HEALTH NEW ENGLAND
TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) REPORT 2023

CONTENTS

Table of Contents

Introduction

This Task Force on Climate-related Financial Disclosures (TCFD) report serves as HNE's 2023 disclosure of the climate-related risks and opportunities to our business. It describes how climate change scenarios may affect our business and outlines our strategy to mitigate those potential impacts while ensuring our resilience, based on our understanding of evolving challenges.

This report follows the recommendations provided by the Task Force on Climate-Related Financial Disclosures (TCFD) and is structured around four thematic areas that represent core elements of how organizations operate governance, strategy, risk management, and metrics and targets.

In this report, we describe how climate change scenarios may impact our business and outline our strategy to mitigate those potential impacts and ensure our resilience. Our understanding of the challenges associated with climate change is evolving and we continuously update our plans accordingly.

Governance

Health New England's oversight of climate-related risks and opportunities are addressed by the highest level of leadership within our organization. We recognize the urgency of climate action and the need to increase our understanding of the impact of climate change on our business.

At Health New England, we are committed to responsibly advancing the interests of our members, providers, employees and the communities we serve. Our Board of Directors lends their expertise to our Executive Leadership team, providing strong leadership that adheres to our values and aligns to Health New England's strategic direction. The Board is responsible for contributing to the development of our enterprise-wide business strategy, and stays informed by regular updates from Health New England's senior leadership and from subject matter experts. To stay ahead of climate-related issues that could affect our operations, the Board relies on the Enterprise Risk Management (ERM) function.

At the management level, we have created governance structures that support accountability through:

Executive Leadership Team: Led by the CEO, this team has management-level responsibility for overseeing Health New England's strategic response to climate change. The Chief Risk Officer presents the results of Health New England Task Force on Climate-Related Financial disclosure report annually. The Executive Leadership Team serves the organization as the Enterprise Risk Management Steering Committee.

Enterprise Risk Management: The Enterprise Risk Management (ERM) function is responsible for overseeing and monitoring risk, including climate-related risk, on an ongoing basis. Health New England continues to invest in risk modeling technology and leverages internal actuarial services, to analyze data and better predict how, when, and where climate change and other risk will influence our operations.

Climate Risk Workgroup: At an operational level, the Climate Risk Workgroup is composed of experts from various different departments within the organization, and includes both enterprise risk management and actuarial professionals.

The Climate Risk Workgroup seeks to:

- **Support** the development of climate-related policies and frameworks
- **Monitor, identify and share** knowledge of emerging climate issues, risks, opportunities and trends
- **Work** within business units to advance climate-related actions
- **Coordinate** implementation of climate efforts across Health New England
- **Measure** progress and recommend adjustments as necessary

Strategy

Scenario analysis does not predict the future, but it provides us a better understanding of the impact and influence on the organization. Scenario analysis is a critical tool for strategic planning, risk management and assessing our strategic resilience. In 2023, we began building on our enterprise-wide climate scenario analysis, applying both qualitative and quantitative climate modeling across our value chain to assess our resilience under different external conditions.

The outcome of this modeling work supported our expectations that, in the foreseeable future Health New England must navigate transition risks. In the longer term, physical risks could pose a greater threat to members we serve and healthcare industry.

Climate modeling approach

Our assessment was led by our internal Climate Based Work Group. The TCFD aligned risk categorization with potential impacts, adjusted to align with the health payer industry, are summarized below and were shared with subject matter experts to assess and evaluate the impact within each of their respective areas.

Type	**Climate Related Risk**	**Potential Impact**
Transition Risk	Policy and Legal	
	- Increased pricing of GHG emissions – Enhanced emissions-reporting obligations - Mandates on and regulation of existing products and services - Exposure to litigation	- Increased compliance costs: - Increased insurance / re-insurance premiums - Write-offs, asset impairment, and early retirement of existing asset due to policy changes: - Increased costs and/or reduced demand for products and services resulting from fines and judgments
	Technology	
	- Substitution of existing products and services with lower emissions options - Unsuccessful investment in new technologies - Costs to transition to lower emissions technology	- Write-offs and early retirement of existing assets: - Costs to adopt/deploy new practices and processes

	Market	
	- Changing customer behavior - Uncertainty in market signals - Increased cost of raw materials	- Reduced demand for goods and services due to shift in consumer preferences: - Increase in medical cost increase product pricing, loss of business - Abrupt and unexpected shifts in energy costs, or inability for employer groups to adapt, shuts doors, consolidation, loss of employer groups - Change in revenue mix and sources, resulting in decreased revenues
	Reputation	
	- Shifts in consumer preferences - Stigmatization of sector - Increased stakeholder concern or negative stakeholder feedback	- Reduced revenue from decreased demand for goods/services - Reduced revenue from negative impacts on workforce management and planning (e.g., employee attraction and retention): - Reduction in capital availability:

Type	**Climate Related Risk**	**Potential Impact**
Physical Risks	Acute	- Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions) - Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism) - Write-offs and early retirement of existing assets (e.g., damage to property and assets in “high-risk” locations) - Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants) - Increased capital costs (e.g., damage to facilities) - Reduced revenues from lower sales/output - Increased insurance premiums for members/employers in “high-risk” locations

Climate Risk Qualitative Impact Analysis

Enterprise Risk Management aggregated the results of the qualitative impact analysis; summarized below.

Risk	Impact
Behavioral Health	An increase in global temperature may result in negative impacts on members' behavioral health, leading to increased utilization of emergency room visits, inpatient and outpatient behavioral health visits, and substance use-related diagnoses. Preventive care services, access to mental health services, and address social determinants of health exacerbated by climate change may help members stay healthy.
Community Benefits	Climate change's negative impact on community members' health and well-being could generate a greater inequity gap in social determinants of health and health equity. Environmental justice communities with vulnerable populations may experience disproportionately high exposure to environmental hazards.
Compliance/Legal	Climate change-related factors may increase compliance risk for Health New England. The organization could face an upsurge in claims, alleged fraud, waste, and abuse due to climate risk. New regulations and cybersecurity risks associated with climate change may also affect compliance and privacy incidents, requiring additional resources and training.
Facilities / Info tech	While Health New England is making efforts to reduce its environmental impact through automation, use of recycled materials, and electronic communication, further steps are needed to address waste, energy consumption, and commuting-related carbon footprints. Reliance on technology could be impacted by external stress on the power gird and/or outages due to climate related events.
Human Resources	The effects of climate change on the workforce encompass both physical and mental health implications. Workforce members could confront the same member concerns such as respiratory illnesses and heat-related conditions due to climate change, leading to potential increases in benefits claims and associated costs. This could cause extended periods of Medical and Sick Leave (MSL) as well as Paid Family and Medical Leave (PFML). Additionally, climatic shifts might contribute to elevated stress, anxiety, and depression among the workforce, resulting in heightened utilization of benefits and increased costs. The challenges arising from climate-related disruptions could also influence turnover and retention, prompting the potential need for supplementary financial support, adaptable schedules, and extra time off to assist associates in navigating these difficulties.
Medical/Utilization	Climate change may negatively impact vulnerable members with chronic health conditions, leading to an increase in emergency department visits, hospitalizations, and medication usage. Extreme temperatures, hurricanes, droughts, and floods, could lead to increased health risks for Health New England's membership. Conditions like lung disease, allergies, heart disease, dehydration, kidney problems, skin diseases, and mental health issues may be affected, driving higher medical care utilization and costs.
Product	Climate change can drive changes in the health insurance industry, and Health New England needs to develop products and services to help members mitigate the impact of climate change, which could include energy-efficient appliances, renewable energy options, discounts on medications for climate-related conditions, and transportation benefits to reduce carbon footprints.
Pharmacy	Climate change could worsen air quality, leading to an increase in lung disease, allergies, and heart disease. This may result in higher utilization of medications for asthma, COPD, allergy treatments, and cardiac conditions, potentially driving up pharmacy costs.

Climate scenarios

HNE modeled different climate scenarios based on an approach taken by the American Academy of Actuaries. We reviewed the historical trend for days per year in the 90th percentile of temperature within the region. The assumption is a higher number of days at the tail end of historical temperatures will result in higher utilization patterns for members with certain chronic conditions. These conditions include respiratory disease, cardiovascular disease, kidney disease, behavioral health conditions, diabetes, high-risk pregnancies and skin exposure. A continuing rise of days with extreme heat conditions will increase dehydration, heat stroke and other events related to rising temperatures.

Modeling assumptions

Health New England utilized current spend and prevalence by disease category to model potential outcomes from climate risk. Historical costs were then projected at different growth rates by line of business depending on expected growth of days about the 90th percentile in temperature. This was projected out 5 years to estimate a total potential plan impact due to increasing temperatures. Scenarios were built using existing modeling capabilities and publicly available data sources, including assessments and reports by the American Academy of Actuaries. Given the complexity and uncertainty of how one risk may influence others, each risk factor was modeled independently, not contemplating the dependency or trade-offs between them. The time horizon used was a medium-term outlook of five years.

Scenario analysis outcomes

The following section explains the outcomes of the scenario modeling on Health New England's current portfolio until 2028, with the limitations and considerations disclosed. The tables in this section summarize the changing risk profile under different climate scenarios. To assess transition risk until 2028, we used a selection of relevant external variables to simulate the climate scenarios. These variables included current disease prevalence, growth rate of days at the 90th temperature percentile and overall medical trend. The nature and speed of transition disruption significantly varies according to the different climate scenarios considered.

RISK	LIKELIHOOD (%)	MIN ($M)	MOST LIKELY ($M)	MAX ($M)	AVG ($M)	Expected Range (Annual) ($M)
Scenario #1 – Moderate	10	0.10	0.15	0.16	0.10	0.02 - 0.08
Scenario #2 – Significant	10	0.16	0.19	0.20	0.17	0.02 - 0.10
Scenario #3 - Severe	15	0.20	0.24	0.28	0.24	0.04 – 0.13

Risk Management

Health New England's Risk Management (ERM) Framework is designed to identify, assess and mitigate risks to minimize their potential impact and support the achievement of Health New England's long-term purpose and business strategy. The ERM Framework is supported by various processes:

- A top-down assessment is performed at the leadership level to create a good understanding of the organization's key risks.
- A bottom-up assessment occurs in parallel, resulting in the aggregation of individual operational assessments.

Climate risks and opportunities are included in the scope of our Enterprise Risk Management (ERM) Framework, processes and reporting. Climate analysis is a rapidly evolving area. In 2023, Health New England added Climate risk to our Enterprise Risk taxonomy level. Risk themes at the taxonomy level include Strategic, Reputational, Operational, Legal/Compliance, Credit/Market, Liquidity, Human Capital, Information Technology/Security, Reserve, and Pricing/Underwriting risk.

Health New England have defined Climate Risk as the potential adverse effects and challenges posed by changing climate patterns, extreme weather events, and degraded environmental conditions on the health and well-being of our members and the sustainability of our operations. This includes increased prevalence and severity of respiratory diseases, cardiovascular conditions, allergies, and other health issues, as well as the potential strain on healthcare resources, rising healthcare costs, and the need for proactive measures that safeguard the health of our members and address the broader societal impacts of climate change on our most vulnerable populations.

We took important steps this year to strengthen our methodology and tools to identify, assess and manage our climate risks and opportunities. Our 2023 assessment approach and process are summarized in the Strategy section. The findings will continue to be integrated into our planning and ERM Framework to help strengthen our resilience, mitigation and adaptation responses. The addition of Climate risk represents our evolving insights on climate-related risks and opportunities that may inform our business strategy, decision-making processes and overall operations.

Metrics and Targets

2023 climate-related metrics and targets

We continue to build our Climate Risk metrics and targets. Data is our starting point. We are enhancing our ability to identify and measure Climate related health outcomes and exploring new ways in which we can use analytics to enhance decision-making and transparency.

Objective: The objective of the KPI/KRI's are to enhance our understanding of the climate-related health risks faced by our members and proactively address these risks. By monitoring and reporting on climate based at-risk health outcomes we can evaluate and assess for climate-related impact if results fall outside of estimated trend and enable intervention and resource allocation to mitigate the risk and improve health outcomes.

Key Metrics

- Emergency room visits: Track the number of emergency room visits related to climate-sensitive health conditions*, such as respiratory illnesses, heatstroke, or cardiovascular emergencies.
- Hospitalizations: Monitor the rate of hospitalizations due to climate-related health conditions*, including respiratory diseases, cardiovascular events, and heat-related illnesses.
- Medication usage: Measure the utilization of medications for climate-associated health conditions*, such as asthma/COPD inhalers, allergy treatments, cardiovascular medications, and immunosuppressant.
- Disease-specific diagnoses: Track the prevalence and incidence of climate-sensitive health conditions*, such as asthma, allergies, cardiovascular diseases, and mental health disorders.
- Vulnerable population analysis: Stratify health outcome data by LoB to identify vulnerable populations disproportionately affected by climate-related health risks.

*As defined by American Academy of Actuaries

Reporting: Annually reports will be generated to provide insights into the prevalence, trends, and LoB distribution of at-risk negative health outcomes. The reports will include comparisons to historical data, benchmarking against industry standards, and highlight exponential trend that may require focused interventions or resource allocation.