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ECONOMIC BURDEN AND COST TO GOVERNMENT OF YOUTH MENTAL ILL-HEALTH

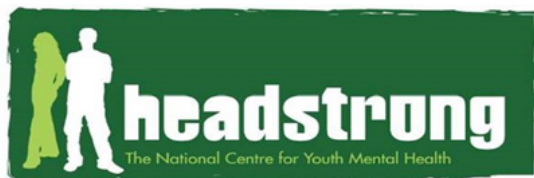
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This document should be cited as follows:

Headstrong, The National Centre for Youth Mental Health. (2013). Economic Burden and Cost to Government of Youth Mental Ill-Health. Dublin, Ireland: The National Centre for Youth Mental Health.

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Executive Summary

Since its adoption by the World Health Organization (WHO) for population-level public health planning, the concept of Disability Adjusted Life Year (DALY) is the most widely accepted measure of the economic burden of ill-health. These economic studies highlight the impact that mental ill-health has at the population level. According to the most recent WHO estimates (2008), neuropsychiatric disorders are the second leading cause of DALYs in Europe, accounting for 19% of all “disease”. Of the top 15 disease categories, depression is third (5.6% of all DALYs), alcohol use is sixth (3.3% of all DALYs), and self-inflicted injury ranks 11th (2% of all DALYs). When represented as years living with disability (YLD), mental disorders are by far the leading contributor to chronic conditions in Europe, accounting for 39.7%. WHO data show that mental ill-health accounts for a little over 20% of the global burden of disease in Ireland.

Leading psychiatric epidemiological investigations in Europe and Australia illustrate the disproportionate contribution of young person’s mental ill-health to the global burden of disease in societies. These data strengthen the economic case for early intervention and prevention with adolescents and young adults, based on emerging knowledge about when mental ill-health emerges, what its long-term impact is, and how these effects can be ameliorated.

The economic burden of mental ill-health among young people in Ireland can be estimated using prevalence data from Headstrong’s My World Survey, which was conducted in 2011 with a large sample of adolescents and young adults across Ireland. An adolescent sample (12-17 years old) was comprised of a statistically representative sample of 6,085 Irish youth enrolled in 72 of 732 post-primary schools, at least one school per county. A similar survey of young adults (18-25 years old) was comprised of 9,133 individuals, 91% of whom were students. It included large numbers of students in 9 universities, 14 Institutes of Technology, and a relatively large sample of emerging adults that were not students (this latter sample may not be statistically representative of emerging adults).

When population estimates of mental ill-health from these cohorts are multiplied by disability weightings used in WHO and Australian studies, the number of Disability Adjusted Life Years (DALY) for Irish young people was estimated at 32,769. This accounts for 31.7% of all of the burden of mental ill-health in Ireland (which is disproportionately higher than other age cohorts). Moreover, when standard economic estimates of the “value” of a life year are considered, the long-term cost for this cohort alone can be estimated at a minimum of €3.042 billion.

The above cost estimate number relates to the cost to society as a whole, only a portion of which is borne by government. On an annualised basis, what then is the estimated cost to government of youth mental ill-health, in terms of both treatment and prevention efforts. The remainder of this report focuses on the following questions:

- *How much is being spent by government, directly and indirectly, on youth mental health/mental ill-health?*
- *Where in government are these expenditures located?*

Executive Summary (continued)

- *What portion of these expenditures is aligned with more traditional mental health care (medical model) and what portion reflects implementation of the community-based paradigm articulated in A Vision for Change?*

The strategic approach to this task has been to develop a list of every government department and its component parts, go through line items in each budget (or from any other source available), tally the expenditure items identified with youth and/or youth mental health, and from these data develop a broad estimate of the direct costs to government for youth mental health services and supports. Every effort has been made to garner the most recent data available. In most cases these are either 2011 or 2010 data.

Direct government expenditures by Departments and Offices are allocated across nearly 40 Votes. Currently, 84% of government expenditures fall into just three sectors, social protection (40%), health (27%), and education (17%). These broad areas of Government expenditure include responsibility for adolescents and young adults, but they are so broad that the expenditure streams are often not sorted by specific conditions (i.e., mental-ill health) and age group.

For the purposes of this report, only data from the Health Service Executive and the Department of Health, the Department of Education and Skills, the Department of Children and Youth Affairs, the Department of Social Protection, and the Department of Justice and Equality are reported on. A summary of the estimated total annual expenditure across these five Departments is shown below.

Estimated total annual expenditures

Department	Estimated Cost
DoH & HSE	216,657,053
DCYA	25,595,000
DES	31,805,000
DSP	30,741,000
DJE	3,420,000
SUBTOTAL	€308,218,053

Introduction to the Economic Justification

Headstrong's overall mission is to change how Ireland thinks about young people's mental health through research, advocacy and service development. The Jigsaw model of service delivery is Headstrong's response to the challenge of transforming how young people in Ireland access mental health support and attain positive developmental outcomes. Jigsaw brings services and supports together to insure that every young person has **one good adult** in their life to support them, whatever their level of need. Thus, Jigsaw seeks to: (1) ensure access to youth friendly integrated mental health supports when and where young people need them, (2) build the confidence and capacity of front line workers to directly support young people and to connect them to Jigsaw, and, (3) promote community awareness around youth mental health to enhance understanding of young people and the risk and protective factors that contribute to their mental health and well-being.

The Jigsaw model is aligned with the philosophy underlying the Health Service Executive's (HSE) Primary Care Strategy, which is defined as "...an approach to care that includes a range of services designed to keep people well, from promotion of health and screening for disease to assessment, diagnosis, treatment and rehabilitation as well as personal social services. The services provide first-level contact that is fully accessible by self-referral and have a strong emphasis on working with communities and individuals to improve their health and social wellbeing." The Primary Care Strategy highlights many of the defining features of the Jigsaw model, including easy access, the need to span a spectrum of activities from mental health promotion to intervention, and the importance of being embedded within communities.

The Jigsaw model offers a service to young people that complements, strengthens, and integrates mental health services and supports currently available within the primary care system. Given that mental health problems are implicated in a great number of primary care consultations (depression is the third most common reason for GP consultation), and that 75% of mental health problems occur prior to age 25 (most emerging during adolescence and young adulthood), investment in youth mental health through a primary care approach makes considerable sense.

The Jigsaw model offers a service to young people that complements, strengthens, and integrates mental health services and supports currently available within the primary care system.

Moreover, Jigsaw is a multi-systemic early intervention and prevention model. In this context, it:

- Promotes **positive mental health** for young people by deploying strategies that target the whole population to enhance strengths, thereby reducing the risk of subsequent negative outcomes (e.g., community-level mental health awareness training);
- Utilizes **universal prevention strategies** designed to address risk factors in the whole population without attempting to discern which young people are at elevated risk (e.g., anti-stigma media campaigns and youth advocacy);
- Targets groups of **young people at risk** for developing mental health difficulties through selective prevention strategies (e.g., Youth Centred Practice training for front-line providers);
- Provides indicated early intervention/prevention supports and services for young people with mild / emerging mental health difficulties (e.g., brief interventions delivered through the Jigsaw Hub).

When fully operational, Jigsaw sites can occupy an important space in the community mental health services “landscape”. The programme is not intended to supplant other forms of mental health care and support, but rather to complement and help integrate them. A typical Jigsaw project is designed to have capacity to provide direct support for about 6% of a community’s youth population aged 12-25 years, but reaches a far greater number indirectly through capacity-building and outreach.



How are the Four Papers Organised?

This series of papers synthesises a wealth of available information about the mental health of young people in Ireland in order to: (1) describe the prevalence and complexity of mental ill-health among young people in the context of the present system of mental health services and supports, (2) establish some parameters for the direct and indirect economic cost of youth mental ill-health to Irish society, and in particular, to government, (3) specify the costs and presumed benefits of adopting Jigsaw as a key component of the youth mental health “landscape”, and, (4) summarise the core economic justification for the model.

Paper 1 (Need Analysis and Programme Description) provides context for the economic evaluation of Jigsaw by discussing issues such as: Why focus on the mental health of young people? What is it like to come of age in 21st century Ireland? What are the mental health needs of young people in Ireland? What is the magnitude of problems experienced by young people? What international evidence exists regarding youth mental health and systems design? What is the Jigsaw model and how does it address these needs? Where does Jigsaw fit in the “landscape” of youth mental health services and supports? What potential impact will it have? What has been accomplished to date?

1

Paper 2 (Economic Burden and Cost to Government Analysis) reviews the literature on estimation of the global burden of ill-health across the world, with specific focus on mental health. Then, extrapolating from Headstrong’s My World Survey and other population surveillance data sources, an estimate of the global burden of youth mental ill-health in Ireland is calculated. The paper goes on to describes, in considerable detail, the specific cost to government of youth mental health programmes, services and supports across various expenditure “streams and tributaries” in health, mental health, education, justice, youth services, and related sectors.

2

Paper 3 (Jigsaw Cost Analysis) provides detailed description of the cost of selecting, installing, operating, and supporting a Jigsaw site based on data gleaned from demonstration sites, and establishes cost projections associated with scale-up activities.

3

Paper 4 (Cost Benefit Analysis) discusses how adoption of the Jigsaw programme, as an integrating element of the system of care and support for young people, can avert costs and improve mental health outcomes for young people. It then examines the benefits of a transformed system of services and supports that includes Jigsaw as a core early intervention and prevention element. The paper concludes with specific (and verifiable) hypotheses about how Jigsaw is likely to yield cost offsets that justify its incorporation by government into the system of services and supports.

4

The Disability Adjusted Life Year (DALY) Concept

The concept of Disability Adjusted Life Year (DALY) is the most widely accepted measure of the economic burden of ill-health. A measure of the number of healthy life years lost due to ill-health, disability or early death, it has been adopted by the World Health Organization (WHO) for population-level public health planning and is the statistic most often reported in public health research in relation to the cost-effectiveness analyses. In this context, the term “disability” refers to “...departures from good or ideal health in any of the important domains of health. These include mobility, self-care, participation in usual activities, pain and discomfort, anxiety and depression, and cognitive impairment.”

Essentially, DALYs represent gaps in systems of health care. They reflect the gap between a population’s current health status and an ideal (theoretical) health status in which all citizens reach old age free of “disease”. DALYs have become valuable tools for public policy makers because they provide a standardised method for: (1) comparing the health of one population with another; (2) identifying and quantifying health inequalities within populations; (3) estimating the number of people affected by particular difficulties and the overall burden to society; (4) making judgments about the relative cost-effectiveness and cost-benefit of interventions; and ultimately, (5) informing debates about health policy.

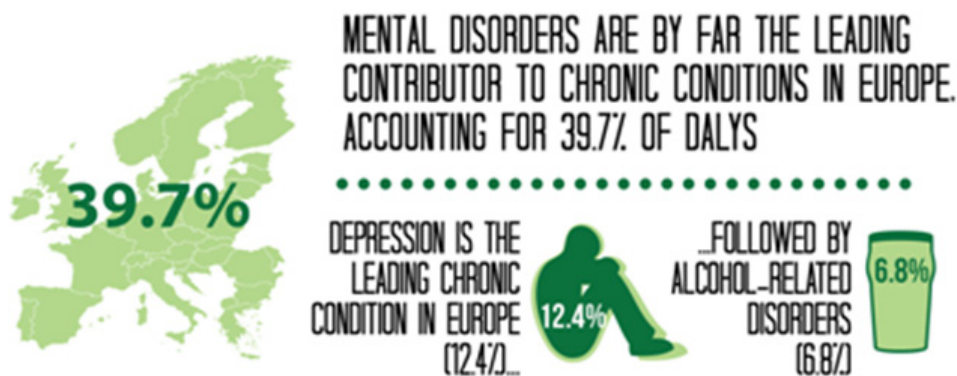
The DALY statistic combines the epidemiological concepts of mortality and morbidity. Ill-health can result in the loss of life (mortality). Therefore, the number of Years of Lost Life (YLLs) can be calculated if one knows the life expectancy at the time of death (which varies by gender) and the age at death. Similarly, the impact of ill-health on life quality (i.e., Years Lost to Disability, or YLDs) can be estimated if one knows the typical age of onset and duration, incidence or prevalence in the population, and the relative severity of the “disease” or injury.

Different types of ill-health have different courses and severities. Detailed knowledge of the severity of specific disorders in the general population, combined with expert knowledge of these difficulties, allows for the use of disability weighting. The disability weight can range from 0 (perfect health) to 1 (equivalent to death). Extensive research is available in the health economics literature to guide calculation of disability weights.

Years Lost to Disability (YLD) can be calculated in several ways, but for the purposes of this report, the period prevalence method is used. Period prevalence is the proportion of the population with a given condition over a specified period of time. In this method, the number of “cases” at a specific point in time (e.g., the past year) is multiplied by the disability weight.

The last step in calculating DALYs is to then add the YLLs (mortality) to the YLDs (morbidity). The resulting metric (the DALY) is equivalent to one year of healthy life lost. Typically, DALYs are reported as the number of years of life lost for a population of 100,000, yielding a rate.

Health economists sometimes add two other elements to DALY calculation: age weighting and discounting. In age weighting, the relative value of a given life year varies. In terms of economic “value”, a year of healthy life at a young age or in early adulthood has greater economic “value” than it would in childhood or old age. Thus, greater weight is given to the loss of health life in youth and young adulthood. Age weighting has particular ramifications when certain forms of ill-health are under consideration, such as youth mental health, because the overwhelming evidence shows that these problems emerge during youth and young adulthood. But, not all studies have used age weights (e.g., Australia), because the concept of inequality of “life value” at various ages is seen as a socially unacceptable construct (i.e., people of all ages have value). Discounting has to do with the economics of time. In essence, discounting reflects the fact that the value of something in the future is less than it is in the present. In the case of DALYs, where the discount rate of 3% has been used in some studies, a weighted year of life saved next year is worth 97% of a year of life “saved” this year. In the economic situation that Ireland currently faces, with GNP in decline rather than in growth mode, finding the appropriate discounting method is more challenging. Neither age weighting or discounting will be used in the present evaluation for the calculation of DALYs for youth mental health in Ireland.



World Health Organization Burden of Disease Studies

The initial Global Burden of Disease (GBD) study was commissioned by the World Bank in 1991. It provided a comprehensive assessment of the burden of 107 diseases and injuries and 10 selected risk factors for the world and for eight major regions. The methodology of that study gave rise to the use of DALYs as a common metric to estimate the health loss associated with morbidity and mortality. A subsequent study by Murray & Lopez (1996) for the World Health Organization has been updated several times. The most recent GBD study was conducted for the year 2004 (and updated in 2008). A comprehensive GBD update is presently underway for the year 2010, and is due to be released in 2012. It is led by a consortium including Harvard University, the Institute for Health Metrics and Evaluation at the University of Washington, Johns Hopkins University, the University of Queensland, and the World Health Organization (WHO).

From their inception, GBD studies have served to highlight the impact that mental ill-health has, relative to other types of illness, at the population level. According to the most recent WHO estimates (2008), neuropsychiatric disorders are the second leading cause of DALYs in Europe, accounting for 19% of all disease. Of the top 15 disease categories, depression is third (5.6% of all DALYs), alcohol use is sixth (3.3% of all DALYs), and self-inflicted injury ranks 11th (2% of all DALYs).

When represented as years living with disability (YLD), mental disorders are by far the leading contributor to chronic conditions in Europe, accounting for 39.7%. When seen in this light, depression is the leading chronic condition in Europe (12.4%), followed by alcohol-related disorders at 6.8%. Schizophrenia and bipolar disorders are each responsible for 2.3% of years lived with disability.

The WHO makes available DALY estimates for all member nations based on the level of epidemiological information available. The most recent estimates were released in February of 2009. The chart below provides age-standardized DALY rates for Ireland and several comparable countries.

An age-standardized rate is a weighted average of the age-specific rates, where the weights are the proportions of a standard population in the corresponding age groups. This means that the DALY rates for each country in the table below are based on a similar population age structure, removing the effect of variation in age structure and allowing for cross-country comparisons.

It can be seen in the below data from WHO that mental ill-health accounts for a little over 20% of the global burden of disease in Ireland.

Age-Standardised DALY Rate Comparisons Across Health Categories (rate 100/000)

	Ireland ¹	UK	USA	Australia	Canada
Infectious and parasitic diseases	154.2	187.2	330.2	155.3	183.1
Respiratory infections	170.0	137.0	95.3	67.2	65.8
Maternal conditions	16.4	63.8	104.2	16.7	45.1
Perinatal conditions (h)	229.1	265.5	321.3	274.5	245.0
Nutritional deficiencies	80.4	47.9	44.9	36.4	62.1
Malignant neoplasms	1,476.8	1,402.7	1,384.0	1,281.0	1,375.0
Other neoplasms	12.0	24.3	25.4	19.1	23.3
Diabetes mellitus	146.3	168.2	374.3	201.2	341.5
Endocrine disorders	190.1	172.4	246.6	223.6	153.2
Sense organ diseases	744.4	743.1	780.4	480.0	780.7
Cardiovascular diseases	1,408.3	1,334.1	1,525.2	969.1	957.3
Respiratory diseases	857.6	920.9	844.0	997.9	574.4
Digestive diseases	317.9	537.7	408.8	326.3	255.8
Genitourinary diseases	100.3	80.0	122.1	81.0	73.6
Skin diseases	17.5	15.9	18.9	8.8	14.9
Musculoskeletal diseases	399.6	408.4	447.0	410.2	438.1
Congenital anomalies	338.1	224.3	258.6	234.1	228.5
Oral conditions	82.4	82.7	82.9	82.7	82.5
Unintentional injuries	536.5	501.4	984.5	815.0	588.7
<i>Road traffic accidents</i>	226.1	203.4	449.1	265.4	259.9
Intentional injuries	338.8	233.5	482.1	307.6	331.3
<i>Self-inflicted injuries</i>	307.3	169.2	241.9	248.4	253.5
Neuropsychiatric conditions	3,196.3	3,460.9	3,963.2	2,906.6	3,500.6
<i>Unipolar depressive disorders</i>	959.3	960.6	1,454.7	846.9	1,157.1
<i>Bipolar disorder</i>	184.3	184.2	183.6	171.9	183.7
<i>Schizophrenia</i>	185.6	185.2	185.6	164.3	185.9
<i>Alcohol use disorders</i>	469.5	662.7	600.1	571.4	595.6
<i>Drug use disorders</i>	236.1	295.0	379.4	140.1	245.5
<i>Post-traumatic stress disorder</i>	54.0	54.2	57.6	55.3	57.4
<i>Obsessive-compulsive disorder</i>	70.4	70.4	71.4	45.2	71.4
<i>Panic disorder</i>	96.9	97.0	96.8	96.8	96.8
Total DALYs (All Causes)	10,813.0	11,011.9	12,844	9,894	10,321
Total Mental Ill-Health DALYs	2,256.1	2,509.3	3,029.1	2,091.9	2,593.3
Proportion of Mental Illness to Overall Health	20.9%	22.8%	23.6%	21.1%	25.1%
Population (in thousands)	4,067.7	59,964.9	296,844	20,081	31,955

What proportion of GBD is attributable to young people, then? A recent study (Gore, Bloem, Patton, Ferguson, et al. (2011) found that the total number of DALYs attributable to this age group (10-25) was approximately 15.5% of all DALYs from all age groups. For this age range, neuropsychiatric disorders accounted for 45% of all Years Lost to Disability, followed by unintentional injuries (12%).

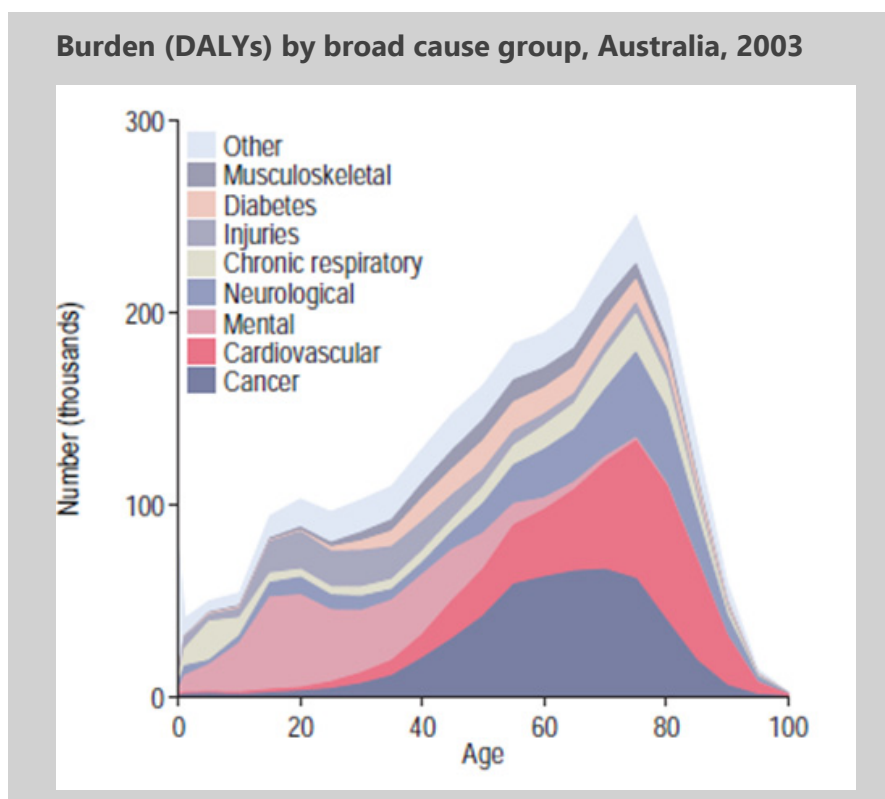
¹ Note: Country health information systems include a range of population-based and health facility-based data sources. The main population-based sources of health information are census, household surveys and vital registration systems.

Australian Burden of Disease Studies

This section briefly examines leading psychiatric epidemiological investigations completed in Australia which illustrate the disproportionate contribution of mental ill-health in young people to the global burden of disease. This is important information because the economic case for early intervention and prevention with adolescents and young adults is based on knowledge about when mental ill-health emerges, what its long-term impact is, and how these effects can be ameliorated.

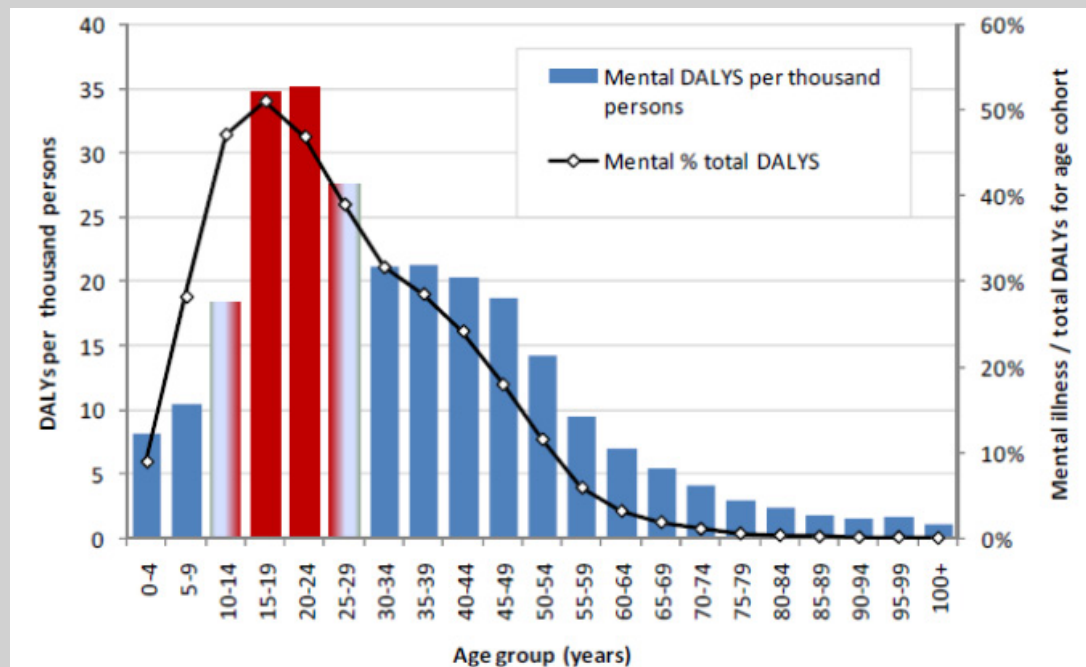
Vos et al. (2001) calculated non-fatal burden of disease rates per 1,000 by age and broad disease group in Victoria (for 1996) using data from the National Survey of Mental Health and Wellbeing. Mental disorders were found to constitute the third largest group of conditions contributing to the burden of disease, ranking behind cancers and cardiovascular diseases. Depression was the greatest contributor to disability among both men and women, and eight other mental disorders in men and seven in women ranked among the top twenty causes of disability. In a follow-up to the above Australian study, Begg et al. (2007) calculated the Burden of Disease for the entire country. Overall, it was found that mental disorders were responsible for 13.3% of the total health burden of Australia. When expressed as DALYs, combining fatal (mortality) and non-fatal (morbidity) numbers, the overall pattern shown in the 1996 Victoria data was replicated.

In the graphic below, note the dramatic increase of mental disorders during adolescence and young adulthood.



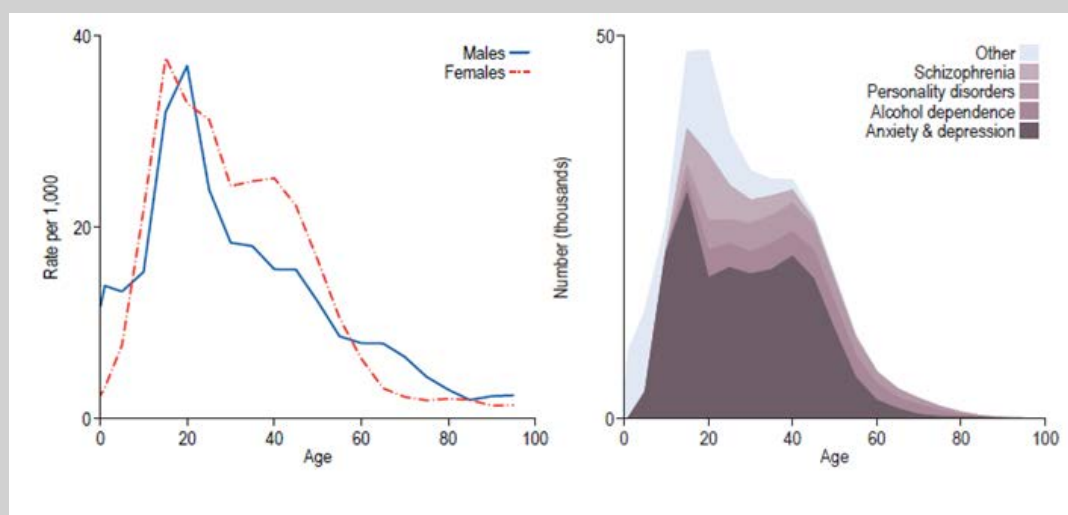
The chart below shows even more dramatically that mental ill-health (as expressed in DALYs) has the greatest impact on young people.

Mental ill-health (expressed in DALYs) across age ranges



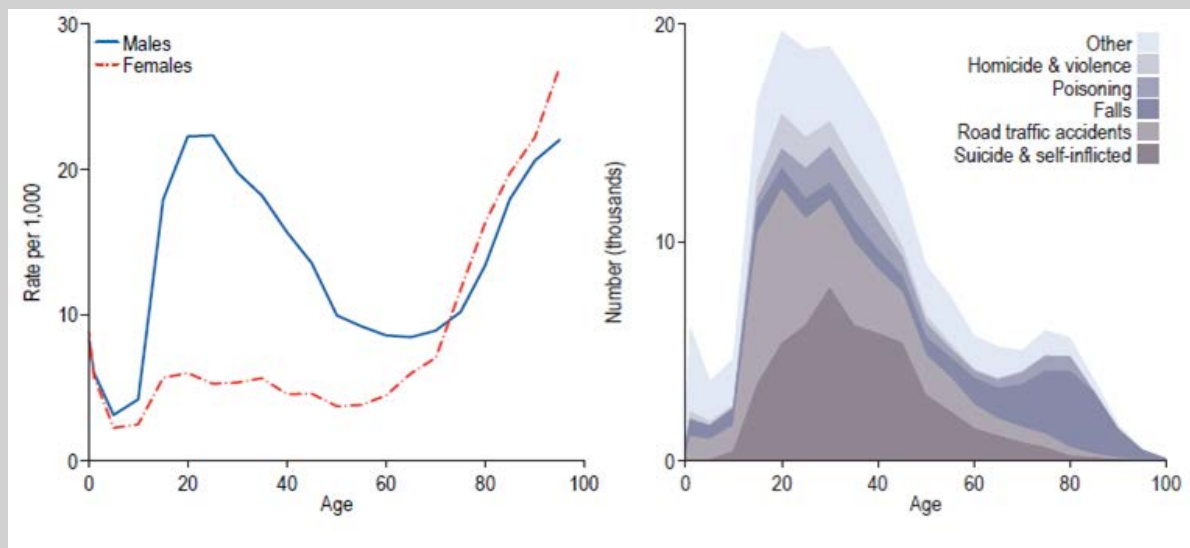
These data were examined more closely to ascertain which mental disorders had the greatest impact developmentally, by age and gender. It can be seen (below) that there are some differences in rates by gender and broad category of disorder. Mental ill-health was more prominent among males during youth and young adulthood, whereas females had rates which extended over a longer period of time. With respect to mental illness, anxiety disorders were somewhat more likely to emerge later in the developmental sequence.

Mental disorder burden (DALYs) by age expressed as: (a) rates by sex, and (b) numbers by specific cause, Australia, 2003



Intentional and unintentional injuries data are highly relevant to youth mental health, and these categories accounted for an additional 7.0% of the health burden in Australia. This health category included suicide, self-inflicted injuries, road traffic accidents, and falls, which together comprise about two-thirds of the injury-related health burden. Males accounted for 73% of the road accident burden, and 78% of the suicide and self-inflicted injury components (falls were more evenly distributed between males and females). The graphic below shows the pattern of health burden as it relates to age and cause, once again showing that young people accounted for a much higher proportion of the burden

Injury burden (DALYs) by age expressed as: (a) rates by sex, and (b) numbers by specific cause, Australia, 2003



Relating DALYs to Cost

While DALYs have communication value in describing the relative impact of various physical and mental illnesses that can afflict a society, they do not by themselves speak to financial cost. While standardized and comparable, they are also theoretical. For the purposes of economic evaluation, it is also often important to attach a monetary figure to a particular “illness”.

Calculating with Actual Cost Data

DALY rates for a given category or type of ill-health (e.g., mental health) can enable estimates of total cost (economic burden) when specific data about the cost of the problem or disorder is available or can be projected. Thus, in a recent comprehensive review of global burden of disease and cost-effectiveness studies, Eaton, Martins, Nestadt, Bienvenu, Clarke, and Alexandre (2008) provided annual cost estimates for eleven major mental disorders in adults for the United States. These reflected a combination of DALY estimates (derived with GBD disability weights, prevalence data, and population data) and single studies documenting the unitary costs of each particular disorder. Cost estimates ranged from \$11 billion per year for simple phobias to more than \$200 billion per year for alcohol use disorders. Direct costs were mostly for treatment, recognizing that only a minority of individuals with the disorders received such treatment. Indirect costs reflected all persons with the disorder, whether or not in treatment. Treatment effectiveness is not taken into account in such cost estimates. In total, total cost of these 11 categories of mental illness for a given year in the United States was estimated to be \$742.2 billion.

Mental disorder	GBD disability weight	Cost per annum in (billions)
Panic disorder	0.17	\$30.4
Social phobia	NA	\$15.7
Simple phobia	NA	\$11.0
Major depressive disorder	0.35	\$97.3
Obsessive-compulsive disorder	0.13	\$10.6
Drug abuse/dependence	0.25	\$201.6
Alcohol abuse/dependence	0.16	\$226.0
Personality disorders	NA	NA
Schizophrenia	0.53	\$70.0
Bipolar disorder	0.40	\$78.6
Dementia (age >65 years)	NA	\$76.0.
Total		\$741.2

In a similar vein, recent research in Portugal examined the burden and costs attributable to alcohol consumption in 2005 (Cortez-Pinto, Gouveia, Pinheiro, Costa, Borges, & Carneiro, 2010). It was found that liver diseases accounted for most of the burden attributable to alcohol (31.5% of total DALYs), followed by traffic accidents (28.2%), and several types of cancer (19.2%). Cost to the health system was estimated at €191.0 million direct costs, representing 0.13% of Gross Domestic Product and 1.25% of total national health expenditures.

Calculating Cost with the Value of a Statistical Life Year (VSLY) Statistic

Because it is often the case that comprehensive and interpretable cost-of-illness data are not available, health economists use other methods to derive cost estimates. In general, these fall under a concept called willingness to pay (WTP). Based in the economic theory of value, this is the theoretical amount an individual (or government) would be willing to pay, sacrifice, or exchange in order to receive a good or to avoid something undesired. In the case of health, the WTP construct has to do with avoidance of premature death or disability.

This statistic can be calculated in several ways, including: (1) stated preference surveys in which discrete choices are provided to a panel and their responses are taken to indicate the relative value (and cost) of a particular option, (2) wage-risk studies in which extra wages for more risky work are examined, and, (3) consumer behaviour studies. As a practical matter, these are costly and difficult to accomplish.

The more common method is to use a metric called the value of a statistical life (VSL) and its derivative, the value of a statistical life year (VSLY). In effect, VSLY applies an economic value to each year of life expectancy, allowing for a calculation of the cost of a loss of life year (as expressed by the DALY).

In creating budgets and making choices, governments make extensive use of the VSLY metric. It has been used in project and policy evaluations across a broad range of human health and safety explorations by governments in environmental, transport, energy, food safety, and health sectors. It is especially salient for regulatory impact assessments and cost-benefit analysis of a particular programme or policy (as in the present instance).

A recent analysis by the Organisation for Economic Co-operation and Development (OECD, 2011) summarized the current VSL and VSLY data for the major Western economies by country based on an extensive literature review of current economic studies. For the purposes of the present analysis, a summary of the findings for the United Kingdom (UK) and for the European Union (EU) will be provided (US and Canadian findings seem less germane and appear inflated relative to Europe).

Access Economics (2011) conducted a cost-benefit analysis of vision services in Ireland (the only economic evaluation available for Ireland of this type). Because no VSL or VSLY data were available for the Republic of Ireland, these investigators relied on a more recent analysis of UK data by Mason et al (2009). In the UK, VSL data have been used for policy purposes since 1993, especially in the transport and environmental sectors, and more recently in the health sector. Beginning with UK governmental figures, the authors adjusted for inflation, discounting, and currency, arriving at a 2011 Value of a Statistical Life Year in Ireland of €94,794. This figure was used as a proxy for the value (cost) of one DALY in the Ireland.

This VSLY figure for Ireland is quite consistent with recent guidelines issued by the European Commission (Impact Assessment Guidelines, 2009). The EU estimated that the past year VSL was between €1 and €2 million and recommended that VSLY estimates used by governments for cost benefit analyses should be between €50,000 and €100,000.

For the purposes of this economic analysis, €94,794 will be used for VSLY calculations.

Estimation of the Burden of Mental Ill-Health DALYs for Irish Young People

In the section that follows, estimates of Disability Adjusted Life Years (DALYs) for Irish young people will be explored using surveillance data from Headstrong's recent (2011) My World Survey. The My World Survey was conducted in 2011 among samples of adolescents and young adults in Ireland. There were two target groups for this population surveillance measure. An adolescent sample (12-17 years old) was comprised of a statistically representative sample of 6,085 Irish youth enrolled in 72 of 732 post-primary schools, at least one school per county. The sample represents proportionately the number of post-primary schools that are disadvantaged (DEIS, Delivering Equality of Opportunity in Schools) or not disadvantaged (non-DEIS) in the four Community Care Areas. The 72 schools are representative of secondary, vocational or community & comprehensive schools and for secondary schools, by gender composition (single-sex boys, single-sex girls, mixed gender composition). A similar survey of young adults (18-25 years old) was comprised of 9,133 individuals, 91% of whom were students. It included large numbers of students in 9 universities, 14 Institutes of Technology, and a relatively large sample of emerging adults that are not students. The sample may not be statistically representative of emerging adults in Ireland (e.g., 65% of the sample is female).

DALY estimates will initially be created based on MWS data that correspond to ICD-10 diagnostic categories used in international studies for mental and behavioural disorders. Credible and widely used disability weights are available for several of the core psychiatric diagnoses (e.g., anxiety, depression, eating disorders, schizophrenia) in both WHO and Australian studies. For the present evaluation, disability weights used in the Australian youth mental health burden of disease studies will be used for comparative purposes. These are shown below. The category of other has been used to calculate DALYs for a variety of other disorders, such as eating disorders, personality disorders, and behavioural challenges.

Disability Weights by Diagnostic Category (adapted from Access Economics, 2009)

	Males	Females
Alcohol dependence	.034	.038
Anxiety disorders	.128	.126
Major depression	.128	.126
Schizophrenia	.434	.434
Other	.128	.118

DALY Calculation

For the purposes of an initial calculation of mental ill-health DALYs for Irish young people, a prevalence table with MWS data for categories that are comparable to the Australian analysis (described in the earlier section) is provided. The numbers within each box represent population-level estimates of the projected number of individuals who, within a given year, are likely to be experiencing that disorder. So, for example, 9% of adolescent females indicated on the MWS that within the past year, they experience severe or very severe depression. For this age range, this would translate into 16,674 individuals.

Population Estimates of Prevalence of Youth Mental Ill-Health in Ireland (2011)

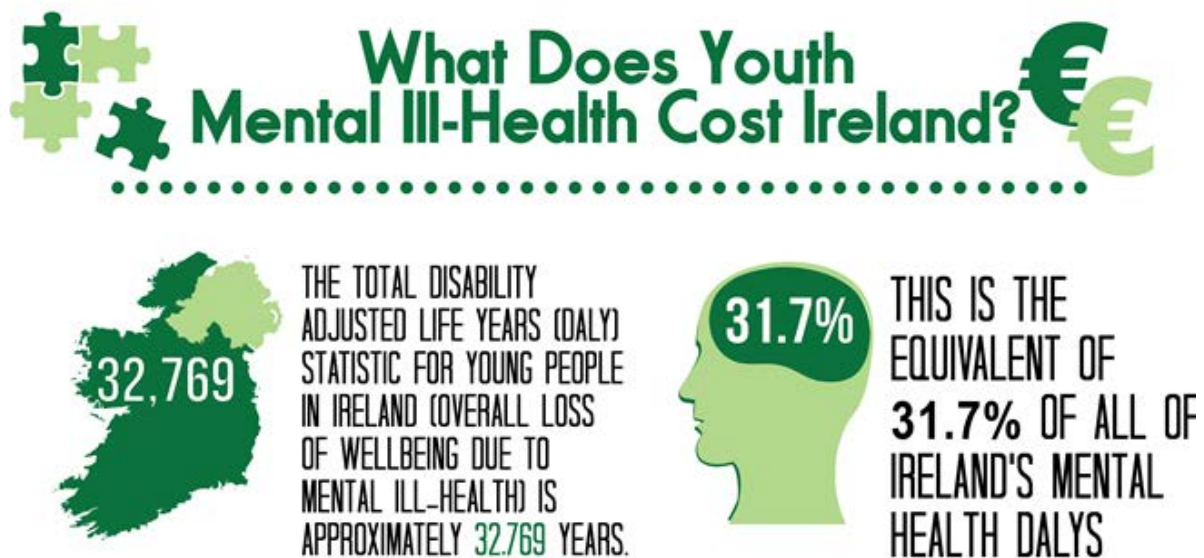
	Adolescent Males	Adolescent Females	Young Adult Males	Young Adult Females
Depression (Severe/Very Severe)	11,176	16,764	36,788	46,292
	(6%)	(9%)	(12%)	(15.1%)
Anxiety (Severe/Very Severe)	16,704	21,716	17,593	23,557
	(10%)	(13%)	(11.9%)	(15.9%)
Alcohol Dependence	6,097	4,383	24,433	16,667
	(3.2%)	(2.3%)	(12.9%)	(8.8%)
Schizophrenia/Psychoticism	14,000		n/a	
	(4%)			

When these population estimates are multiplied by the disability weights shown in the prior table, the estimate number of Years Lost to Disability (YLD) for these conditions is arrived at. **The YLD for these conditions in Ireland is therefore calculated to be 32,093 years.**

Calculating the Years of Lost Life, the second part of the DALY calculation, is done somewhat differently. The number reflects the number of deaths attributable to these conditions in a given year. Using Vital Statistics data, mortality information for a combination of 10-14, 15-19, and 20-24 year olds was examined. This made it possible to project the number of deaths attributable to these conditions for the 10-19 year olds (2), and for the 20-24 year olds (9). These results were consistent with similar analyses done in the UK. Then, using the average life expectancy (2009 Irish life table data from the WHO) for the two age groups (67.4 additional years) an average life expectancy from the two age groups (67.4 for the 10-19 year olds, 60.1 years for the 20-24 year olds), YLLs were calculated for the two groups and summed. **Together, this yielded 676 Years of Lost Life (YLLs) attributable to these conditions.**

For comparison's sake, the overall loss of wellbeing due to mental illness for young people in Australia (Access Economics, 2009) was estimated at 126,975 DALYs. Given that the total population of Australia is about five times larger, this is a roughly comparable impact to what was found for Ireland.

How should this €3.042 billion figure be interpreted, given the size of the number? It is clearly not the cost to government (to be discussed in the next section). Rather, it is an approximation of the lifelong cost of mental ill-health borne by the cohort of young people at the time of surveillance.



Broadening the Analysis

All of the population-level data presented so far relates to the burden of mental ill-health that is attributable to diagnosable psychiatric disorders. These data provide a compelling case for early and targeted intervention with young people with the aim of reducing the prevalence and impact of specific psychiatric disorders. However, as was documented in a companion paper, psychological distress in young people is distributed across the adolescent and young adult population far more broadly than is reflected in the “disease” model that underlies the GBD studies.

The Jigsaw model assumes that all young people will experience mental health challenges and recognizes that, at any time, approximately 20% of young people are in distress. The economic consequences of that distress, if not addressed early and effectively, will be felt immediately (e.g., utilisation of specialized services) and over the long term (e.g., diminished productivity).

Thus, estimation of the true cost of youth mental ill-health requires a broader analysis through greater segmentation of subpopulations and problem areas. What follows must be considered as exploratory and speculative, since the data are not mapped to the ICD-10 categories and recognized disability weights are unavailable. Nonetheless, assume that less serious difficulties have impacts on the trajectory of young people's lives, especially if left untreated. The table below shows estimates of the population-level prevalence of a non-exhaustive sampling of problems and difficulties reflected in the MWS data that, for the most part, do not rise to the level of diagnostic classification. The disability weights are therefore relatively low in most instances.

Population Estimates of Prevalence of Youth Difficulties (Non-Diagnostic) in Ireland (2011)

	Adolescents	Young Adults	Total	Disability Weight	DALYs
Depression - Mild	37,720	49,750	87,470	.03	2624
Depression - Moderate	37,740	31,650	69,390	.05	3469
Anxiety - Mild	24,450	32,890	57,340	.03	1720
Anxiety - Moderate	48,900	61,670	110,570	.05	5528
Alcohol Abuse - Problem	52,400	168,570	220,970	.01	2209
Alcohol Abuse - Hazardous	10,480	41,100	51,580	.02	1031
Deliberate Self Harm	n/a	22,000	22,000	.07	1540
Suicide Attempt	n/a	7,000	7,000	.08	560
Poor School Attendance	50,893	n/a	50,893	.02	1017
Problems with Gardai	44,665	64,833	109,498	.03	3284

Undoubtedly, these are overlapping and therefore duplicated counts. But the overall pattern makes the point that the needs experienced by young people go well beyond avoidance of psychiatric diagnosis.

The Context for Direct Costs to Government

In the previous section, the focus was on the global burden of youth mental ill-health expressed in terms of disability-adjusted life years, or DALYs. In effect, these are costs that will be borne by the individuals throughout their lives, and will ultimately be deducted from the collective Irish “societal bank account” in the future if current conditions are not effectively addressed and ameliorated.

The focus in this chapter is on estimation of actual, direct costs of youth mental ill-health to government (and, by extension, Irish society). Fundamentally, the intent of the present chapter is to attempt a comprehensive governmental cost analysis to answer the following questions:

- How much is being spent by government, directly and indirectly, on youth mental health/mental ill-health?
- Where in government are these expenditures located?
- What portion of these expenditures is aligned with more traditional mental health care (medical model) and what portion reflects implementation of the community-based paradigm articulated in A Vision for Change?

The strategic approach to this task has been to develop a list of every government department and its component parts, go through line items in each budget (or from any other source available), tally the expenditure items identified with youth and/or youth mental health, and from these data develop a broad estimate of the direct costs to government for youth mental health services and supports. Every effort has been made to garner the most recent data available. In most cases this is either 2011 or 2010 data. Greater attention is given to one-year costs rather than cost trends over time.

In undertaking this analysis, it was anticipated that finding, disentangling and understanding government expenditure streams would be difficult, especially since the focus is on just one public health issue (mental ill-health). The process was further constrained by the focus on just one segment of the population (adolescents and young adults, 12-25 years old). A related issue complicating the analysis was the reality that many problems are cross-cutting and more than one department within government may address the issue (possibly in a duplicative fashion).

There is a tendency across all governments to justify funding based on issues that receive a high levels of societal attention. In Ireland, prominent examples are suicide and deliberate self-harm. Justification for expenditures related to these challenges are found in several places, and in many instances the programme to be funded is not designed to address only those problems (e.g., it may focus on a range of inter-related issues, such as social exclusion). A side effect of the resultant diffuseness (i.e., expenditures spread widely across many

government departments, agencies and units), is that no one unit is responsible for a given youth mental ill-health issue or for co-ordinating and accounting for expenditures targeted to ameliorate it.

This report focuses almost exclusively on non-capital costs because capital costs (e.g., premises) are usually expended over multiple years and are driven by issues outside the control of the health and social services sector. For example, government has been unable to sell old psychiatric hospital properties to generate revenue to modernize existing community-based mental health facilities or create new facilities that are more welcoming. At the local level, there is great heterogeneity regarding premises (some agencies own buildings, others lease space) such that capital costs are difficult to calculate.

Direct government expenditures by Departments and Offices are allocated across nearly 40 Votes. The term Votes is used to describe a coherent area of government expenditure that is the responsibility of a single department or office. Government ministers oversee an area of expenditure in relation to 15 ministerial Vote Groups. Currently, 84% of government expenditures fall into just three sectors, social protection (40%), health (27%), and education (17%). These broad areas of Government expenditure include responsibility for adolescents and young adults, but they are so broad that the expenditure streams are often not sorted by specific conditions (i.e., mental-ill health) and age group.

It was decided to set the parameters for this overview analysis around five broad departmental areas of government, as follows:

- The Health Service Executive and the Department of Health
- The Department of Education and Skills
- The Department of Children and Youth Affairs
- The Department of Social Protection
- Department of Justice and Equality

Department of Health (DoH) and Health Service Executive (HSE)

Mental Health Services are provided by the HSE and voluntary sector partners through a variety of settings and approaches. The 2001 Mental Health Act governs the provision of Mental Health Services, and policy is developed in relation to the 2006 report A Vision for Change (AVFC). Mental Health is administered by the Office for Disability and Mental Health, which was established in 2008 to implement the provisions of AVFC in partnership with the HSE and other stakeholders.

A driving concern of the programme is to move toward greater provision of community based services, as envisioned by AVFC. At the time of its publication in 2006, this report estimated that the full implementation of its recommendations would increase the total non-capital spend on mental health to 8.24% of total health expenditure (which was then at 6.98%). This was to have been facilitated by the disposal of assets associated with closure of psychiatric hospitals and re-investment in community-based care, but this has not occurred at anticipated levels due to the economic downturn.

Money voted for health goes to the Department of Health (Vote 38) and the Health Service Executive (Vote 39), which together comprise a Vote Group. The Department of Health has responsibility for the overall organisational, legislative, policy and financial accountability framework for the health sector. The Health Service Executive is responsible for the management and delivery of health and personal social services within available resources. Total gross expenditure for the Ministerial Vote Group in 2011 was €14.29 billion, and the number of public service employees within the DOH and HSE was 105,502. In 2011, the health sector experienced €1 bn in reductions as a function of the previous government's National Recovery Plan.

According to the DoH Annual Output Statement 2012 for the Vote Group, Mental Health Services (Programme 6b) expenditures during 2011 encompassed approximately €752 m for HSE and €1 m for DoH. **This is approximately 5.37% of the total health care expenditure, far less than what was called for in AVFC (8.24%, which would translate into approximately €1.18 bn).** Of this total spend, €672 m was allocated for current (programme) costs, €40 m for capital expenditures, €22 m for administrative pay, and €19 m for other administrative support. The mental health sector employs 9,122 public servants, comprising approximately 8.6% of those working within Health.

These overall budget estimations imply that youth mental health, if proportionately represented in the budget based on population, should receive an annual allocation from DoH of **€118,246,661**.

The Health Service Executive (HSE), established in 2005, is where one might expect to find detailed budgets that delineate expenditures for youth mental health. However, upon inquiry, it was learned that the HSE's accountability structure is not based on care groups (such as youth mental health), but rather on HSE areas and hospitals with accountable managers. As a result, the HSE focus is on data accuracy and consistency within the accountable business units, not on the detail of care groups.

Moreover, it was learned that the HSE statutory system consists of eleven different accounting systems operating in each of the eleven former Health Board areas. The HSE has been in discussion with the Department of Health and Finance since its inception, seeking the implementation of a single national accounting system which could include (among other benefits) standard national care group reporting), but this has not as yet been put in place.

The eleven separate accounting systems across the HSE encompass approximately 12,000 individual cost centres. Each accounting system has its own care group structure for each of the care groups, and these are not consistent across the country. In order to obtain an indicative national view of care groups, each of the 12,000 cost centres are "mapped" to a national care group. Not all care groups can be uniquely identified to a specific care group so there is significant mapping to multi-care group headings.

Based on information provided by the HSE for this report, the chart below shows the indicative catchment area budgets for mental health as defined by the above "system" of budgeting and accounting for 2010 and 2011. Interpretation of these figures is further complicated because the extended catchments include the population of each geographic area served by that catchment, but these do not in all instances coincide with the accountability structure in the HSE area (and may straddle one or two other HSE Areas). As a consequence, the figures are a somewhat unreliable estimate of the whole.

HSE Mental Health Budget by Super Catchment Area

Super Catchment Area	Population Served (Census 2006)	Budget 2010 €m	Budget per Capita 2010	Budget 2011 €m	Budget Per Capita 2011
1. (Limerick, North Tipperary, Clare)	361,028	59,931,304	€166.00	58,399,973	€161.76
2. (Donegal, Sligo, Leitrim, West Cavan)	238,317	51,999,908	€218.19	48,668,952	€204.21
3. (Galway, Mayo, Roscommon)	414,277	91,003,973	€219.66	89,071,724	€215.00
4. (North Lee, North Cork)	248,470	55,023,000	€221.44	54,697,000	€220.13
5. (South Lee, West Cork, Kerry)	372,660	49,458,000	€132.71	43,042,000	€115.50
6. (Wexford, Waterford)	256,986	37,417,000	€145.60	35,421,000	€137.83
7. (Carlow, Kilkenny, South Tipperary)	203,852	54,549,000	€267.60	50,696,000	€248.69
8 (North Dublin)	222,049	30,998,260	€139.60	30,342,783	€136.65
9 (Louth, Meath, Cavan, Monaghan)	390,636	49,596,159	€126.96	46,543,791	€119.14
10 (North West Dublin, Dublin North Central)	312,472	70,258,422	€224.85	68,353,363	€218.75
11 (Dun Laoghaire, Dublin South East and Wicklow)	372,107	54,865,000	€147.45	33,239,000	€89.32
12 (Dublin West, Dublin South West, Dublin South City)	389,750	50,487,000	€129.53	69,817,000	€179.13
13 (Laois, Offaly, Longford, Westmeath, Kildare, West Wicklow)	457,244	60,578,000	€132.48	59,861,000	€130.91
14 Forensic National	4,239,848	20,528,000	€4.84 (National Service)	19,910,000	€4.69 (National Service)
		€736,693,026		€708,063,586	

Based on these HSE figures, there was an apparent reduction in overall mental health expenditure from 2010 to 2011 of -4% (-€28,629,440). It is also apparent that there are significant differences in levels of expenditure across areas of the country with respect to mental health. Resources are not allocated evenly, nor are they expended evenly. Expenditure levels appear to be related to historical patterns, and perhaps also relate to the concentration of institutional resources in the absence of a community-based system of care.^{2,3}

In light of the difficulties in accounting for funds as described above, Amnesty International and Mental Health Reform have been advocating for more transparency in mental health expenditure, as have others concerned with the implementation of A Vision for Change. Their data indicate:

The subsections that follow seek to estimate current youth mental health costs within the health care system.

“... the non-capital expenditure on mental health services was €770M in 2009, in comparison to 1.1billion in 2008. Spending on mental health has dropped from 13% of the overall health budget in 1986 to 6.4% in 2009 and 5.3% in 2010. AVFC recommends that the rate reach 8.4%. This is still a low level compared to international standards: the equivalent rate is 12% in England and 18% in Scotland; other European countries allocate over 20% of their total health spend on mental health service and support. The 2010 staff moratorium has disproportionately impacted on the mental health services: mental health represents just 9% of the healthcare work force but accounted for 20% of the 1,500 posts lost through the moratorium.”

Cost of Long Stay Residential Care

A major goal for Ireland as described in AVFC has been to progress the agenda for psychiatric de-institutionalization by closing aging and inefficient psychiatric hospitals. Taken in historical context, significant progress has been made in this regard, moving from a total inpatient census in 1963 of 19,801 to 2,812 in 2010. In 2011, government anticipated making further progress through the closure of one hospital and the provision of community respite care through the Genio trust. Expenditure for hospital-based and other forms of long stay residential care has reduced from approximately €607 m in 2008 to an estimated €534 m. In recent years, there has been a significant reduction in inpatient psychiatric hospitals and beds, accompanied by a reduction in admissions to hospitals (from 2,024 in 2009 to 1,952 in 2010). According to DoH, an 8% reduction in involuntary admissions occurred between 2007 and 2010 as a function of the availability of community care.

Nonetheless, there remains a significant imbalance between mental health expenditures for inpatient versus community based care. The process of

² In consultations with health care economists, it was revealing to learn that budget and expenditures reported by the DOH and the HSE can vary by as much as 20% due to the manner in which data are presented, how costs are allocated (e.g., overhead), and the fact that some staff cross program boundaries.

³ The authors express appreciation to Carol Ivory from the HSE for sharing these budgetary data.

re-balancing these has remained slow since AVFC's recommendations six years ago. The economic downturn has made achievement of this goal even more challenging. But, in paradoxical fashion, the recession has also created opportunities (and demand) for transformational change.

Focusing now on young people in long stay residential care, in 2010 there were 205 male and 230 female adolescents (17 or younger) receiving treatment in Ireland's psychiatric facilities at the time of the census. A total of 2,240 young adults 18-19 years old and 20-24 years old were admitted to adult psychiatric hospitals and units in 2010.

The 2010 admissions data for individuals under age 25 to psychiatric units and hospitals (including private hospitals and the Central Medical Hospital) are shown in the table below.⁴

Admissions to Psychiatric Units, Adult and Child & Adolescent Facilities

	Male	Female	Total
ADULT UNITS			
15 years and under	6	7	13
16-17 years old	82	68	150
18-19 years old	348	230	578
20-24 years old	944	718	1,662
TOTAL	1,380	1,023	2,403
CHILD AND ADOLESCENT UNITS			
15 years and under	56	68	124
16-17 years old	61	87	148
ALL ADMISSIONS REGARDLESS OF UNIT TYPE			
15 years and under	62	75	137
16-17 years old	82	68	150
18-19 years old	348	230	578
20-24 years old	944	718	1,662
OVERALL TOTAL	1,436 (56.8%)	1,091 (43.2%)	2,527

Length of Stay

From a direct cost perspective, important data come from discharge patterns, as shown in the table below.

Length of Stay in Psychiatric Facilities (Adult and Child and Adolescent) by Gender, 2010

ADULT Facilities Length of Stay for Under 25s	Male	Female	Total
Less than 1 week	655	379	1034
1 to < 2 weeks	252	201	453
2 to < 4 weeks	187	204	391
1 month to < 3 months	215	197	412
3 months to < 1 year	41	25	66
1 to 5 years	5	0	5
Totals	1355	1006	2361
CHILD/ADOLESCENT Units: Admissions <18 in 2010 Discharged in 2010	Male	Female	Total
Less than 1 week	14	8	22
1 to < 2 weeks	11	4	15
2 to < 4 weeks	20	20	40
1 to < 3 months	50	91	141
3 months to < 1 year	8	7	15
Totals	103	130	233

Re-Admissions

Not all of those admitted to mental health ill health facilities were “first” admissions. Individuals with mental ill-health serious enough to lead to hospitalization often require continuing care that may involve re-admission, as shown below for young people.

All admissions, First Admission, Re-Admissions to Psychiatric Units (public and private) and Central Mental Hospital and Child and Adolescent Facilities, 2010

Age Groups	All Admissions	First Admission	Re-Admissions
Under 18	163	116	47 (28.8%)
18-19	578	346	232 (40.1%)
20-24	1,662	741	921 (55.4%)

In 2010 there were 19,619 individuals of all ages admitted to all hospitals; 6,266 (31.9%) were admitted for the first time, but 13,353 of those individuals were re-admissions (a 68.1% re-admission rate).

Examining data from all hospitals, public and private, adult and child and adolescent, 30.1% of those under the age of 18 were re-admissions, 40.1% of those 18-19 years old were re-admissions, and 55.4% of those 20-24 years old were re-admissions.

Estimate of Long Stay Residential Cost

From 1 January 2009 the standard fee was €75 per night up to a maximum of €750 in one year. This is clearly not what it costs for one night in a psychiatric hospital. A much more realistic estimate can be generated using the mean cost of an in-patient bed in a public hospital, estimated by NUIG researchers as ~€350 per day. Then, rounding the length of stay ranges as follows:

- 1 to < 3 months in-patient stay in psychiatric facility, assume 60 days as length of stay.
- 3 months to < 1 year IP stay in psychiatric facility, assume 180 days as length of stay
- 1 to < 5 years in-patient stay in psychiatric facility, assume 365 days as length of stay.

yields the following conservative estimates:

Adult Facilities:

215 male patients x 60 days = 12,900 days x €350:	€4,515,000
197 female patients x 60 days = 11,820 days x €350:	€4,137,000
41 male patients x 180 days = 7,380 days x €350:	€2,583,000
25 female patients x 180 days = 4,500 days x €350:	€1,575,000
5 male patents x 365 days = 1,825 x €350:	€638,750

Child and Adolescent Facilities:

50 male patients x 60 days = 3,000 x €350:	€1,050,000
91 female patients x 60 days = 5,460 x €350:	€1,911,000
8 male patients x 180 days = 1,440 x €350:	€504,000
7 female patients x 180 days = 1,260 x €350:	€441,000

Estimated annual cost for long stay residential care = €17,354,750

The estimates above are only for those patients under the age of 25 using the mean cost per bed per day of €350. It is recognized that each patient may use a somewhat different mix of individualized services, both human capital and disposable and consumable supplies.

Cost of Community Based Mental Health Services

The DoH estimates that the 2011 level of expenditure on community mental health was approximately €252m (down from €286m in 2008). This encompassed a broad range of service categories and programmes.

Primary Care

General practitioners in Ireland play an extremely important role in the system of health care. In addition to the A&E departments, they are the first line of defence for health and mental health tertiary care, in part because a referral from a GP is typically required to gain access to more specialised care. Compared to Northern Ireland (NI), the Republic of Ireland relies far more heavily on GPs, with a population ratio of .70 to 1,000 versus .58 in NI (about 2,400 versus 980 is actual numbers). General Practitioners (GPs) are the primary care gatekeepers for entry into all aspects of the health systems in Ireland. They are expected to play an increasing role in the health care transformation effort currently underway.

Various forms of health insurance and government entitlement schemes underlie the primary care health system. Two types of medical cards, the General Medical Services card (GMS) and the General Practitioner Visit Card (GPVC), are important with respect to youth mental health. In 2010 38.1% of the population (n = 1,615,809) was eligible for the GMS and 117,423 (2.8%) of the population had the GPVC. This same year, a total of 233,744 young people 12-15 and 16-24 were eligible for GMS and 19,440 for the GPVC. Rounding the numbers, these 253,000 young people 12-25 years old constitute about 34% of the 736,000 young people in Ireland in 2011.

The Primary Care Reimbursement Service (PCRS) reimburses services to primary care contractors, including GPs, for services to members of the public in their community. The HSE has agreements with 6,567 health care professionals, 2,740 of whom are medical doctors; the rest are mostly pharmacists, dentists and specialists in eye care. The state funded Demand Led Schemes account for approximately 20% of the HSE's overall budget. They include General Medical Services (GMS) (i.e. Medical Cards/GP Visit Cards), Drugs Payment, Long Term Illness, Dental Treatment Services, European Economic Area, High Tech Drugs, Primary Childhood Immunisation, Health (Amendment) Act 1996, Methadone Treatment and HSE Community Ophthalmic Services,.

In 2010, PCRS handled over 75 million claim / payment transactions for services provided to over 3.42 million people in their community by Doctors, Pharmacists, Dentists and Opticians, with an associated expenditure of €2.529 billion. Payments to doctors totalled €493.83 m (€348.13 m in fees, and €145.70 m in allowances) and payments to pharmacies totalled €1.564 bn (€357.51 m in fees and mark-up and €1.191 bn in drugs and medicines). Doctor fees are primarily based on capitation per person, weighted by gender, age, and distance from the practice. Approximately 64.35% of the population availed of one or more of these services. The proportion of the PCRS claims for pharmacies for drugs acting on the nervous system (primarily psychiatric medication) was €344.47 m.

Given that 16.55% of the eligible population was young people, the proportion of cost attributable to this age range might be estimated at €81.72 m. However, it is well known that young people do not avail of GP services at the same level as others, in part because many cannot afford the fees if they do not have insurance. Assuming, more conservatively, that the portion of this figure that is related to youth mental health needs is 10%, the cost for GP / Primary Care would be about €50 m.

It is important to note that in some areas of the country there are community psychology services that operate within primary care. In theory, Primary Care Teams (PCTs) are to be augmented by pharmacists, dieticians, psychologists, and chiropodists, who are to form a Health and Social Care Network supporting a population area of 4-,000-50,000. Unfortunately, the HSE has no data on the extent to which community psychologists are providing such services, but such programmes are known to Headstrong in Counties Donegal and Meath, for example.

Since 1980, public expenditures have accounted for 80% of the costs of health, 12% has been covered by out-of-pocket payment by individuals/families and 8% by private health insurance. As Normand (2012) notes, private insurance has been more complementary than a substitute. One-third of costs of health care have been covered by government via medical card schemes. Normand indicates that most people choose to pay the full cost of GP visits and pay the full cost of drugs up to the monthly limit. He notes that what is unusual is that private out-of-pocket spending is concentrated on primary care and community-based services. Thus, while the stated intent of government policy is to move service delivery out of hospitals to community-based units, there are financial incentives that encourage people to use the hospital.

Given a conservative estimate that 40% of GP care for young people has a core mental health component, the annual cost of primary care attributable to youth mental health is likely to be in the €20,000,000 range.

Psychiatric Medication

The HSE reports that the cost of pharmaceuticals reimbursed through the community drug schemes was €1.9bn in 2010. €1.320bn of this total was cost, €165m was wholesale mark-up, and €384m was in fees and retail mark-up to community pharmacists. Total per capita expenditure on pharmaceuticals in 2009 was the highest in the European Union.

In 2010, the Primary Care Reimbursement System (PCRS) processed claims for “drugs acting on the nervous system” in the amount of €344.47m in total. While some of these may be for other neurological conditions, it seems likely the great majority are for psychiatric illness. Assuming 75% were psychoactive, the cost

of psychiatric medicine may be in the €250m range (probably a conservative estimate).

It is not known what portion of this expenditure is for young people, but assuming that it is proportional to the population (16.7%), the cost attributable to youth mental health would be allocated at €43,144,000. However, it is also known that young people are less likely to be seen and that the older individuals are more likely to be diagnosed and prescribed for, and therefore for the purpose of this analysis this figure is discounted to a total estimate of €20,000,000.

Child and Adolescent Community Mental Health

AVFC placed great emphasis on improvement of services to children and young people, recognizing that early intervention has proven effectiveness and can ameliorate the emergence of adult mental disorders. The Child and Adolescent Mental Health Services (CAMHS) were developed to prioritise the full range of mental health care, provide services to age 18 (closing a gap in the prior system as of 1/12/11), and reduce waiting lists. Currently, 61 CAMHS teams have been established (of the 99 recommended by AVFC). These include 55 community teams, two day-hospital teams, and three paediatric hospital liaison teams.

In its current budget, government has ring-fenced €35m for mental health services with the expectation that a substantial portion will be used to enhance child and adolescent services.

These cannot be considered fully implemented, however, since in many instances they have not been fully staffed (e.g., some are comprised of a consultant psychiatrist with no staff). Ideally they should include a 11 WTE clinical staff and 2 WTE administrative staff (to include junior medical staff, two psychologists, two social workers, two nurses, a speech and language therapist, an occupational therapist and a child care worker). If fully implemented to the level of 99 teams, the full complement of staff would equal 1,289. As of September 2011 there were 464.74 WTES (recommended level should be 728) working in the 56 community CAMHS teams with an average of 8.3 WTES per team (6.95 WTES were clinical). Thus, staffing was only at the 63.8% level.

Assuming that the average cost of a clinical WTE is €85,000 and a non-clinical WTE is 45,000, the total current expenditure for CAMHS team personnel is about €36.5 m. With operating expenses, perhaps the total cost is in the €45-50 m range.

Given that approximately two-thirds were in the 10 to 17 age ranges, the overall current cost of the CAMHS programme for youth mental health can be estimated to be in the €33m range.

The most recent appointment non-attendance rate (2009) was 19.6%. This is a productivity loss which a better system of early intervention may help to avert

(see Chapter 6). Waiting lists are also a continuing concern for understaffed CAMHS teams, in that large numbers of young people are unable to access support when needed and may often not need the level of care offered (in the absence of other forms of early intervention support). As of September 2011, of 7,849 only 46% of new cases could be seen within 1 month of referral, 69% were seen within 3 months. 12% waited between 3 and 6 months, an additional 12% waited between 6 and 12 months, and 8% waited more than a year.

Adult Community Mental Health

As of 2011, 124 Adult Community Mental Health teams had been established across Ireland (although this remains well short of the 227 recommended by AVFC). Due to a hiring moratorium and early retirements, many posts within these teams remain unfilled. In 2011, more than 600 psychiatric nurses retired, but as of September only 60 of the 100 posts allowed to be re-filled under the exemption had been filled. Government policy is to place greater emphasis on therapy posts, as opposed to nursing posts.

Data could not be found to estimate the proportion of adult mental health services delivered to young people in the 18-24 age range. The HSE is not able to determine any of the current characteristics of the adult mental health system, because most records are kept manually and there are no central IT functions. In contrast with the database now available regarding CAMHS, there is no system for determining the composition or implementation characteristics of the 124 now in operation.

What is clear is that the effects of the economic downturn have been especially difficult for this age cohort, and it is anticipated that the demand on this part of the service system has increased dramatically.

Therefore, for the purposes of this analysis, an estimate slightly higher than the CAMHS costing will be assumed, roughly €40 m.

National Office of Suicide Prevention

The National Strategy for Action on Suicide Prevention, termed Reach Out, was launched in 2006 as a broad-based public health approach. Within the strategy, 26 cross-cutting action areas have been identified. It is administered by the National Office of Suicide Prevention (NOSP). The Office engages in a wide range of activities, including training (approximately 22,500 people have been provided ASIST training since 2004, 3,000 in SafeTalk), two mental health awareness campaigns, supporting the work of 15 national organizations working in suicide prevention, and implementing an All Island Action Plan. Funding is provided for 11 Suicide Prevention officers countrywide. An additional €1m in funding was provided to NOSP in 2011 to bring its total budget to €4.2m. The total annual funding for suicide prevention within the HSE (including NOSP) is estimated for 2011 at €8.7m.

Apportioning this to the youth population, given high rates of suicide within this population, may account for approximately €3 m.

Accident & Emergency Care

In 2011, there were a total of 39 Accident and Emergency (A & E) Wards in Ireland, but some were due to close or be downgraded to urgent care status. There has been great concern about overcrowding in A&Es, although this may be somewhat alleviated with the emergence of minor injuries clinics. In the absence of community-based supports, A&Es are often the only option for young people in crisis who cannot access support in other ways. A recent study (Okorie, McDonald, Dineen, 2011) found that in one Irish A&E, 19% of all those who attended for crisis intervention psychiatric care were frequent attenders.

There are approximately 1.2 million presentations annually to A&E departments in Ireland (McGregor & O'Neill, 2007). Although the youth population is 16.7%, assume that perhaps 10% of these are young people in the 12-25 age range (about 120,000 presentations). If one assume further that possibly 20% of these presentations are for psychological distress (a likely underestimate), it may be that youth mental health accounts for as many as 24,000 presentation. It is known that presentations at A&E by young people for Deliberate Self Harm (DSH) alone average about 2,400 per annum. Young people in distress present at the A&E because they have few or no other alternatives to obtain support and are in crisis. The current cost of an A&E visit is €100 (undoubtedly an underestimate of the true cost).

This yields a total potential youth mental health cost of €24 m.

Child Protection and Children in Care

This area of responsibility is undergoing tremendous reform and cultural change as the new Department of Child and Youth Affairs is consolidated and as the Children and Families Support Agency (a new statutory agency) is being planned. This will involve developing new delivery models, developing organization designs at regional and local levels, establishing new administrative structures, implementing new child protection procedures (Children First, 2011), and developing a national case management information system.

The HSE is more transparently involved in youth mental health because of its responsibility for “children in care.” In 2011 there were 6,160 children (including young people) in the care of the State, and this number is expected to rise to 6,526 by 2012. This part of the HSE is responsible for investigating cases of suspected physical, sexual, emotional abuse and neglect. Those cases are then determined as being confirmed as abuse, confirmed as non-abuse, reaching an inconclusive outcome, and having an assessment on-going. A large percentage (77%) of the young people in care at the end of 2009 had been in care for more than a year. Sixty-one percent of the 1,781 cases of suspected child abuse and/or neglect were

“confirmed as abuse with 36% as either inconclusive or assessment on-going.” A substantial percentage of these youth are likely to require long-term care and many are likely to have mental health difficulties. In 2010, 419 were served in residential care, 5,387 in foster care (including with relatives), and 179 in other placements.

The Child Welfare and Protection budget accounted for more than 4% of the overall HSE budget (€587 m) in 2011, but only 3% of the workforce. Due primarily to the increasing number of children in care and significant increases in child protection reports and investigations, the HSE anticipated a significant budget overrun of €70m in 2011.

On 20 June 2012 a report was released indicating that between 2000 and 2010, 195 young people who were in contact with social services died, 122 of them from non-natural causes. Thirty-six of the young people in directly in the care system who died included 17 from non-natural causes. Twenty-seven of the 32 young people in the “aftercare” system who died from non-natural causes. A substantial number, 128 of these young people were known to the HSE.

Assuming 5% of this cost is attributable to youth mental health services and supports, a figure of €32.1 m is allocated.

Health Promotion / Prevention

Health promotion programmes within the HSE focus, to a large extent, on physical health in areas such as control of infectious diseases, national immunisation and vaccination programmes, and emergency planning. There were some expenditures in 2010 related to young people such as:

- Alcohol public awareness campaign – €175,000
- Sexual health campaign – €95,000
- Drugs campaign – €90,000

Perhaps more significantly, a number of community health promotion officers have taken an active role in the development of youth mental health initiatives in Irish communities.

The total budget for Health Promotion in 2011 was €29,447,833, with 206.56 positions allocated.

Assuming that 5% of this spend relates to youth mental health, an estimate of €1.472 m is allocated.

Social Inclusion and Drugs Program

Social inclusion programmes within the HSE encompass the Traveller health, adult homeless, crisis pregnancy, domestic and sexual violence, and the drug

programmes. An expenditure in this category that relates specifically to young people is the crisis pregnancy programme, with an annual budget of €6,772,174. 7.5 WTEs are allocated to this programme. A much larger expenditure is provided for drug and methadone treatment. In 2010, about 9,400 individuals were in receipt of methadone treatment, and 12,500 more received other forms of drug treatment. Most of the €32.7 m expenditure is provided through almost 500 community-based projects, as well as 14 local and 10 regional drugs task forces.

Assuming that 15% of this spend relates to youth mental health, an estimate of €5.92 m is allocated.

Costs Associated with Problem Alcohol Use

Rehm et al. (2004) described the well-known extent to which alcohol is a risk factor for disease.

Alcohol consumption is estimated by the WHO to be the third largest lifestyle risk factor for disease burden in developed countries. Globally, alcohol accounts for 3.2% (1.8 million) of deaths and 4% (58.3 million) of disability adjusted life years (DALYs). Martin, Barry, Goggin, Morgan, Ward and O'Suilleabhain (2010) calculated Irish alcohol-attributable fractions (AAFs) using mortality data from January 1, 2000 to December 31, 2004. The AAF (alcohol-attributable fraction) is the proportion of cases in a population with a particular condition that is estimated to be caused by alcohol. This method quantifies at the population level the known causal contribution of alcohol to all diseases and injuries. The WHO (2000) considers AAF to be one of the best methods available to quantify the harms and possible benefits of alcohol.

Alcohol was estimated by Martin et al. (2010) to have caused 4.4% (6,584) of deaths and 10.8% (131,245) of all-cause person years of life lost (PYLL). As expected, when mortality is examined across the entire life span, chronic conditions were responsible for 2.2 times more deaths than acute conditions (69% versus 31%). Given the focus of this report on adolescents and young adults, it is interesting that 21,479 of the 92,373 years of life lost for males were accounted for by those 10-14, 15-19 and 20-24 years old.

Byrne (2010) completed an economic analysis of the impact of alcohol use in Ireland for the HSE. Byrne's estimate of the total cost of problem alcohol use in Ireland was €3.7 bn (1.9% of GDP in 2007). The macro-level impact of 1.9% of GDP is consistent with estimates by Anderson and Baumberg (2006), based on a review of studies. They found that alcohol misuse in the EU was 1.3% with a range from 0.9% to 2.4%.

Byrne (2010) connected the costs of problem alcohol use to the public policy regimen of excise taxes on alcoholic beverages. In Ireland these taxes are relatively high but their real value has fallen since 1996. While there have been three increases in the excise tax on alcohol since 1994, the taxes on beer have not changed since 1994. Therefore, this decline in real price has made alcohol more

affordable, particularly to young people. It is interesting that the largest cost item in Byrne's estimates is for costs to the health care system of alcohol-related illnesses. From a chronic disease perspective this reflects the long-term medical and other consequences of alcoholism in the health sector of Ireland.

Cost of Problem Alcohol Use (Byrne, 2010)

Costs	€million	% of total costs
Costs to health care system of alcohol-related illnesses	€1,200	32
Costs of alcohol-related suicides	€167	5
Cost of alcohol-related road accidents	€526	14
Cost of alcohol-related crime	€1,189	32
Cost of output lost due to alcohol-related absence from work	€330	9
Cost of alcohol-related accidents at work	€197	5
Cost of alcohol-related premature mortality	110	3
Total	€3,719	

The Health Research Board (2009, 2011, 2012) has produced a number of studies focused on various alcohol-related consequences. These studies are especially relevant for an examination of the economics of youth mental ill health for several reasons: (1) the 2011 My World Survey and a number of other studies of Irish youth have found rather high prevalence rates for alcohol use, frequent use, a high number of drinks consumed in any one session, and large percentages of young people classified as possibly alcohol dependent or hazardous drinkers, (2) the involvement of alcohol in the consequences experienced by adolescents and young adults including fatalities and injuries in road traffic accidents and criminality, (3) the role of alcohol for indirect costs related to premature mortality and disabilities, and (4) the putative potential role of alcohol in sectors like education and social welfare.

Road Traffic Accidents

Several studies of the economic effects of problem alcohol abuse have been conducted in Ireland (Byrne, 2010; Hope, 2007; Hope, 2008; Mongan, Hope, & Nelson 2009; Ramstedt & Hope 2005; Walsh & Walsh, 2011). A disproportionate number of the premature deaths among young people (i.e., years of life lost and the resulting indirect costs to society of their lost productive capacity) are associated with road accidents. In this section the focus will be on the magnitude of fatalities among young men and women, the association of those fatalities to alcohol, and the economic burden of alcohol-related traffic fatalities as well as direct costs.

The table below shows the number of deaths and injuries in Ireland in 2010 by age group and mode of transportation.

Road Traffic Fatalities by age group and mode of transportation, Ireland, 2010
(Top Panel), **Road Traffic Accidents by age group and mode of transportation**
(Bottom Panel)

DEATHS							
Age Groups	Pedestrians	Pedalists	Motorcyclists	Car Drivers	Car	Other Road	Total
0-5	3						3
6-9	0						0
10-14	1						1
15-17	0			2	5		7
18-20	0			8	10	1	19
21-24	6		2	12	12	1	33
25-34	3		4	23	10	5	45
35-44	7		7	8	4	3	29
45-54	7	1	4	6	2	2	22
55-64	7	1		5	0	4	17
65+	10	3		15	2		30
Unknown	0			1	3		4
Total	44	5	17	80	50	16	212
INJURIES							
Age Groups	Pedestrians	Pedalists	Motorcyclists	Car Drivers	Car	Other Road	Total
0-5	72	8			147	9	236
6-9	77	10			100	7	194
10-14	92	36	3	2	144	9	286
15-17	58	17	18	65	174	39	371
18-20	61	11	24	339	335	61	831
21-24	64	18	50	338	262	69	801
25-34	132	109	137	907	419	176	1880
35-44	92	73	71	683	189	145	1253
45-54	69	51	47	432	161	89	849
55-64	88	32	22	276	128	57	603
65+	92	14	4	292	127	23	552
Unknown	26	20	15	122	122	59	364
Total	923	404	391	3506	2308	743	8275

The 10-14, 15-17, 18-20 and 20-24 age groups will be used to reflect premature mortality from traffic accidents for adolescents and young adults. Using the figures on deaths for pedestrians, pedalists, motorcyclists, Car Drivers, Car Passengers, and Other Road events, young people 10-24 years old account for 60 of the 212 deaths (28.3%). These age groups (10-24) account for 2,289 of the 8,275 injuries or 27.7% of all injuries.

The Road Safety Authority in Ireland uses a methodology developed by Goodbody Economic Consultants (2004) for estimating costs associated with the 185 fatal collisions and with serious, minor, and material damage that occurred in 2010.

The estimated cost of all road collisions in 2010 was €853 million. This represented a decrease in the cost of collisions of €121 million when compared to the 2009 figure. Bedford, McKeown, Vellinga and Howell (2006) estimated that alcohol was a contributory factor in 36.5% of all fatal road crashes in Ireland in 2003.

- **Fatal Road Traffic Accidents, 2010**

Young people represented 28.3% of all road accident fatalities in 2010.

Estimates of the Cost of Road Traffic Accidents, 2010

Type of Road Accident	Number Collisions	Cost Per Collision	Total Cost €
Fatal	185	€2,583,311	€477,912,535
Serious	409	€345,121	€141,154,489
Minor	5,186	€33,991	€176,277,326
Material Damage	21,305	€2,719	€ 57,928,295
Total	27,085		€853,272,645

Deaths, young people ages 10-24 (28.3%) x total costs: €135,249,107

Bedford, et al. estimate of alcohol-related traffic fatalities (36.5%) x cost death 10-24: €49,365,294

- **Road Traffic Injuries, 2010**

In 2010, Gardai recorded 27,085 motor vehicle collisions. Of these, 409 were classed as serious collisions.

- **Serious Injury Accidents, 2010**

Total cost of serious injuries from road traffic accidents, 2010: €141,154,189

Percent youth 10-24 yrs old, all road accidents (27.7%) x cost serious collisions: €39,099,710

Estimated, alcohol-related traffic fatalities (36.5%) x cost death 10-24: €14,271,394

- **Minor Injury Accidents, 2010**

Total cost of minor injury road traffic accidents, 2010: €176,277,326

Percent youth 10-24 yrs old, all road accidents (27.7%) x cost minor collisions: €48,828,818

Estimated, alcohol-related traffic minor injuries (36.5%) x cost minor inj, 10-24: €17,822,518

- **Material Damage Accidents, 2010**

Total cost of material damage accidents, 2010: €57,928,295

% youth 10-24 yrs old, material damage road accidents (27.7%) x costs damage:
€16,047,137

Estimated alcohol-related traffic fatalities (36.5%) x cost damage: €21,143,827

**Total estimated youth cost portion of alcohol-related road accidents =
€102,603,033**

**Direct cost to government attributable to youth mental health (10%) =
€10,260,303**

Alcohol-Related Crime

In the economic study of problem alcohol use conducted by Byrne (2010), two areas accounted for the largest costs: cost to the health care system for alcohol related illness that is dominated by consequences of chronic alcohol consumption over a long period of time and cost of alcohol-related crime. Neither of these is specific to young people who are, for the most part, not involved significantly with law enforcement, the courts or the prison system. However, there are three types of crime where young people are prominent: (1) drunkenness, (2) public order offenses, and (3) assaults.

From 2003-2007 there were 59,154 arrests made for drunkenness; 37.5% (22,183) of these were committed by individuals 18-24 years old. There were 159,074 public order arrests in the same period, 42% (66,811) of which were committed by 18-24 year olds. Finally, there were 66,413 arrests for assaults, 35.5% (23,577) of which involved young people 18-24 years old.

In total, the number of offenses attributable to 18-24 year olds for drunkenness, public order, and assaults for the period 2003-2007 is 112,571. An overwhelming majority of these involved alcohol. As Byrne (2010:25-28) notes, it is difficult to disentangle when alcohol is a causal factor versus a contributory factor.

Byrne does make estimates of the cost of all alcohol related crime (for everyone of all ages). The figure is €319 million. Then, using data from Scotland and the UK, he derives an estimate of the total cost of crime in Ireland in 2007 including criminal justice system costs, property/health and victim services costs, costs in anticipation of crime (i.e., security devices and systems), and cost of crime because of lost productive output. The total estimate is €1.19B. Note again that this figure is not specific to young people, but instead involves costs for individuals of all ages 18 years old and older in Ireland.

Ignoring all the other costs and just focusing on the cost of Garda Síochána resources devoted to alcohol-related crime, if adolescents and young adults were responsible for only 5% of these law enforcement costs, primarily because of the effects of alcohol on young people, this would equal €9.55M.

Total Estimated Youth Mental Health Costs to Health System

Summary of Direct and Indirect Costs Associated with Youth Mental Health	
Long Stay Residential Care	€17,354,750
Primary Care	€20,000,000
Psychiatric Medication	€20,000,000
CAMHS	€33,000,000
AMH	€40,000,000
Suicide Prevention	€3,000,000
Accident & Emergency	€24,000,000
Health Promotion	€1,472,000
Substance Abuse Prevention / Treatment	€5,920,000
Child Welfare/Protection	€32,100,000
Alcohol-Related Traffic Accidents	€10,260,303
Alcohol-Related Crime	€9,550,000
SUBTOTAL	€216,657,053

Department of Children and Youth Affairs (DCYA)

The Department for Children and Youth Affairs (DCYA) is a new department created with effect on 3 June 2011. The former Office of the Minister for Children and Youth was Vote 41; DCYA is Vote 43. It was created to unite and integrate a range of policy and services units from across government (Health; Education and Skills; Justice and Equality; and Community, Equality and Gaeltacht Affairs), to include the Office of the Minister for Children and Youth Affairs (OMCYA), the National Education Welfare Board (NEWB), the Family Support Agency, and the Family Mediation Service, and some units from the Irish Youth Justice Service. It is also proposed that a new Child and Family Support Agency (CFSA) be created within which funding related to child and family support services (now housed primarily within the HSE) will be transferred to DCYA.

Programmes & Services

There are a wide range of programmes and initiatives now operating within the DCYA that relate to young people specifically, with additional growth expected with the possible advent of the Child and Family Agency. Descriptions and 2011 expenditures from these activities are delineated in detail below, and are taken from a document 11 November 2011 entitled, Comprehensive Review of Expenditure for Vote 43, by the DCYA.

A summary table at the end of this section allocates the portion of each of these expenditures to youth mental health.

Centre for Effective Services (CES) - €4m in 2011

“The Centre for Effective Services was established in 2008 and is 50% funded by Government (25% each from DCYA and DECLG) and 50% by AP. The intention is to provide publicly funded services with access to relevant expertise on a timely and supportive basis. Funding departments and AP can access CES advice and DCYA has a work plan in place which provides for key aims of promoting and applying an evidence informed approach promoting collaborative joined up working (CSCs) and building capacity (skill transfers etc). The Centre employs 16 non-public service staff who provide technical and organisational expertise to support the design, implementation and on-going review and development of evidence-informed services for children, youth and families. This total staffing has responsibilities in servicing the priorities of all funders. The Memorandum of Understanding commits the Departments and AP to provide €10.4m over a 5 year period from 2008. In 2011, both Departments are providing funding of €0.400m and are each committed to €0.725 each in 2012 and €0.360m in 2013.”

National Longitudinal Study - €7.920m in 2011

“As part of the National Children’s Strategy 2000-2010, a National Longitudinal Study of Children in Ireland is being undertaken by the ESRI and Trinity College

University 17 on behalf of the Government. The purpose is to study the factors that contribute to or undermine the well-being of children in contemporary Irish families and, through this, to contribute to the setting of effective and responsive policies relating to children and to the design of services for children and families. During 2008-2011, a total of €17m will have been spent on the Study and the ESRI and Trinity are contracted up to 2013 to complete the Study's first phase. The contractual commitment for Phase 1 of the Study will conclude at the end of 2013, with the 2011 allocation reducing from €7.920m to zero by 2014. The costs due to be paid in 2012-2014 will amount to €3.559 in 2012, €2.005m in 2013 with no currently contracted costs in 2014."

Voice of the Child and Young People's Participation - €1.202m in 2011

"One of the three national goals under the National Children's Strategy 2000-2010 is to ensure that children and young people have a voice in the design, delivery and monitoring of services and policies that affect their lives at national and local level. This programme oversees the development and improvement of structures that promote and enable participation by children and young people including crosscutting participation initiatives with other departments, agencies and organisations, and effective engagement with children and young people.

Youth Cafes - €1.374m in 2011

"The youth café funding scheme was launched in April 2010 with total funding allocated of €1.500m. Under the scheme 16 new cafés will be funded with a further 50 existing sites receiving funds to upgrade facilities. €0.126m was spent in 2010 and €1.374m is expected to be spent in 2011."

Young People's Facilities and Services Fund (YPFSF) Round 1 - €7.192m in 2011

"The Young Peoples Facilities and Services Fund provides services and facilities to divert 'at risk' young people in disadvantaged areas from the dangers of substance misuse. In the past a number of projects were mainstreamed and transferred from the DCRAGA to DES and subsequently to OMCYA and now DCYA. In 2011, the YPFSF Round 1 has a current allocation of €7.192m which supports 104 projects used by 105,000 young people. €5.76m of the 2010 funding was used to fund the pay costs of 129 staff who are employed by the 104 projects. 257 CE and sessional staff are also employed. The remaining €2.01m of 2010 funding was used to meet programme/overhead costs."

Young People's Facilities and Services Fund (YPFSF) Round 2 - €15.562m in 2011

"The Young People's Facilities and Services Fund (YPFSF) Round 2, was established in 1998 to assist in the development of preventative strategies/initiatives in a targeted manner through the development of youth facilities, (including sport and recreational facilities) and services in disadvantaged areas where a significant drug problem exists or has the potential to develop, The YPFSF was assigned to DCRAGA in 2002 and subsequently to the OMCYA in 2008. In 2011, the YPFSF Round 2 has a capital allocation of €0.8m and a current allocation of €15.562m which supports 178 community centres, youth facilities and sports clubs which are used by 535,000 young people. Approximately €11.2 million of

the 2010 funding was used to fund the costs of 276 staff who are employed by the 178 projects. 397 CE and sessional staff are also employed. The remaining €5.49 million of current funding is used to meet overhead costs.”

Local Drugs Task Force Projects - €1.433m in 2011

“In January 2011 responsibility for 21 Local Drugs Task Force projects was transferred from the Department of Education and Skills to the Youth Affairs Unit of the OMCYA. These projects, through a variety of programmes and activities, seek to encourage young people not to engage in drug-taking. 7,000 young people in the 10-14 age range participate in the 21 projects. €1.228m of the 2010 funding was used to fund the pay costs of 25.5 staff who are employed by the projects. €0.266m of the 2010 funding was used for non-pay costs to meet project overheads. Each project must apply annually for funding. Funding is distributed to the projects through 3 VECs.”

Special Projects for Youth Scheme - €18.156m in 2011

“This programme was established in the mid-1980s to support “special” out of school projects, in non-formal education settings, for disadvantaged young people. The programme supports 181 projects which are used by 103,000 young people. €14.998m of the 2010 funding was used to fund the pay costs of more than 400 staff employed by the projects. In addition, some 460 other staff are funded through funding received from other agencies/sources. €4.478m of the 2010 funding was used for non-pay programme costs. Funding is distributed to the projects through 19 VECs and 4 national youth work organisations. These young people are assisted in their personal and social development thereby increasing their life chances and increasing social cohesion. Progress reports indicate improved outcomes for young people engaged in these projects including improved self-worth, resilience and coping skills, increased social inclusion and social integration and improved school attendance and re-engagement with formal education process.”

Youth Information Centres - €1.862m in 2011

“This programme was established in mid-1980s to provide information and advice to young people. The programme funds 31 centres which are used by c 175,000 young people in the 15-17 age range. The majority of the centres also act as relays for a European Information Service, Eurodesk. €1.38m of 2010 allocation was used to fund the pay costs of some 34 staff who are employed by the centres as well as 30 other CE/sessional workers. €0.626m of the 2010 allocation was used for non-pay costs of the centres. Funding is distributed to the projects through 18 VECs. The information provided to young people is on matters relevant to their personal, social and vocational development with a view to enabling them to disseminate it in a format and style which they can understand, and in settings that they find comfortable and easy to use, using all available forms of media and all forms of contact to reach different groups of young people.”

Youth Service Grant Scheme - €11.444m in 2011

“This (universal) scheme was established in the mid-1980s following publication of the Costello Report (1984) and the resultant National Youth Policy. €9.052m of

the 2010 annual YSGS Grant-in-Aid allocation, was made up of pay costs for some 228 staff employed by the organisations and €3.275m was non-pay. Funding is distributed to the organisations directly and supports 228 core head-quarter posts of 31 national voluntary youth organisations. In the context of the review of youth service programmes it is intended to explore the scope for greater administrative efficiencies through greater sharing of resources and expertise amongst organisations, use of shared services and other efficiencies.”

Local Youth Clubs Grant Scheme - €1.035m in 2011

“This universal scheme was established in 1999 and revised in 2008. It supports voluntary youth club activities for young people with priority being given to young people between the ages of 10 and 21. There are 1,600 clubs supported which are used by 89,000 young people. The maximum grant is €3,000 per club per annum. Staff-led projects funded under other youth programmes cannot apply for funding under this scheme. As these are volunteer-led clubs, all funding is used for programme delivery and is non-pay related. Funding is distributed to the clubs through 31 VECs.”

EU Youth in Action Programme - €0.527 in 2011

“The EU Youth in Action Programme 2007-2013 is implemented in Ireland by Léargas, the Exchange Bureau. Léargas is a body set up to operate EU exchange programmes in Ireland on behalf of DES, the HEA and DCYA. DCYA is the National Authority for this programme and provides €2m in annual Grant in Aid funding to meet the operational costs of the organisation including the costs of 6.86 Leargas staff. The EU pays for the programme costs which are distributed by Leargas. In 2010, 132 projects involving almost 1,300 young people were funded. Other Léargas programmes have separate State funding sources. The programme is operated under an agreement between DCYA and the EU Commission and is scheduled to run until 2013.”

Gaisce, the President's Award - €0.737m in 2011

“This programme was established in 1985 under the patronage of the President to encourage young people to set and achieve a challenge in a non-competitive environment. Over 17,000 young people registered for the award in 2010. €0.670m of the 2010 allocation was used to fund the pay costs of 9 staff (7.5 FTEs) who are employed by Gaisce.”

National Educational Welfare Board (NEWB) - €9.731m in 2011

“The NEWB was established in 2002 under the Education (Welfare) Act 2000 as the statutory agency with responsibility to ensure that every child attends school regularly, or otherwise receives a certain minimum education, and provides a service to the most disadvantaged areas and the most at-risk children and young people. It has a statutory responsibility to ensure that every child attends school regularly, or otherwise receives a certain minimum education. The NEWB's responsibility for the Education Welfare Service (EWS) was expanded in 2009, as part of the Integration of Educational Services, to include responsibility for administration of the Home School Community Liaison (HSCL) Programme, the School Completion Programme (SCP) and the Visiting Teachers Service for

Travellers (VTST). With the cessation of the VTST in September 2011, at risk Traveller children are now supported through the general DEIS programme. In 2011, the NEWB's allocation amounts to €9.731m, including the education welfare service and administration costs for the National Co-ordination teams of the HSCL and SCP programmes. Over €6m of the NEWB's funding is in respect of pay-related costs. Non-pay costs comprise some €1.060m for office rent and service charges across the country, €0.380m for legal fees including District Judges requiring Education Welfare Officers to have legal representation in court, and €1.060m for ICT/Telecommunications, Travel and Subsistence, Professional Development and Home Education Assessment."

School Completion Programme - €30.256m in 2011

"The School Completion Programme (SCP) was launched in 2002 following on from 2 previous early school leaving initiatives. The SCP discriminates positively for children and young people aged between 4 and 18 years who are at risk of early school leaving. Its objective is to retain children and young people in the formal education system to completion of senior cycle or equivalent and improve their quality of participation and educational attainment. The SCP's 2011 allocation is €30.256m and supports 124 projects across the State, which link with 224 second level and 473 primary schools, targeting 38,000 pupils who are at specific risk of early school leaving as well as whole classes and, in some instances, whole schools to avoid stigmatisation of the targeted group. The majority although not all of such schools are designated DEIS schools. The SCP uses local management committees to develop a collaborative programme of in-school, after school and holiday time interventions that support and meet the needs of local children and young people at risk of early school leaving. The SCP also supports the Teenage Parenting Support Programme for the education element of the Teenage Parenting Support Programme (TPSP), implemented by the Crisis Pregnancy Agency/HSE, which assists over 500 teen parents to stay in formal education. In addition, the SCP supports the Schools Business Partnership (SBP) to facilitate mutually beneficial links between schools and local businesses and 160 SCP second level schools are matched with companies in the local community. The funding covers the pay costs of a programme coordinator and operational costs."

Family Support Agency (FSA) - €31.700m in 2011

"The FSA was established under DSFA in 2003 under the Family Support Agency Act 2001. The Family Support Agency has a statutory remit to conduct or commission research into matters related to the Agency's functions or such other matters as the Minister may request and to promote and disseminate information in relation to marriage and relationships, family mediation, parenting and related matters. It transferred to DCEGA in 2010 and to DCYA in 2011. All non-contract staff are public servants except for two civil servants who are seconded to the Agency. Its total allocation in 2011 is €31.700m of which €1.858m is used to meet the operational costs of the FSA."

The Family Resource Centres (FRCs) programme - €15.897m in 2011

"The FRCs are centres where families and groups can access information and advice, support, education and training, childcare services and after-school clubs. People from marginalised groups and areas of disadvantage are involved at all levels of the 107 FRCs, serving on Voluntary Management Committees and/or contributing to activities and programmes. 258.5 staff are employed. Of the FRC's 2011 allocation of €15.897m, approximately €14m relates to pay costs. The balance covers operational overheads including €0.700m paid to 2 contracted regional support agencies, €0.521m paid to 5 specialist support agencies (Pavee Point, DESSA, Women's aid, Family Support Network (Drugs) and Blue Drum (community development through the arts)), and €0.315m for supports including data systems, a national forum, Garda vetting and family support training for staff and volunteers. FRCs provide a range of interventions funded through a variety of programmes, many of which are now contained within Vote 43, and work closely with local schools. These include initiatives to retain children and young people in school, breakfast clubs, homework clubs, youth cafés, community based youth work, facilities and services for young people and work on issues of particular concern/risk to young people e.g. alcohol and drugs prevention. Many FRCs are located in premises leased from local authorities, the HSE or local parishes/community councils for nominal rents. Fewer than 10% are owned by the FRCs."

Counselling Grants Scheme - €10.678m in 2011

"The FSA provides funding to voluntary and community organisations providing marriage, relationship, child and bereavement counselling services. The scheme was established in 1994 to assist marriage guidance and counselling services and was extended to include child counselling in parental separation and bereavement. The 2011 funding allocation is €10.678m. €7.002m of this is paid on a multi-annual basis to just 28 organisations, with 2011 the last year of the cycle, and the balance is paid to a further 580 organisations."

Family Mediation Service (FMS) - €2.949m in 2011

"The FSA is currently responsible for the Family Mediation Service (FMS) which provides a free, professional service to couples who have decided to separate to assist 30 them to negotiate the terms of their separation or divorce through the help of a trained mediator. The 2011 FMS allocation of €2.949m consists of €1.361m for staff costs, €0.865m for accommodation and €0.722m for general administration."

Centres for Young Offenders - €17.100m in 2011

"Children's detention centres provide residential care for children remanded or sentenced to detention by the Courts. It is a principle of the Children Act 2001 that detention should be a last resort and for as short a time as possible. The objective of the detention centres is to provide for the care and educational needs of the children and address offending behaviour in order to prepare them for return to the community as quickly as possible. In addition to specialised education programmes, the centres provide individual care programmes tailored

to each child's needs and risks. Staff in the centres come from multidisciplinary backgrounds and include care staff, night supervisors, teachers, nurses, administrative and ancillary staff. Psychological and medical services are provided when necessary. Funding for the children's detention centres will transfer to Vote 43 from January 2012. In 2011, the funding allocation amounts to €17.100m (€19.086m in 2010) of which €15m is pay-related and €2.100m is in respect of non pay costs. "

Irish Youth Justice Service (IYJS)

"From January 2012, the IYJS functions in relation to children's detention and remand centres will transfer to DCYA and the remaining areas of IYJS, which will stay under the aegis of DJE, will be co-located with DCYA. The IYJS was established in 2006 to lead and drive reform in the area of youth justice guided by the principles of the Children Act 2001. In addition to managing and developing children's detention facilities, it funds organisations and projects providing services, including Garda and Probation Projects, to young people aged less than 18 years who find themselves in conflict with the law. These children may be involved with An Garda Síochána, the Probation Service and the Courts Service.

The following areas of IYJS are not transferring to DCYA although IYJS staff working in these areas will be co-located with DCYA:

- *Garda Youth Diversion Projects (YDP)* . The YDP programme tackles anti-social behaviour, builds on community policing and supports partnerships between local communities and local Gardaí. It provides alternative programmes for juvenile offenders through the juvenile liaison scheme and Garda Juvenile Diversion Programme and restorative programmes.
- *Young Persons Probation Projects (YPP)*. The YPP programme supports the use of community sanctions, such as community service orders as an alternative to detention, to rehabilitate young offenders and keep them from further involvement in the criminal justice system.

Total Estimated Youth Mental Health Cost to the Child & Youth Services System

Programme	Allocation to YMH (%)	Rationale
Voice of the Child and Young People's Participation (€1.202m in 2011)	€60,000 (5%)	Youth participation/health promotion
Youth Cafes (€1.374m in 2011)	€673,500 (50%)	Social/recreational opportunities with strong MH component
Young People's Facilities and Services Fund (YPFSF) Round 1 (€7.192m in 2011)	€2,157,000 (30%)	High risk youth, substance misuse prevention
Young People's Facilities and Services Fund (YPFSF) Round 2 (€15.562m in 2011)	€4,668,000 (30%)	High risk youth, substance misuse prevention
Local Drugs Task Force Projects (€1.433m in 2011)	€716,000 (50%)	High risk youth, substance misuse prevention
Special Projects for Youth Scheme (€18.156m in 2011)	€5,446,000 (30%)	High risk youth, personal development
Youth Information Centres (€1.862m in 2011)	€186,200 (10%)	Opportunities
Youth Service Grant Scheme (€11.444m in 2011)	€1,144,000 (10%)	Youth programmes with MH components
Local Youth Clubs Grant Scheme (€1.035m in 2011)	€103,000 (10%)	Youth programmes with MH components
Gaisce, the President's Award (€0.737m in 2011)	€73,700 (10%)	Youth programme with MH components
National Educational Welfare Board (€9.731m in 2011)	€973,000 (10%)	MH implications for school bonding
School Completion Programme (€30.256m in 2011)	€3,025,000 (10%)	MH implications for school bonding
Family Resource Centres (€15.897m in 2011)	€1,589,000 (10%)	MH components of youth & family
Counselling Grants Scheme (€10.678m in 2011)	€1,067,000 (10%)	Youth mental health services
Family Mediation Service (€2.949m in 2011)	€294,000 (10%)	MH & family conflict
Centres for Young Offenders (€17.100m in 2011)	€3,420,000 (20%)	MH components of youth crime
SUBTOTAL	€25,595,400	

Department of Education and Skills (DES)

The Department of Education & Social Skills is responsible for the structure and functioning of three developmentally organized levels of education (primary, post-primary, higher education). Level 2 (post-primary) and Level 3 (higher education) are where adolescents and young adults are served. In 2010 there were 356,107 pupils in Ireland's post-primary schools, most of whom were 12-17 years old. There are three general types of post-primary schools: (1) Secondary (186,622), (2) Vocational (114,761), and, (3) comprehensive and community (54,724). About a quarter of post-primary schools received enhancements via the DEIS (Delivering Equality in Schools) system for schools in disadvantaged areas where the chronic absenteeism rates are substantially higher than in non-DEIS schools.

DES is a large department with a budget in 2011 of €8,749 bn. The Department is responsible for primary, post-primary, and post-secondary education throughout Ireland. In 2011, there were approximately 103,000 public servants employed by DES, accounting for about a third of the public service. Young people are served in 730 post-primary schools.

Special Education

In 2011, there were 11,523 special education teachers, of which 5,500 were resource/learning support teachers, 4,450 positions primary school general allocation teachers, 1,155 teachers in special schools, and 418 primary special classes. The cost for these positions was €656m in 2011. Additionally, within the special education programme, the special needs assistant scheme is budgeted for €365m, funding an additional 10,575 special needs assistants (2,065 at post-primary level). The preponderance of these resources appears to be aimed at the primary level, and it does not appear that young people with emotional and behavioural difficulties receive many resources within a special education context.

Given the cost of over €1 bn, and assuming that perhaps 25% of these resources are expended at the post-primary level (€250 m), and that 5% of the effort with these young people is directed toward behavioural and emotional issues that impact on learning, a figure of €12.5m attributable to youth mental health services seems appropriate.

National Behaviour Support Service (NBSS)

In contrast, the focus of the National Behaviour Support Service (NBSS) is exclusively on post-primary students. Established by DES in 2006, it uses a consultation model to assist partner schools in addressing current behavioural concerns on three levels, targeted intervention, and intensive individualised support. Behavioural interventions address the academic literacy, learning, social, emotional and behavioural needs of students in partner schools. According to their website, the NBSS is working with over 90 post primary schools throughout Ireland, with 30 Behaviour Support Classrooms funded in 2009 (serving 648

students with behavioural difficulties in an alternative school context.

The cost of the service in 2011 was €2.22m, according to an online communication from Minister Quinn. All of this seems appropriate to allocate to youth mental health.

High Support Special Care Units

DES has responsibility to provide education services for young people who are deemed out of control and in residential care settings. The salaries of teachers in such special care units, youth encounter projects (non-residential), and line projects are funded by DES.

The total budget for this service is €5.7 million, a quarter of which (€1.425 m) seems attributable to youth mental health given the population being served.

Youthreach

Youth is an integrated programme of education, training and work experience for young people aged between 15 and 20 who have left school early without any qualifications or vocational training. It provides opportunities for these students to receive education at NFQ Levels 3-5 to enable progression to further education and training or higher education or employment. In 2010, 3,692 learners were served. The 2011 expenditure for the Youthreach programme was €67 m. Given the focus of the programme, much of its costs seem attributable to youth mental health.

For the purposes of this analysis, a 20% figure will be employed (€13.4 m).

National Educational Psychological Service (NEPS)

NEPS provides a range of services both direct and indirect which support the personal, social and educational development of all children in primary and post-primary schools. In 2010/2011, NEPS current employed 171 psychologists, an increase of 13 on the 2009 figure. The Renewed Programme for Government 2009 provided for 210 posts to ensure full coverage of schools by NEPS psychologists, however under the terms of the National Recovery Plan 2011 - 2014 a cap of 178 was applied. During 2010 NEPS developed a Continuum of Support Structure for Post Primary schools relating to the provision of support for students with special education needs including social emotional health difficulties. NEPS has also had input into the Inter-Departmental Committee on Health Promotion and Suicide Prevention in relation to the development of a framework in this regard for operation within Post-Primary Schools.

The 2011 cost for NEPS was €18,629 m. Assuming 30% of this was for young people ages 12-18 (post-primary), the allocation to youth mental health would be €5.58 m.

School Guidance Teachers

Guidance counsellor positions in schools are undergoing a drastic rescission due to budget cuts. Previously, they were allocated as an ex-quota basis, with positions provided in relation to student enrolment and levels of student disadvantage. This allocation formula will be removed, with the effect of making “guidance teacher” positions part of the regular allocation to a school. This removes the incentive/requirement to place priority on employment of a guidance counsellor, and is likely to hit disadvantaged schools hardest. The Institute of Guidance Counsellors estimates that 240 such positions will be lost in second level schools. To a very large extent, guidance personnel in schools concentrate on career development and preparation for third level education. Some are engaged in personal counselling, but it is a relatively small proportion.

It was not possible to obtain a 2011 costing for school guidance services.

Social Personal and Health Education (SPHE)

This programme is a mandatory part of the curriculum at the junior cycle level, and is designed to promote positive mental health and adjustment. At post-primary level, the cost of implementing the SPHE curriculum is primarily in relation to the SPHE Support Service, established to assist schools with implementation of the SPHE at Junior Cycle level.

It was not possible to obtain a 2011 costing for this service,

DEIS (Delivering Equality of Opportunity in Schools)

DEIS is a programme designed to ensure that the educational needs of students in disadvantaged communities are met. It focuses on attendance, progression, retention and attainment for these students. In 2011, 200 post-primary schools were part of the programme, and received support in the form of lower pupil teacher ratios, Home-School Community Liaison services, enhanced guidance services, and access to the school completion programme, among others. The total budget for DEIS was €103m. It is not clear what proportion of these resources was used for post-primary students, but assuming a 22% level (proportion of schools) yields an overall figure of €22.66m.

Assuming a mental health component of this total yields an estimated youth mental health expenditure of €2.26m.

Higher Education Mental Health Supports

Some higher education institutions provide support services such as institutional-based counselling, mental/psychiatric services or general learning support. For example, in Trinity College Dublin, there is a specialized occupational therapy mental health support service called Unilink, within the Disability Service, which is part-funded by the Fund for Students with Disabilities. Additionally, institutions have developed online information services to assist students with mental health conditions.

In the University sector a number of College Health Services have part-time health promotion officers who run health promotion weeks and develop educational material focusing on mental health, sexual health, nutrition, exercise and alcohol /drugs.

.Learning support services provided to students with mental health difficulties include one-to-one specialist tuition and subject specific tuition. One-to-one specialist tuition provides students with organisation, communication and learning skills to cope with the demands of social, personal and academic integration into Higher Education. Additional subject specific tuition may be provided to compensate for lectures missed due to absences, hospital appointments, effects of medication etc. Due to the nature of the difficulties experienced by this group of students, they require additional support to ensure that they understand the material covered in lectures.

It was not possible to obtain a 2011 costing for Third Level mental health services.

Unattributable Indirect Costs to Government for Education-Related Problems

There are two places where youth mental ill-health may be associated with direct and indirect costs: (1) chronic absenteeism, defined as missing 20 or more days of school (in 2010, 16.9% of all students), and (2) early school leavers who do not acquire literacy and numeracy skills and competencies. Conceptually, chronic absenteeism and early school leavers are best defined as problems of attrition and retention. Among those who complete the Leaving Certificate, some go into universities or technical institutes, but not all are successful. This is, again, issues of attrition and retention.

There is a dearth of research on chronic absenteeism in the Irish school system (personal communication, Peter Archer, Educational Research Centre, June 2012). The most comprehensive study focused on comparing early school leavers with those who are Leaving Cert leavers. Smyth and McCoy (2009) made the following estimates, most of which are direct costs.

Outcomes, Potential Costs, and Cost Estimates for Early School Leavers Compared to Leaving Cert Leavers, Smyth and McCoy, 2009

Outcomes	Potential Costs	Estimates
Unemployment	Welfare payments	€12,300 per early school leaver
Unemployment	Income tax foregone	€17,000 per early school leaver
Lone parenthood	Welfare payments	€ 4,000 per female early school leaver
Health	Utilisation of health services	Did not estimate, assumed that health expenditures on early school leavers would be considerably larger than for Leaving Cert leavers
Crime	Cost of imprisonment and other services	<ul style="list-style-type: none"> - Prison place cost in 2007 was €97,700 - 46.6 per 1,000 for early school leavers - 1.6 per 1,000 for Leaving Cert leavers - Assumes 1 year in prison over lifetime - €280M is differential between early school leavers and Leaving Cert leavers

Each year in Ireland, there are about 9,000 individuals that could be considered early school leavers, about 2-3 percent of all students in Level 2. Considering nothing but unemployment and the welfare costs of €12,300, the ultimate total cost estimate for this one item is €110,700,000. It is not possible with existing data to know what percentage of early school leavers are leaving school because of mental ill-health.

Total Estimated Youth Mental Health Cost to the Education System

Programme	Allocation to YMH (%)
Special Education	€12,500,000
National Behaviour Support Service (NBSS)	€2,220,000
High Support Special Care Units	€1,425,000
Youthreach	€13,400,000
National Educational Psychological Service (NEPS)	€5,580,000
School Guidance Teachers	n/a
Social Personal and Health Education (SPHE)	n/a
DEIS (Delivering Equality of Opportunity in Schools)	€2,260,000
Higher Education Mental Health Supports	n/a
SUBTOTAL	€31,805,000

Department for Social Protection (DSP)

This is by far the most complicated and complex department to examine regarding expenditures. At €20.620 billion in 2011, it accounts for about 40% of all current government expenditures. The Department of Social Protection (Vote 38 and Social Insurance Fund) penetrates every segment of society. The Department administers a large array of benefit and entitlement schemes, many of which are relevant to youth mental health, given the well-known negative association between poverty and well-being.

The primary function of the DSP is to provide “...well-designed income supports to households with children so as to ensure their economic security in line with the objectives of the National Children’s Strategy. Such supports...include universal financial support to families with children as a contribution to the cost of raising children and further targeted support to those who are at risk of poverty in a way that minimises disincentives for parents to take up paid work.”

The chart below suggests the DSP schemes that are most relevant to children and families, and indicates that 2011 estimate of expenditure.

Many other programmes, far too numerous to mention, benefit individual young people indirectly. A total of 1.4 million families receive a social welfare payment each week. When qualified adults and children are included, almost 2.1 million people in Ireland benefit from these weekly payments. Some 600,000 families receive child benefit payments for over 1.2 million children each month.

It is impossible to identify a specific monetary value for the contribution of the Department of Social Protection to youth mental health. However, it is appropriate to assert that this Department, through its many benefit and entitlement schemes, is contributing to youth mental health in substantial ways.

DSP Expenditure for Children and Families, 2011

Scheme	2011 Budget
Child Benefit	€2,066,700,000
Qualified Child Increase : Working Age Schemes	€664,600,000
Qualified Child Increase : Retired and Older People Schemes	€4,300,000
Back to School Clothing and Footwear	€82,800,000
School Meals Schemes	€35,000,000
Widowed Parent Grant	€6,000,000
Family Income Supplement	€199,300,000
Guardian’s Payment	€15,400,000
Total Expenditure	€3,074,100,000

Assuming, conservatively, that allocating 1% of the budget for children and families alone would yield an annual cost factor of €30,741,000.

Department of Justice and Equality

This Department encompasses elements of Vote 19 (Justice, Equality, and Law Reform - €397 m in 2011), Vote 20 (Garda Síochána - €1.503 bn in 2011), Vote 21 (Prisons - €313 m in 2011), Vote 22 (Courts Services -101.1 m in 2011), and Vote 23 (Property Registration Authority - €35.6 m in 2011). The gross total of all of these components is €2.43 bn.

Healthcare in Prisons

The 2011 cost of healthcare in prisons was €18 m. It is not clear what proportion of this relates to mental health care.

Irish Youth Justice Service

This programme element was discussed within the DCYA section, because certain components were transferred to that department in 2011. As reported by Justice and Equality, the total cost of the service in 2011 was €37,223,000. Programme components that did not transfer to DCYA include the Garda Youth Diversion (GYD) Projects and the Young Persons Probation (YPP) programme. In 2011, the funding allocation for these services amounted to €17.1 m.

Garda Youth Diversion

The youth diversity programme addresses anti-social behaviour, builds on community policing, and supports partnerships between local communities and Gardaí. It provides alternative programmes for juvenile offenders through the juvenile liaison scheme restorative justice strategies. There are presently 100 Garda Youth Diversion community-based projects in Ireland. Most operate through youth organisations such as Foroige, Catholic Youth Care, Youth Work Ireland, and Orga Chorcaí. In 2010 there were 5,480 young people involved in these projects. Of the young people served, 71% were males, 23% were under the age of 14, and 67% between 14 and 17 years old.

Young Persons Probation Projects (YPP)

The YPP programme supports the use of community sanctions, such as community service orders as an alternative to detention, to rehabilitate young offenders and keep them from further involvement in the criminal justice system. It is a specialist division of the Probation Service, and works with young people aged 12-18.

The proportion of the expenditures attributable to youth mental health is limited, as a function of the transfer of most activities to DCYA.

A conservative 20% allocation of the remaining Irish Youth Justice Service expenditure amounts to €3.42m.

Summary of Estimated Direct Costs of Youth Mental Ill-Health to Government

Department	Estimated Cost
DoH & HSE	216,657,053
DCYA	25,595,000
DES	31,805,000
DSP	30,741,000
DJE	3,420,000
SUBTOTAL	€308,218,053



What are we currently spending on youth mental health (12-25 years) in Ireland?



.....
2011 EXPENDITURES RELATED TO YOUTH MENTAL HEALTH ACROSS ALL DEPARTMENTS OF GOVERNMENT



€308,218,053

HEALTH\HEALTH SERVICE EXECUTIVE
 CHILDREN AND YOUTH AFFAIRS
 EDUCATION AND SKILLS
 SOCIAL PROTECTION
 JUSTICE AND EQUALITY

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