health, health care and unhealthy behaviours, it should become the main focus. In Warwickshire, the impact of social factors largely contributes to people living 13 years less in some wards in the county than in others (see Figure 20).

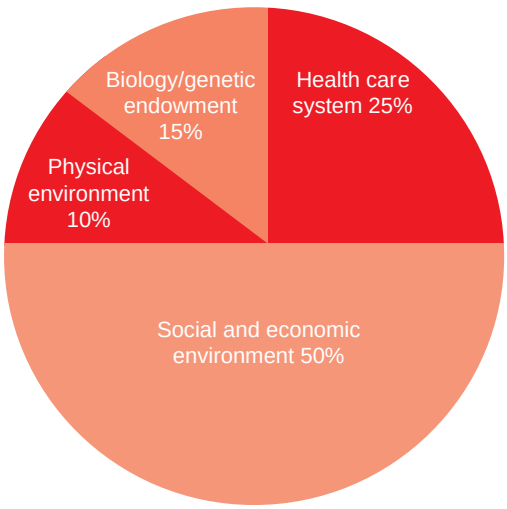
Figure 18: The Wider Determinants of Health



These socioeconomic factors are often the responsibilities of local authorities, schools, employers, community and voluntary sector organisations and communities. These factors can have a much greater impact on health and wellbeing than health services do.

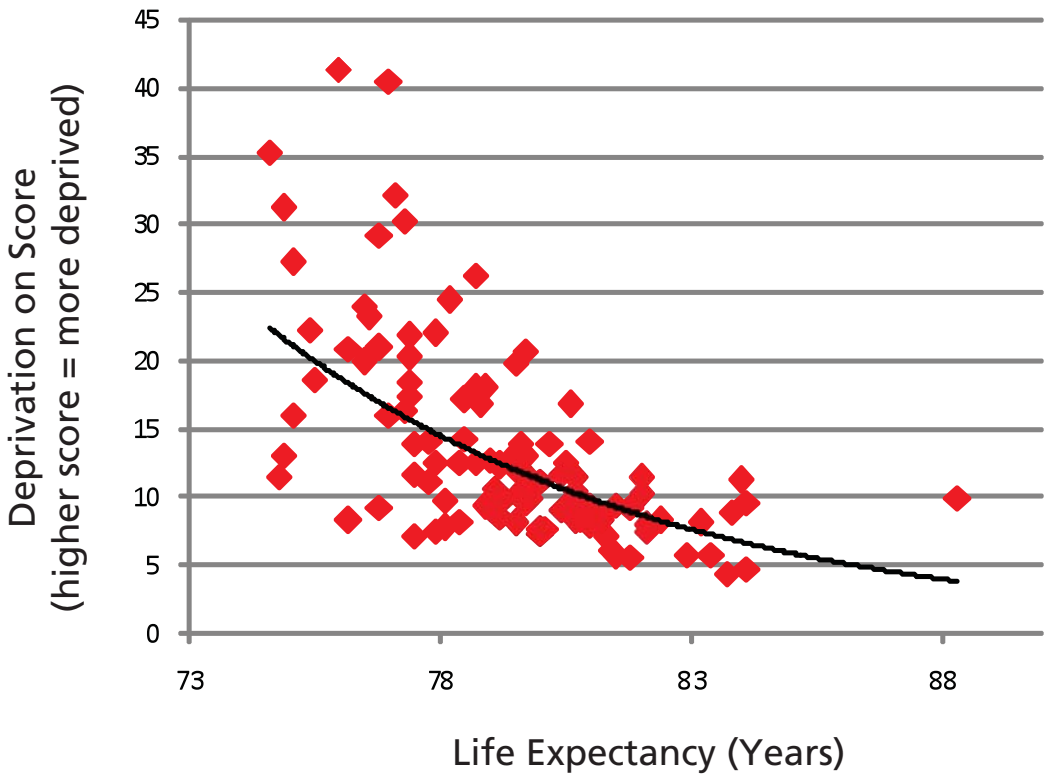
Source: Dahlgren and Whitehouse

Figure 19: Contributory Factors to Health Benefit



Source: Canadian Institute for Advanced Research, Health Canade, Population and Public Health Branch AB/NWT 2002

Figure 20: Relationships between deprivation and life expectancy in Warwickshire, by Ward



Source: Public Health Warwickshire
Please note each diamond represents a ward

This means that when these factors, which could be public services, buildings, communities and infrastructures, are being planned or changed it is vital their impact on health and wellbeing is fully considered. Ensuring that health and wellbeing are central to decision making within our public organisations is important. They make important decisions about the places we live, how we get from place to place, the environment in which our children are taught and the businesses that prosper.

Community Infrastructure Levy

The Levy allows local authorities in England and Wales to raise funds from developers undertaking new building projects in their area. The money can be used to fund a wide range of infrastructure that is needed as a result of development. This includes new or safer road schemes, flood defences, schools, hospitals and other health and social care facilities, park improvements, green spaces and leisure centres.

Green Spaces

The Marmot Review[20] refers to evidence that well-designed green and open spaces can benefit communities – increasing social contact and social integration, particularly in underprivileged neighbourhoods. People are more likely to be physically active if they live in neighbourhoods with many destinations and where they have a number of reasons for walking including walking to work, for recreation and for other tasks. Prevalence rates for diseases such as diabetes, cancer and depression are lower where there is more green space, and mental health may be particularly affected by the amount of green space.

Case study: Green Therapy

In Warwickshire, 'Measured Miles' have been developed across the county. Outdoor activities are a natural, free and accessible treatment that boosts mental wellbeing – either horticultural and allotment programmes or simple walks in the park:

- Within Nuneaton and Bedworth, 4 way-marked measured miles routes have been commissioned with the aim to train volunteer walk leaders to run 4-5 led walks per week for each locality:
    - Riversley Park
    - Middlemarch
    - George Eliot Hospital
    - Bedworth Miners Park
- North Warwickshire has a measured mile in place in Hurley.
- Warwick District have two measured miles:
    - Victoria Park, Leamington
    - St Nicholas Park, Warwick
- Stratford-on-Avon is planning a measured mile around the recreation ground in Stratford and in Alcester in conjunction with development of a new hospital/health centre.
- Rugby have plans to develop a measured mile in Caldecott Park.

Additionally, Green Gyms are also being planned:
- Stratford-on-Avon – have one green gym in the district and are planning one more.
- Nuneaton and Bedworth have three green gyms in the borough.

Walking for health walks are also available in each district/borough and through Age Uk.
You can find them at www.exercisereferral.org.uk/exercisereferral.

One way to ensure that health and wellbeing are explicitly considered when making these decisions is for organisations to carry out "Health Impact Assessments".

Health Impact Assessments (HIAs) consider the proposed change, this could be anything from a new housing development or new policies, and assesss what the likely positive and negative consequences for health and wellbeing will be. Recommendations are then made on how to enhance the positive consequences and reduce the negatives.

Types of developments or changes that may warrant a Health Impact Assessment include:
- Large housing developments.
- Major commercial or industrial developments.
- Significant changes to the way public services are delivered.
- Significant changes to public infrastructure.
- Changes to local policies where there is a link to the social determinants of health.

The six steps of Health Impact Assessment:

1 Screening: Decide whether a proposal requires assessment by HIA.
2 Scoping: Clarify the questions to be answered by the HIA and how the assessment will be carried out.
3 Assessment: Decide what the health impacts will be and how big by considering each pathway by which the proposal could impact on health.
4 Recommend: For each option make recommendations as to how good health consequences could be enhanced, how bad health consequences could be avoided or minimised, and how health inequities could be reduced.
5 Communicate: Communicate the findings of the HIA to the decision makers.
6 Evaluate: Evaluate the quality of the HIA highlighting lessons for future HIAs. Monitor which proposals and if possible assess whether any predictions made were correct.

The Public Health Warwickshire Department would encourage and support a requirement for Health Impact Assessments on all major planning proposals and policies. HIAs do not have to take a long time and making changes to plans early on can reap rewards later. The changes to maximise the gain for health and wellbeing often do not cost anything when made at this early stage and can create benefits for years or decades.

In Warwickshire, we think we can start to improve health and wellbeing by addressing specific social inequalities:

- Good quality housing for all.
- Freedom from poverty.
- Smoke free environment.
- Healthy and sustainable communities and places.
- Safer communities.
- High quality schools and education.

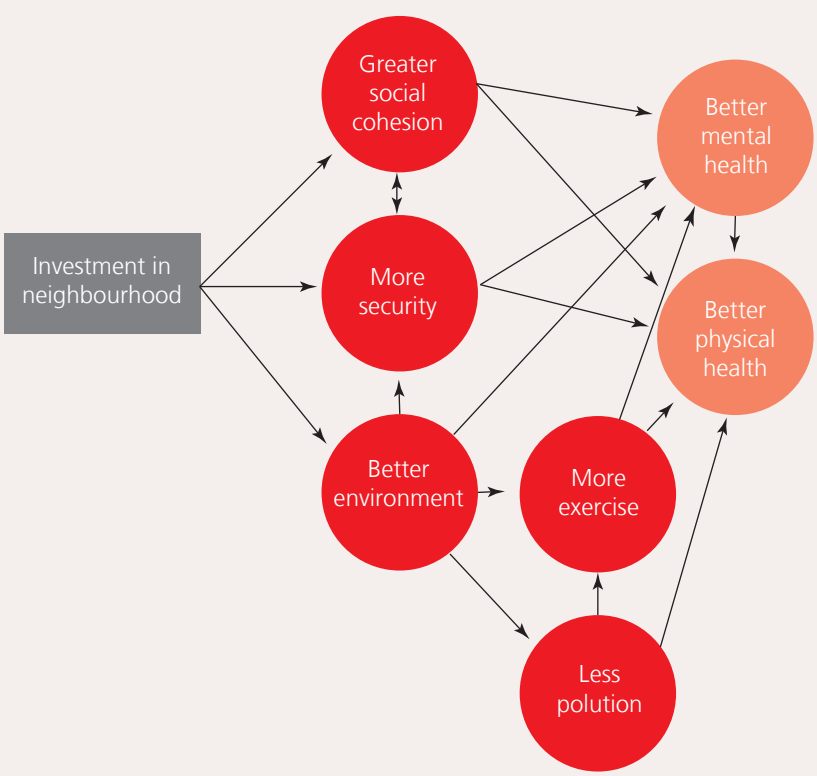
These issues are specifically targeted in the Health and Wellbeing Strategy.

Local Government Assets which influence Health and Wellbeing (both County and District/Borough)

- Environmental Health Powers
- Transport Policy and Regulation
- Housing Stock and Services
- Leisure Services
- Planning Powers
- Environmental Services
- Locally Elected Councillors

Figure 21: Causal Pathways in Health and Wellbeing

Health Impact Assessments draw the links between the causes and effects of factors on health and wellbeing. By doing this we can think about how to improve the root causes of health and wellbeing.



Recommendations

- All public sector organisations in Warwickshire commit to carrying out Health Impact Assessments on all new major plans and policies to ensure that the maximum health gain is achieved including Core Strategies and Neighbourhood Plans.
- Health and wellbeing should be included as core considerations in every planning and transport policy in Warwickshire and as part of the District and Borough Council's Core Strategies and Neighbourhood Plans as part of becoming a health improving local authority.
- Some funding from Community Infrastructure Levies on new developments are used to address local health and wellbeing issues and where necessary carry out more in depth Health Impact Assessments.
- Organisations contact the Warwickshire Public Health department to discuss how to take forward a Health Impact Assessment.
- The Warwickshire Health and Wellbeing Board champions the use of Health Impact Assessments as a way of addressing the social determinants of health and reducing health inequalities.

Appendix 1: Full Details of Sources for Figure 2

[1] Modelled estimates of prevalence (%) Association of Public Health Observatories (APHO) applied to 2011 Census resident population estimates.
[2] NHS Direct, Asthma UK.
[3] NHS Direct.
[4] NCHOD.
[5] Diabetes Prevalence Model, (persons aged 16+), 2012 estimates, APHO.
[6] NEOERICA Study Estimates (persons aged 18+ years.
[7] Coronary Heart Disease Register, QOF 2010/11.
[8] Stroke or Transient Ischemic Attacks (TIA) Register, Quality and Outcomes Framework (QOF) 2010/11.
[9] Hypertension Register, QOF 2010/11.
[10] Diabetes Mellitus (Diabetes) Register (ages 17+), QOF 2010/11.
[11] Chronic Obstructive Pulmonary Disease Register, QOF 2010/11.
[12] Asthma Register, QOF 2010/11.
[13] Epilepsy Register (ages 18+), QOF 2010/11.
[14] Cancer Register.
[15] Hypothyroidism Register.
[16] Chronic Kidney Disease Register (ages 18+), QOF 2010/11.
[17] Evolve, NHS Warwickshire.
[18] Public Health Mortality Files, Office for National Statistics.

Appendix 2: Disease Prevalence - Actual v Estimated

Warwickshire PCT Actual vs. Expected Disease Prevalence			
Condition	**Actual Count**	**Expected Count**	**Difference**
Coronary Heart Disease	18,033	23,067	-5,034
Stroke and Transient Ischemic Attack	9,071	10,402	-1,331
Hypertension	77,721	133,791	-56,070
Diabetes (ages 17+)	21,033	26,903	-5,870
Chronic Obstructive Pulmonary Disease	7,527	12,308	-4,781
Epilepsy (ages 18+)	3,344	3,841	-497
Hypothyroidism	17,301	11,217	6,084
Cancer	7,235	4,398	2,837
Asthma	34,752	49,904	-15,152
Heart Failure	4,182	8,444	-4,262
Palliative care	366	5,685	-5,319
Dementia	2,489	6,386	-3,897
Chronic Kidney Disease (ages 18+)	18,194	39,938	-21,744
Obesity (ages 16+)	38,471	103,497	-65,026
Depression (ages 18+)	40,675	36,478	4,197

Source: NHS Comparators

N.B. Actual Counts have been taken from the Quality and Outcomes Framework (QOF) Disease Registers. Expected prevalence data for 2008/09 are derived using expected prevalence rates provided by the Eastern Region Public Health Observatory (ERPHO) which take account of age, sex, ethnicity, smoking status and deprivation score at practice level. Modelled estimates are published on the Association of Public Health Observatories (APHO) website. http://www.apho.org.uk/resource/item.aspx?RID=77180

Practice Level data is provided on the website www.warwickshire.gov.uk/publichealth and on www.warwickshire.gov.uk/jsna.

Appendix 3: Disease Prevalence - Actual v Estimated by Clinical Commissioning Group (CCG)
Actual vs. Expected Disease Prevalence by Clinical Commissioning Group (CCG), 2008/09

Long-Term Condition		Rugby (excluding Coventry) CCG	South Warwickshire CCG	Warwickshire North CCG	Warwickshire	West Midlands Region	England
Coronary Heart Disease	Reported Count	2,989	8,828	6,216	18,033	203,504	1,886,406
	Expected Count	3,821	10,867	8,381	23,069	273,586	2,367,043
	Difference	-832	-2,039	-2,165	-5,036	-70,082	-480,637
	Ratio	**0.78**	**0.81**	**0.74**	**0.78**	**0.74**	**0.80**
Stoke & TIA	Reported Count	1,485	4,721	2,865	9,071	98,675	901,323
	Expected Count	1,726	5,089	3,587	10,402	120,718	1,063,855
	Difference	-241	-368	-722	-1,331	-22,043	-162,532
	Ratio	**0.86**	**0.93**	**0.80**	**0.87**	**0.82**	**0.85**
Hyperten-sion	Reported Count	13,381	37,285	27,055	77,721	812,836	7,132,856
	Expected Count	23,032	64,806	45,957	133,795	1,415,855	13,079,549
	Difference	-9,651	-27,521	-18,902	-56,074	-603,019	-5,946,693
	Ratio	**0.58**	**0.58**	**0.59**	**0.58**	**0.57**	**0.55**
Diabetes	Reported Count >=17	3,654	9,294	8,085	21,033	255,405	2,213,138
	Expected Count >=17	4,533	13,569	8,808	26,910	268,532	2,505,033
	Difference	-879	-4,275	-723	-5,877	-13,127	-291,895
	Ratio	**0.81**	**0.68**	**0.92**	**0.78**	**0.95**	**0.88**
Chronic Obstructive Pulmonary Disorder	Reported Count	1,242	3,188	3,097	7,527	86,902	834,312
	Expected Count	2,049	5,624	4,635	12,308	183,115	1,604,715
	Difference	-807	-2,436	-1,538	-4,781	-96,213	-770,403
	Ratio	**0.61**	**0.57**	**0.67**	**0.61**	**0.47**	**0.52**
Epilepsy	Reported Count >=18	651	1,521	1,172	3,344	37,310	326,841
	Expected Count >=18	664	1,909	1,267	3,840	39,442	373,621
	Difference	-13	-388	-95	-496	-2,132	-46,780
	Ratio	**0.98**	**0.80**	**0.93**	**0.87**	**0.95**	**0.87**
Asthma	Reported Count	6,253	17,407	11,092	34,752	351,333	3,197,726
	Expected Count	8,773	24,459	16,671	49,903	527,976	4,958,717
	Difference	-2,520	-7,052	-5,579	-15,151	-176,643	-1,760,991
	Ratio	**0.71**	**0.71**	**0.67**	**0.70**	**0.67**	**0.64**
Heart Failure	Reported Count	656	2,067	1,459	4,182	45,577	397,040
	Expected Count	1,406	4,362	2,673	8,441	84,395	776,263
	Difference	-750	-2,295	-1,214	-4,259	-38,818	-379,223
	Ratio	**0.47**	**0.47**	**0.55**	**0.50**	**0.54**	**0.51**
Chronic Kidney Disease	Reported Count >=18	2,802	8,984	6,408	18,194	191,987	1,739,443
	Expected Count >=18	6,640	20,433	12,865	39,938	397,315	3,670,504
	Difference	-3,838	-11,449	-6,457	-21,744	-205,328	-1,931,061
	Ratio	**0.42**	**0.44**	**0.50**	**0.46**	**0.48**	**0.47**

Source: NHS Comparators

N.B. A ratio of less than 1 indicates that the expected count is higher than the reported count and a ratio of more than 1 indicates that the reported count is higher than the expected count.
Reported Count data: Count of patients recorded by practice as having condition as reported in QOF data.
Expected Count data: Expected count of patients by practice on the disease register.
Expected prevalence data for 2008/09 are derived using expected prevalence rates provided by the Eastern Region Public Health Observatory (ERPHO) which take account of age, sex, ethnicity, smoking status and deprivation score at practice level. Modelled estimates are published on the Association of Public Health Observatories (APHO) website. http://www.apho.org.uk/resource/item.aspx?RID=77180

References and Key Documents

[1] Stratton IM, Adler AI, Neil HA, Matthews DR, Manley SE, Cull CA, Hadden D, Turner RC, Holman RR Association of glycaemia with macrovascular and microvascular complications of Type 2 diabetes: prospective observational study.. British Medical Journal 2000;321:405-412.

[2] Deakin T, McShane CE, Cade JE, Williams RD. Group based training for self-management strategies in people with type 2 diabetes mellitus. . Cochrane Database Systematic Review 2005 Apr 18;(2):CD003417.

[3] Sign Guidance, 57; Cardiac Rehabilitation, 2002. www.sign.ac.uk/guidelines/fulltext/57/index.

[4] The Lancet http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60240-2/fulltext
The Scottish School of Primary Care; Mutimorbidity in Scotland.

[5] Director of PH Annual Report 2009/10.

[6] KingsFund http://www.kingsfund.org.uk/topics/longterm_conditions/index.html

[7] Director of Public Health Annual Report 2009/2010.

[8] Kings Fund, Long term conditions and mental health, 2012.

[9] Whooley et al JAMA 2008, 300 (20); 2379-2388 Depressive symptoms, Health Behaviours and Risk of Cardiovascular Events in Patients with CHD.

[10] Katon WJ (2003). 'Clinical and health services relationships between major depression, depressive symptoms, and general medical illness'. Biological Psychiatry, vol 54, no 3, pp 216–26.

[11] Junger J, Schellberg D, Muller-Tasch T, Raupp G, Zugck C, Haunstetter A, Zipfela S, Herzog W, Haass M (2005). 'De pression increasingly predicts mortality in the course of congestive heart failure'. European Journal of Heart Failure, vol 7, no 2, pp 261–7.

[12] Katon JW, Von Korff M, Lin EHB, Simon G, Ludman E, Russo J, Ciehanowski P, Walker E, Bush T (2004). 'The Pathways Study – A randomised trial of collaborative care in patients with diabetes and depression'. Archives of General Psy chiatry, vol 61, no 10, pp 1042–9.

[13] Das-Munshi J, Stewart R, Ismail K, Bebbington PE, Jenkins R, Prince MJ (2007). 'Diabetes, common mental disorders, and disability: Findings from the UK National Psychiatric Morbidity Survey'. Psychosomatic Medicine, vol 69, no 6, pp 543–50.

[14] Department of Health, Long Term Condtions.dh.gov.uk.

[15] Warwickshire Adult Social Care & Health, Supporting Independence (prevention) Strategy, 2011 – 2014 http://www.swft.nhs.uk/our-services/virtual-wards.aspx (virtual Ward ref).

[16] The Scottish Government and Long term Conditions Alliance Scotland, The Self Management Strategy for Long Term Conditions in Scotland, 2008.

[17] Vassilev et al, Social Networks, Social Capital and chronic illness self management: a realist review, Chronic Illness, 2011.

[18] Joint Director of Public Health (2011) 'Reaching Higher: Healthy Lives, Healthy People, Healthy Warwickshire'.

[19] Lord Darzi. High Quality Care for All: NHS Next Stage Review, 2008.

[20] Marmot M, Allen J, Goldblatt P et al. Fair society, healthy lives: the Marmot review – Strategic review of health inequalityes post – 2010. University College London, 2010.

[21] HM Government (2010) Healthy Lives, Health People: our strategy for public health in England. London: TSO.

[22] DH (2010). Equity and Excellence: Liberating the NHS White Paper. London: TSO.

[23] DH (2010). The NHS Quality, Innovation, Productivity and Prevention Challenge: an introduction for Clinicians. London: TSO.

[24] Moyer A, Finney JW, Swearingen CE, Vergun P. Centre for Health Care Evaluation, 2002. Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment-seeking populations.

[25] NHS Yorkshire and the Humber. Delivering Healthy Ambitions Better for Less: Making Every Contact Count http://www.healthyambitions.co.uk/Uploads/BetterForLess/08%20BETTER%20FOR%20LESS%20every%20contact%20counts.pdf

1. % of people in this area living in 20% most deprived areas of England 2010.
2. % of children living in families receiving means-tested benefits and low income, 2009.
3. Crude rate per 1,000 households 2010/11.
4. % at Key Stage 4 2010/11.
5. Recorded violence against the person crimes crude rate per 1,000 population 2010/11.
6. Crude rate per 1,000 population aged 16-64, 2011.
7. % of mothers smoking in pregnancy where status is known 2010/11.
8. % of mothers initiating breastfeeding where status is known 2010/11.
9. % of school children in year 6 (age 10-11), 2010/11.
10. Persons under 18 admitted to hospital due to alcohol specific conditions, crude rate per 100,000 population 2007/8-2009/10 (pooled).
11. Under 18 conception rate per 1,000 females aged 15-17 (crude rate) 2008-10.
12. % of adults aged 18 and over, 2010/11.
13. % aged 16+ in the resident population, 2008/9.
14. % adults, modelled estimate using Health Survey for England 2006- 2008.
15. % aged 16 and over, October 2009-October 2011.
16. % adults, modelled estimate using Health Survey for England 2006-2008.
17. Directly age standardised rate per 100,000 population, aged under 75, 2006-2008.
18. Directly age sex standardised rate per 100,000 population, 2010/11.
19. Directly age sex standardised rate per 100,000 population, 2010/11.
20. Estimated users of opiate and/or crack cocaine aged 15-64, crude rate per 1,000 population, 2009/10.
21. % people on GP registers with a recorded diagnosis of diabetes 2010/11.
22. Crude rate per 100,000 population, 2008-2010.
23. Crude rate per 100,000 population, 2010 (chlamydia screening coverage may influence rate).
24. Directly age and sex standardised rate for emergency admissions, per 100,000 population aged 65 and over, 2010/11.
25. Ratio of excess winter deaths (observed winter deaths minus expected deaths based on non-winter deaths) to average non-winter deaths 1.08.07-31.07.10.
26. At birth, 2008-2010.
27. At birth, 2008-2010.
28. Rate per 1,000 live births 2008/10.
29. Per 100,000 population age 35+, directly age standardised rate 2008-2010.
30. Directly age standardised rate per 100,000 population aged under 75, 2008-2010.
31. Directly age standardised rate per 100,000 population aged under 75, 2008-2010.
32. Rate per 100,000 population 2008-2010.

33-38. STI diagnosis per 100,000 population 2010/11.

39. Proportion in 2010/11.

Joint Director of Public Health

Annual Report **2012**

PO Box 43 - Shire Hall
Public Health Department
Barrack Street
Warwick
CV34 4SX

Telephone: 01926 413 775
Fax: 01926 410 130