



## **Social and economic cost of eating disorders in the US**

Report for the Strategic Training Initiative for the Prevention of Eating Disorders and the Academy for Eating Disorders

June 2020

More than **28.8 million Americans** alive today will have an eating disorder at some point during their lives – either in the past, present or future.

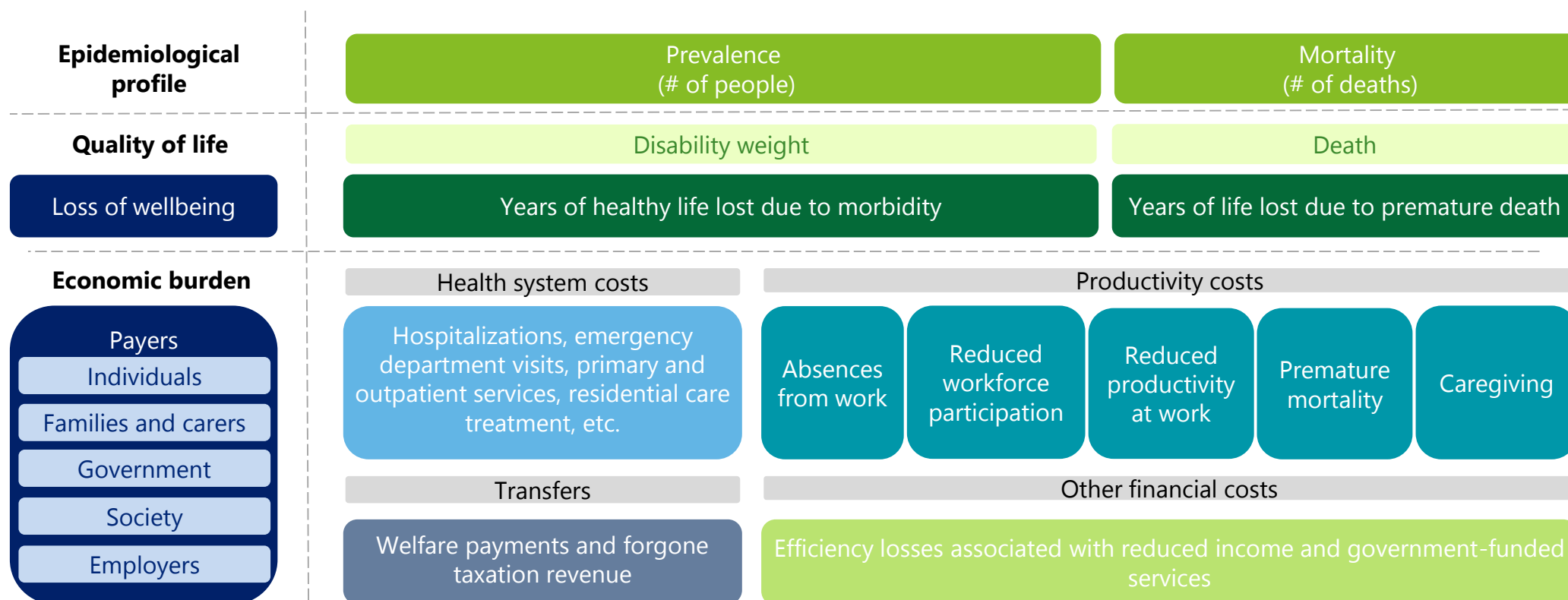
**1.9 million children** alive today will have an eating disorder before they are 20 years old.

# An overview of cost-of-illness modelling

A standard methodology used to estimate financial costs and the reduction in wellbeing due to a condition

Costs of eating disorders include financial costs to the health system, productivity losses, informal caregiving, and other financial costs. The costs of eating disorders also include the reduction in wellbeing for people living with eating disorders.

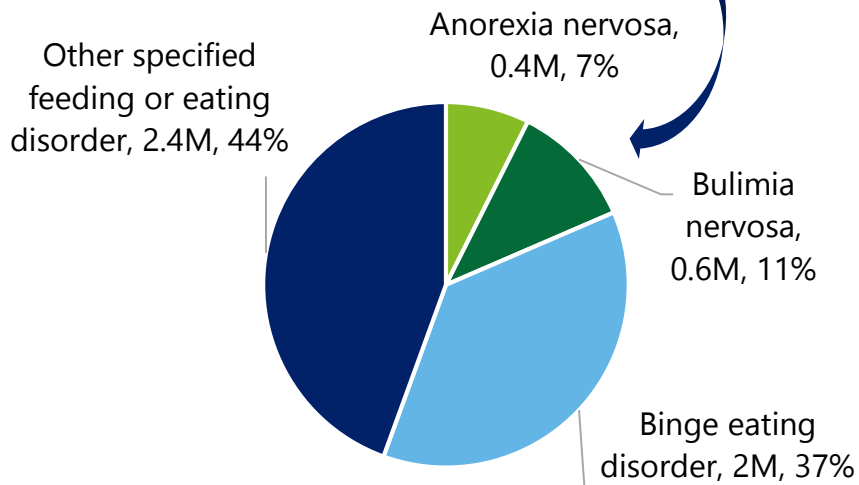
Costs were estimated from a societal perspective for the fiscal year 1 October 2018 – 30 September 2019 using a prevalence approach.



# Prevalence

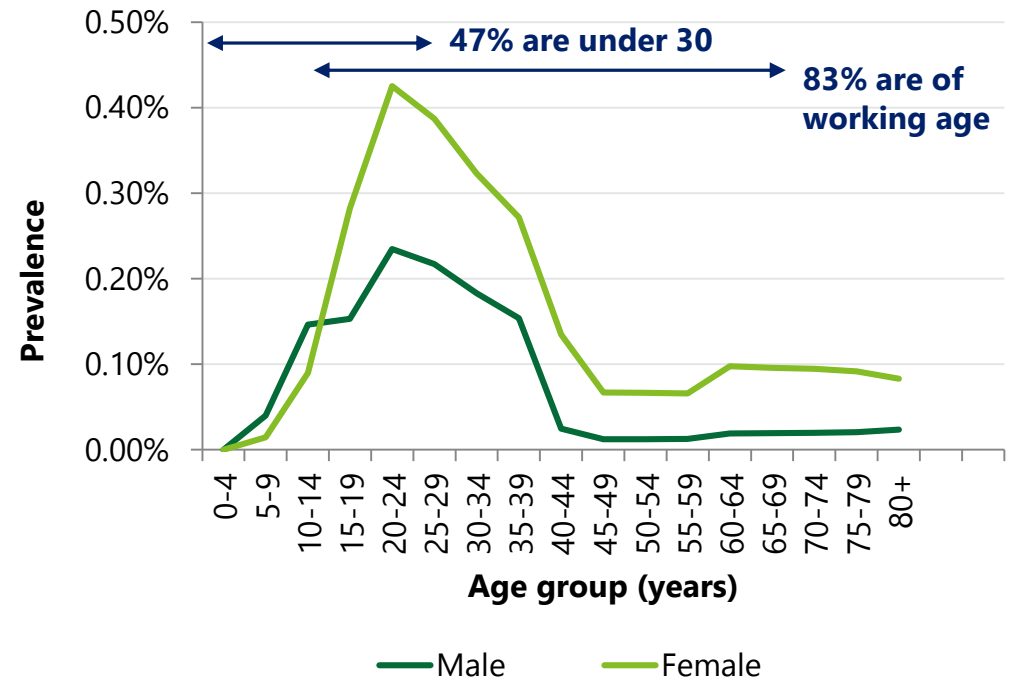
5.48 million Americans had an eating disorder (ED) during 2018-19

**One-year prevalence in 2018-19:**  
**1.66% (5.48 million people)**



**Deaths associated with eating disorders in 2018-19: Approx. 10,200**  
**(range of 5,500-22,000)**

Prevalence of eating disorders by age and gender (%), 2018-19



Lifetime prevalence as of 2018-19:

**8.6% for females (14.4 million cases)**

**4.1% for males (6.6 million cases)**

# Financial costs

The total financial costs of eating disorders are large, and there is a substantial reduction in wellbeing

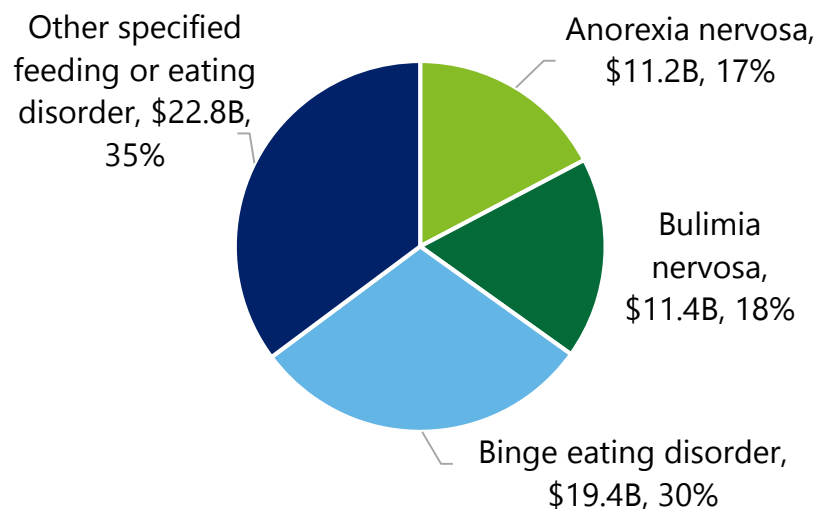
The annual financial cost of eating disorders was \$64.7 billion in 2018-19, which equated to \$11,808 per person with an eating disorder.

The average annual cost per person was greatest for anorexia nervosa (\$27,400), followed by bulimia nervosa (18,300).

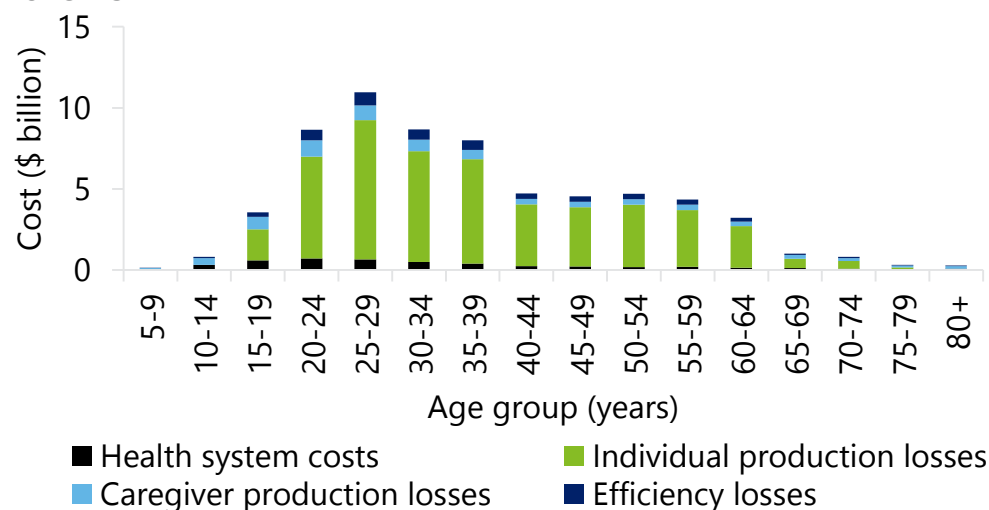
Financial costs of eating disorders by cost component, 2018-19

Cost component	Total cost (\$M)	Per person with condition (\$)	Proportion (%)
Health system	4,555.4	831	7.0%
Productivity losses	48,634.3	8,874	75.2%
Informal care	6,731.4	1,228	10.4%
Efficiency losses	4,794.8	875	7.4%
<b>Total financial costs</b>	<b>64,716.0</b>	<b>11,808</b>	<b>100.0%</b>

Financial costs of eating disorders by type, 2018-19



Financial costs of eating disorders by cost component and age, 2018-19



## Health system costs

The significant majority of health system costs of eating disorders was due to primary and outpatient care

Health system costs due to eating disorders totaled **\$4.6 billion**, or **\$831 per person** with an eating disorder.

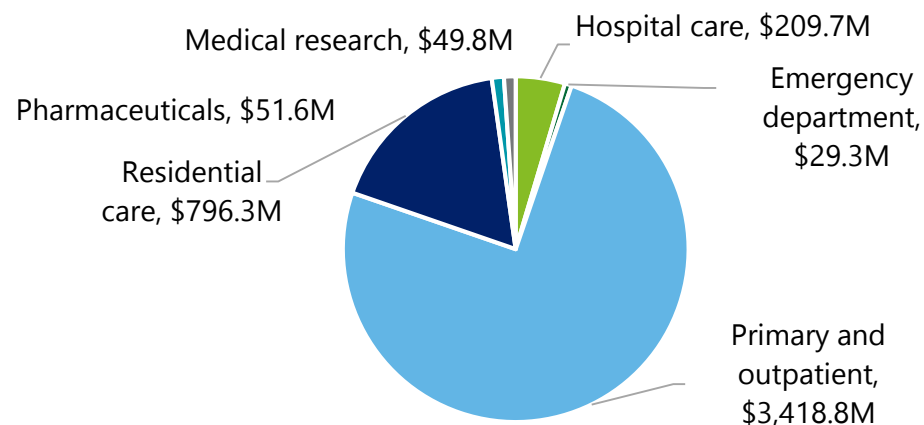
The estimated average cost per person was highest for individuals with anorexia nervosa (\$2,615), followed by those with bulimia nervosa (\$1,335).

Further research is required to better understand the costs of medical nutrition therapy. These costs may also be substantial (up to \$570 million).

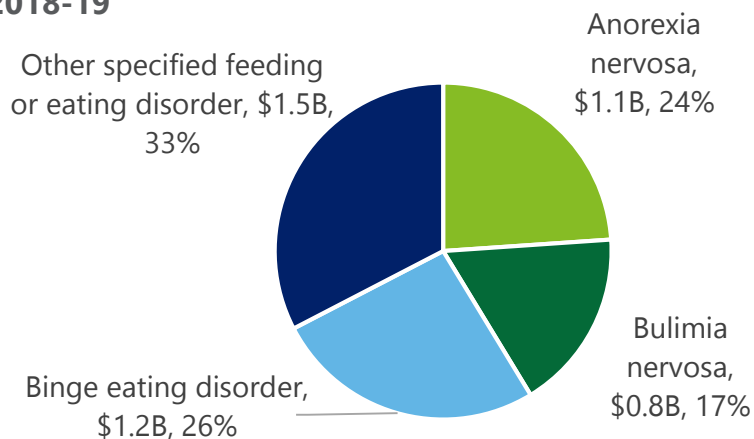
*“My treatment course was absolutely delayed by lack of finance, options and gender inequality that existed.”*

*“Intensive outpatient care was a significant financial burden. Asking staff how people could afford this care they said often second mortgages were taken, dipping into college savings plans.”*

Health system costs of eating disorders by cost type, 2018-19



Health system costs of eating disorders by eating disorder, 2018-19



# Productivity costs

Productivity costs of eating disorders were largely made up of presenteeism and reduced employment, with the costs being borne by individuals, employers and government

Productivity costs due to eating disorders totaled \$48.6 billion, or \$8,874 per person.

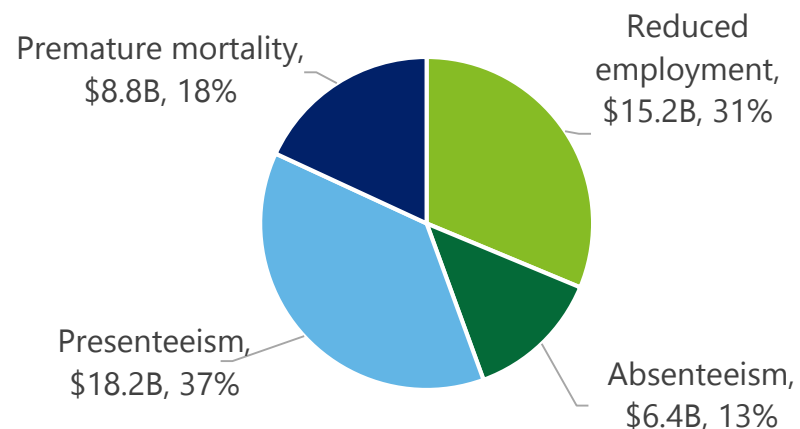
Individuals with anorexia nervosa or bulimia nervosa were estimated to be absent from work for an additional 27.3 days per year, which was lower for other eating disorders (4.2 days per year).

Presenteeism impacts were also substantial (~10% lower work output).

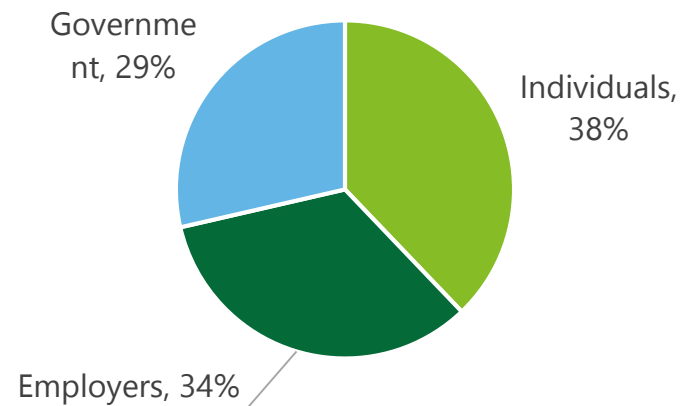
**Absenteeism** measures costs due to temporary absences from work due to eating disorders.

**Presenteeism** measures costs due to reduced productivity when an individual attends work while they are unwell compared to when they are healthy.

Productivity costs of eating disorders by type, 2018-19



Productivity costs of eating disorders by bearer of cost, 2018-19



## Other financial costs

Other financial costs of eating disorders were made up of informal care costs and efficiency losses, at \$11.5B combined

### Informal care costs

Informal caregiving for eating disorders was estimated to cost **\$6.7 billion** in 2018-19.

Informal care cost an average of \$1,228 per person with an eating disorder.



Approximately **23.6%** sought help from a loved one or close friend, meaning there were **1.3m** caregivers.



Each caregiver provided **4.45 hours** of care per week on average, or **5.8 full-time** working weeks per annum.



**5.8m hours** of informal care were provided in 2018-19, which equates to **144,000 full-time** working weeks.

### Efficiency losses

Efficiency losses due to eating disorders were estimated to cost **\$4.8 billion** in 2018-19.

*“The emotional toll of the condition was significant. Our family was separated for one year across continents. As a family of five, we each blamed ourselves, thinking that we were the problem that may have resulted in our daughter nearly losing her life.”*



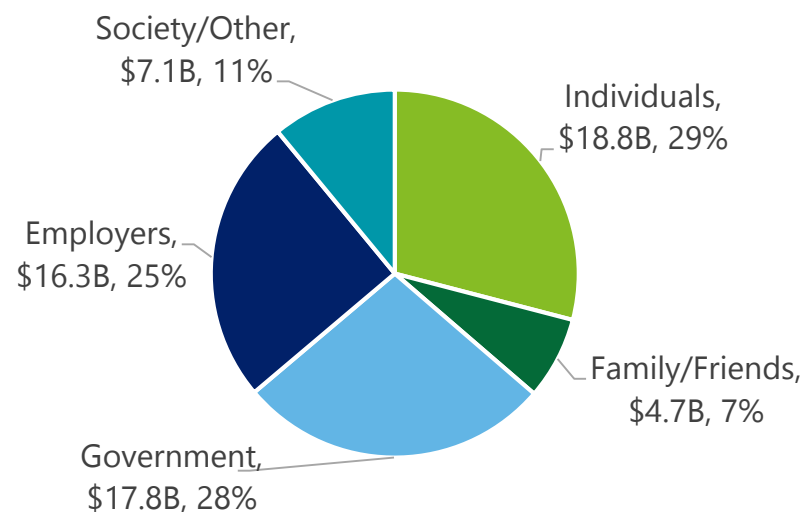
## Who bears the cost?

Individuals bear the largest share of the financial costs of eating disorders in the US in 2018-19, followed by government and employers

The total financial costs borne by people living with eating disorders and their loved ones was **\$23.5 billion** in 2018-19, which includes out-of-pocket payments for health care (\$363.5 million).

Government taxation revenue was reduced by **\$16.0 billion**, and governments also paid **\$1.8 billion** to fund health and other services in 2018-19.

Financial costs of eating disorders by payer, 2018-19



## Wellbeing costs

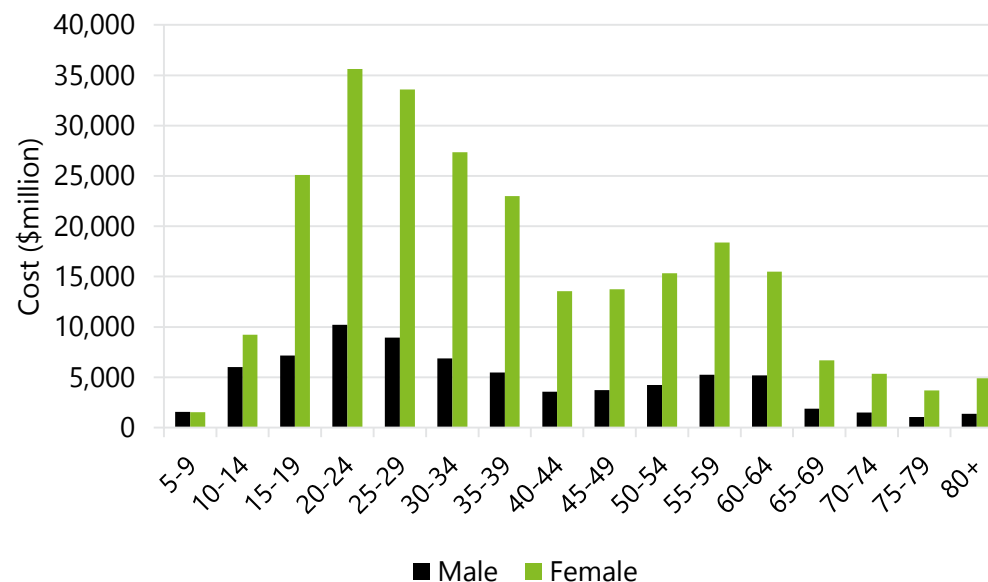
Wellbeing costs of eating disorders in 2018-19 were significant, with the 15-39 age group bearing the highest wellbeing costs

**1.3 million DALYs** were lost due to eating disorders in 2018-19, which represented approximately 1.2% of the total burden of disease in the US.

The loss of wellbeing value was estimated to be **\$326.5 billion** in 2018-19, at an average cost of \$59,600 per person with an eating disorder.

*“The emotional toll was significant. I often felt belittled when I dealt with clinicians who were not competent in the treatment of my condition.”*


Loss of wellbeing due to eating disorders by age and gender, 2018-19





# Future areas of research


## Looking ahead

More research is required into cost-effective treatment and prevention options to reduce the cost of eating disorders to US society

 More research is needed to estimate the cost-effectiveness of stepped, integrated care models to reduce the burden of eating disorders in the United States and this research should be undertaken as a priority.

 Future research is required to understand the long-term impacts of eating disorders and the impact of comorbidities on the costs associated with eating disorders.

 Further research needs to be undertaken to estimate the costs that may be prevented through early intervention and prevention of eating disorders.

 Further research is required to understand and estimate the additional costs of eating disorders that may be attributable to structural racism and other structural oppressions in the US.



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