Key learning points

- In those with psychosis 66% of premature deaths are due to treatable cardiovascular, pulmonary and infectious diseases compared to 33% from suicide and injury.
- Physical health issues impact negatively on self-esteem, mental health, stigma, discrimination and quality of life.
- Adverse lifestyle factors including smoking, anti-psychotic medication related weight gain and diabetes operate very early on in the course of psychosis and are powerfully influenced by social determinants of health.
- The early phase of psychosis offers primary care an important opportunity to prevent or modify risks, avoid premature physical illness and reduce health inequality.

Why is this important for primary care?

Many thousands of people with psychosis are at high risk of dying of physical health problems in their twenties and thirties, at an age when primary care would not usually consider active primary or secondary prevention.

- People with schizophrenia and bipolar disorder die an average 25 years earlier than the general population. [1]
- More premature deaths are due to treatable cardiovascular, pulmonary and infectious diseases (66%) than from suicide and injury (33%). [2]
- The differential mortality gap has worsened in recent decades particularly from heart disease in younger people: Thus those aged 25 to 44 now experience 6.6x higher cardiovascular mortality than an age-matched general population. [3]

What causes these premature ‘physical’ deaths?

1. Lifestyle issues: Populations are experiencing an epidemic of cardiovascular risk factors such as obesity, smoking and sedentary lifestyles. Those with psychosis are further disadvantaged by social determinants of health and face an even greater cardiovascular disease epidemic than the rest of society due to being:
   - More sedentary (often due to the mental disorder or sedating antipsychotic medicines).
   - Less likely to eat fruit and vegetables [4] (due to higher cost of healthier foods, lack of nutritional knowledge or poor cooking skills).
   - Twice as likely to develop type II diabetes mellitus. [5]
   - 2-3 times more likely to be obese [6]; linked in turn to raised cardiovascular mortality. [7]
   - Particularly likely to smoke tobacco…

2. Smoking: the largest cause of preventable illness in the UK with smokers dying on average 10 years earlier than non-smokers. [8]

Increased smoking causes much of the excess mortality of people with mental health problems. [2]

- There is a potent interaction between risks which link to mental disorder since smokers are 44% more likely to develop type 2 diabetes compared with non-smokers, rising to 61% in those smoking over 20 cigarettes a day. [9]
- 64% of those with probable psychosis were smokers compared with 29% without psychosis in a large population survey of psychiatric morbidity. [10]
- 76% of those in their first episode of psychosis are smoking regularly [11]
- Those with schizophrenia have a 10 fold increased death rate from respiratory disease. [12]
- Smoking induces metabolism of some antipsychotic medication, resulting in smokers requiring increased doses which can be reduced by up to half following smoking cessation. [13]

3. Medication: Substantial evidence implicates some or all antipsychotics in causing or worsening weight gain, dyslipidemia, and diabetes. [14]
   - Metabolic syndrome is 2-4 times higher in people with schizophrenia receiving antipsychotics than in an appropriate reference population. [5]

4. Genetic factors: 15% of drug-naïve individuals with first-episode psychosis have elevated fasting glucose levels, high levels of insulin and cortisol, and three times as much intra-abdominal fat as age and Body Mass Index -matched control subjects (correlating with insulin resistance) [15] possibly explainable by neuroendocrine response to persisting distress. In addition familial links with diabetes have long been recognised.

5. The inverse care law? People with psychosis receive suboptimal health care, despite their high risk for serious physical disorders:
   - Diabetes: fewer routine eye checks, poorer glycaemic and lipid control. [16]
   - Physical health checks: only 49% of service users report being ever offered a physical health check. [17]
   - Even when health risks are detected treatment rates remain low; rates of non-treatment ranged from 30.2% for diabetes, to 62.4% for hypertension, and 88.0% for dyslipidemia. [18]
   - Primary care records: data recording is poorer for a range of health promotion areas: cardiovascular risk factors in particular are less likely to be recorded or acted upon than for the general population. [19]

6. Lowered reporting of physical symptoms: People with schizophrenia are less likely than healthy controls to report physical symptoms spontaneously. [20]

What can be done?

Prevention, monitoring and intervening extremely early and rapidly when risks appear prevent future physical disease. Primary care as the lead agency [21] in meeting the physical health needs of these patients can:

1. Evaluate physical health risks: provide screening and intervention for cardiovascular risk factors. [22]
   - Initial evaluation to assess metabolic and cardiovascular risk.
   - Provide at least annual routine physical health screening for smoking status, blood pressure, body mass index (BMI) (or other measure of obesity such as waist circumference), fasting blood glucose, and plasma lipids). [23]
   - Monitor side effects of psychotropic medication on physical health using guidelines. [13]

2. Encourage participation in care decisions based on information about treatment and health promotion interventions:
   - Help patients understand the potential trade-offs of medication improving mental health symptoms but in some cases increasing risks of physical illness.
3. Provide targeted health promotion to combat ‘the big 3’: smoking cessation, dietary improvement and increased physical exercise. This systematic approach can be applied at different levels – as an individual practitioner, at a practice level and as a PCT:
- Raise awareness about how primary care can use its skills and capability to improve the physical care pathways of those with early psychosis.
- Place patients on the Quality and Outcomes Framework disease register for people with serious mental illness as soon as the diagnosis is made to ensure early identification and action on cardiovascular risk.
- Apply reflective practice and learning; use audits against agreed standards of physical health impact e.g. access to smoking cessation; body mass index; exercise.

Useful Resources

Quality Outcome Framework
http://www.dh.gov.uk/en/Healthcare/PrimaryCare/PrimaryCarecontracting/QOF/Index.htm

NICE Revised Clinical guidelines for Schizophrenia (CG 82) 2009
http://www.nice.org.uk/CG82

Maudsley Prescribing Manual – a practical and easy to read guide co-authors David Paton, Roger Kerwin [24]
http://books.google.co.uk/books?id=0HmhwgA8i74C&dq=Maudsley+Prescribing+Guidelines&printsec=frontcover&source=bn&hl=en&ei=lirSdZe5GK06Afiy-Dg&sa=X&oi=book_result&ct=result&resnum=4#PPA8,M1

Rethink/RCPG guide “What’s reasonable” on reasonable adjustments for people with severe mental illness to access primary care services
http://www.rethink.org/how_we_can_help/campaigning_for_change/opening_doors/gp_practices_reason.html

Rethink Physical health check tool – developed with Michael Phelan and expert steering group [25]
http://www.rethink.org/how_we_can_help/research/research_themes/physical_health_check.html

Forum for Mental Health in Primary Care (RCP; RCPsych) Download a number of resources e.g. Primary Care Guidance on Smoking and Mental Health from the forum website:
http://www.rcpsych.ac.uk/college/mentalhealthinprimarycare.aspx

References

17) Your Choice report, Rethink September 08: www.rethink.org/nice
23) Rethink Physical health check tool – http://www.rethink.org/how_we_can_help/research/research_themes/physical_health_check.html