

# Science Policy Outreach Task Force at Northwestern University



## Impact of Chronic Illness

*SPOTlight: Chronic illness stems from risky behaviors, such as low physical activity and tobacco use, leading to high healthcare costs and lost work productivity. These conditions require immediate systemic prevention, education, and targeted support from the government.*

### What is chronic illness?

- Chronic illnesses are conditions which last for over a year and likely require ongoing medical attention. These conditions likely affect the activity levels, quality of life, and/or overall independence of the patient [1].
- In the US, two thirds of all deaths are due to the five major chronic illnesses: 1) heart disease, 2) cancer, 3) stroke, 4) chronic obstructive pulmonary diseases, and 5) diabetes. These illnesses affect more than 6.7 million Illinois residents and account for the top 10 leading causes of death in IL [1,2,3].
- Chronic diseases are mainly driven by high risk behaviors such as 1) tobacco use, 2) exposure to secondhand smoke, 3) poor nutrition, 4) physical inactivity, and 5) excessive alcohol use [1]. Obesity, as a result of engaging in high risk behaviors, is the most common and greatest risk factor for developing chronic disease [1].
- Chronic illness is often compounded with 6 in 10 adults suffering from one chronic disease and 4 in 10 adults suffering from two or more in the US [1].

### What is the economic impact of chronic illness?

- In the US, chronic illness treatment accounts for over 75% of the \$4.1 trillion in aggregate healthcare spending, at around \$5,300/person annually. However, when looking at public health insurance, an even larger proportion is spent on treating chronic illness at 96 cents per dollar in Medicare and 83 cents per dollar in Medicaid [2].
- Illinois spends over \$12.5 billion dollars in health care annually to treat chronic diseases with \$43.6 billion loss in economic revenue due to lost work days and lower productivity [4,5].
- For a person with chronic conditions, direct health care costs on average \$3,300 with \$7,901 in indirect costs.<sup>3</sup> Health spending for non-elderly adult Medicaid enrollees with chronic illness ranged from \$8,099 among those with respiratory disease to \$13,490 among those with diabetes [12].

### What challenges currently exist to addressing chronic illness care?

- Roughly 3 in 5 Illinois residents have encountered healthcare affordability burdens in the past year, with the escalating cost of healthcare causing worry about future affordability for 4 in 5 residents [7,8].
- Sources of treatment burden encompass physical side-effects of medication, treatment expenses, out-of-pocket costs like travel and time investments for organizing and undergoing treatments. These burdens often lead to non-adherence to treatments and cause sub-optimal health outcomes, including relapse, decreased quality of life, wasted treatments, etc [9]. Patients can also be unaware of where to seek help, leading to delayed treatment and long wait times [11].

### What solutions can be implemented to address chronic illness care?

- Successful chronic disease management efforts hinge on several vital factors such as identifying those at risk, having comprehensive data, creating actionable insights about patients, and coaching them toward healthier choices [2].
- At least 80% of premature heart disease, stroke and type 2 diabetes and 40% of cancer diagnoses could be prevented by improving diet, physical activity and eliminating tobacco use [4]. These improvements could prevent up to 40 million cases of chronic illness per year in the US [3]. In Illinois, 62.2% of adults are overweight, and 28.2% are obese [13]. Thus, *although weight is not the sole health indicator*, curbing chronic illness in Illinois necessitates improved diet and physical activity access, alongside weight management plans.
- A variety of low-cost programs have been implemented with the goal of teaching how to effectively manage chronic disease, including 1) The Chronic Disease Self-Management Program [14], 2) the Diabetes-Specific Self Management Education and Support [15], 3) Chronic Care Management [16], and 4) IL Pathways to Health Program [19]. Other programs have focused on customizing workplaces to be better equipped to serve those with chronic illnesses (e.g., Live Healthy Chicagoland Program), as well as providing caregiver support [17,18].
- While some programs exist, they primarily target the elderly and lack statewide coverage. With increasing risk factors and chronic illnesses, broader inclusive support is crucial.

## References & Additional Resources

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