HEALTH NEW ENGLAND
TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) REPORT 2024

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Introduction

This Task Force on Climate-related Financial Disclosures (TCFD) report serves as HNE's 2024 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 actuarial talent, to analyze data to better predict how, when and where climate change and other risk will impact our operations.

Climate Risk Workgroup: At an operational level, the Climate Risk Workgroup is composed of experts from various different departments within the organization, 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

HNE's mission is to improve the life and health of the people in the communities we serve. Our strategy relies on effective management of organizational risk and the long-term health and well-being of our members. We invest in proactive measures and innovative solutions to mitigate adverse impacts on our members' health and to improve operations, this includes health impacts of climate change and sustainability of operations with consideration to the inherent uncertainties and complexities associated with climate change. We have a low tolerance for risks that directly jeopardize the health and safety of members or significantly disrupt the organization's ability to deliver essential healthcare services.

HNE utilizes stochastic modeling and scenario analysis to assess the impact enterprise level risk has on the organization. Both qualitative and quantitative modeling across our value chain is leveraged to assess our resilience under different external conditions. The TFCD *Transition* and *Physical* risk type model is leveraged to help align with HNE identified climate factors (See Appendix A). Climate scenario development includes analyzing both increase in temperature and the impact of geographic based climate hazards such as heat waves, wildfires, and tropical storms on our member's health and wellbeing. Our ability to track and monitor health outcomes related to climate events; heat-related disease, infectious disease, respiratory illness, and mental health disorders amongst others is critically important if we are to develop resilience and readiness measures to address them.

In additional to health related outcomes we have also identified that the effects of climate change may exacerbate inequity within environmental justice communities we serve and that these vulnerable populations may experience disproportionate impact and higher exposure to environmental hazards.

Early indicators and models suggest that while *Physical* risks types may pose a greater threat to the members we serve over a longer time horizon, *Transition* risk types present with a stronger correlation of immediate impact on HNE's membership and operations over the next 5 years.

Scenario Analysis

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 ($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

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.

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. HNE's Risk themes at the enterprise level include Strategic, Reputational, Operational, Legal/Compliance, Credit/Market, Liquidity, Human Capital, Information Technology/Security, Reserve, Climate, 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 establish a climate based risk profile (Appendix B) to align with business objectives and support identification, assessment, and management our climate risks and opportunities.

Our 2024 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. Climate risk represents our evolving insights on climate-related impact and opportunities that may inform our business strategy, decision-making processes and overall operations.

Metrics and Targets

We continue to build our Climate Risk metrics and targets. Data is our starting point. We are still early in development of metrics and targets and continue to explore new ways in which we can use business objectives and analytics to enhance climate-based risk monitoring and decision-making.

Health Outcomes

Objective: This objective focuses on ensuring the health and well-being of members by monitoring the prevalence of climate-sensitive health conditions. By tracking these indicators, HNE aims to understand how trend may be influenced by temperature increase or climate-related hazard.

> **Threshold:** Predefined thresholds for health outcomes. The percentage increase in climate sensitive health conditions over normal trend)
> **Target:** Maintain Climate Sensitive Health Condition Medical Expense within Normal Trend
> **Tolerance**: +/- 15% of Normal Trend

Model outputs can be influenced by membership turnover and make it difficult to effectively track the member's previous and future conditions. We have taken steps to exclude these variables, thus limiting the populations within our reporting.

HNE have not detected significant change in the prevalence of climate-sensitive health conditions amongst our member populations.

Reporting:

Annually reporting provides insight into the prevalence, trends, and LoB distribution of at-risk negative health outcomes. Climate based health related outcomes stayed within tolerance limits for the period reported. Reports will include comparisons to historical data, benchmarking, and highlight exponential trend that may require focused interventions or resource allocation.

Appendix A: TCFD Risk Type Analysis

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	- Compliance costs and reserve requirements - Insurance/re-insurance premiums - Reserve adjustments and write-downs due to asset impairments from policy changes - Costs and/or pressured demand for products and services due to fines and judgments - Uncertainty in forecasting due to evolving regulations - Legal risks and expenses
	Technology	
	- Substitution of existing products and services with lower emissions options - Unsuccessful investment in new technologies - Costs to transition to lower emissions technology	- Capital allocation required for new practices and processes - Risks tied to digital infrastructure disruptions - R&D and compliance costs
	Market	
	- Changing customer behavior - Uncertainty in market signals - Increased cost of raw materials	- Weakening of demand for goods and services due to shifting consumer preferences - Medical costs driving up product pricing - Strain on reserve adequacy due to abrupt market shifts or economic downturns - Costs and market volatility due to altered regulatory conditions
	Reputation	
	- Shifts in consumer preferences - Stigmatization of sector - Increased stakeholder concern or negative stakeholder feedback	- Pressure on revenue due to brand and reputational damage - Workforce-related costs due to challenges in talent attraction and retention - Financing costs due to limited access to capital - Risks tied to public and stakeholder backlash - Scrutiny from ESG stakeholders

Type	Climate Related Risk	Potential Impact
Physical Risks	Acute	- Costs due to operational disruptions and supply chain interruptions - Workforce-related costs from impacts on health, safety, and absenteeism - Asset damage in high-risk locations, data center disruptions - Operating costs driven by climate-related infrastructure needs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants) - Reinsurance costs as climate-related risks become more severe

Appendix B: Climate Risk Profile

Risk	Impact
Increased Health-related Costs	The risk that climate hazard contributes to more frequent and severe health issues, including heat-related illnesses, respiratory diseases, mental health, and vector-borne diseases, leading to higher medical expenses and claims payouts
Disruption of Healthcare Infrastructure	The risk that climate hazard and environmental changes can damage healthcare facilities, disrupt supply chains, and hinder access to care, impacting HNE's ability to deliver services and manage costs effectively.
Changes in Demographics and Health Needs	The risk that climate hazard-induced population shifts and changes in health risks can alter healthcare utilization patterns, requiring adjustments to product offerings, underwriting criteria, and pricing models to address evolving health needs and demographics
Regulatory and Legal Compliance	The risk that regulatory and legal challenges related to climate change, including compliance with environmental regulations, adaptation to new risk assessment methodologies, and potential liability for inadequate coverage or response to climate-related health impacts can lead to reputational and/or fines, penalties, or sanctions.
Financial Implications for Underwriting and Pricing	The risk that climate-related health outcomes necessitate adjustments to underwriting criteria, pricing models, and risk management strategies to maintain profitability and sustainability in the face of increased claim frequency and severity.
Workforce Climate Resilience	The risk that climate hazard and environmental changes impact HNE's workforce in the same manner as our member population, leading to both physical and mental health implications, such as stress, anxiety, and depression. Prompting extended periods of Medical and Sick Leave (MSL), Paid Family and Medical Leave (PFML), turnover, or the need to enhance retention programs. Increasing the likelihood and need for supplementary financial support, adaptable schedules, and extra time off to assist associates with navigating these difficulties.
Reputation and Stakeholder Perception	The risk that HNE's response to climate-related health risks will impacts reputation and stakeholder trust. Proactive measures to address climate impacts can enhance public perception and loyalty, while perceived indifference or unresponsiveness can lead to reputational damage and loss of market share.
Long-Term Sustainability	This risk that climate change poses systemic risks to the healthcare industry, affecting the long-term viability of insurance business models, investments in healthcare infrastructure, and the ability to adapt to changing environmental conditions and health needs over time.