

# NAIC CLIMATE RISK DISCLOSURE SURVEY

## TCFD-ALIGNED QUESTIONS

### UPDATED 2022

#### GOVERNANCE

1. *Disclose the insurer's governance around climate-related risks and opportunities.*

*In disclosing the insurer's governance around climate-related risks and opportunities insurers should consider including the following:*

- Identify and include any publicly stated goals on climate-related risks and opportunities.
- Describe where climate-related disclosure is handled within the insurer's structure, e.g., at a group level, entity level, or a combination. If handled at the group level, describe what activities are undertaken at the company level.

*A. Describe the board and/or committee responsible for the oversight of climate-related risks and opportunities.*

*In describing the position on the board and/or committee responsible for the oversight of managing the climate-related financial risks, insurers should consider including the following:*

- Describe the position on the board and/or committee responsible for the oversight of managing the climate-related financial risks.

*B. Describe management's role in assessing and managing climate-related risks and opportunities.*

#### Response to Governance

Building on a legacy of environmental stewardship, Mass General Brigham Health Plan's parent, Mass General Brigham, Inc. has broadened the scope of its work related to climate, health, and health care delivery and has established a governance structure for overseeing these efforts.

Mass General Brigham Health Plan Inc. (MGBHP) is a part of Mass General Brigham Incorporated (MGBI) which has established the Climate and Sustainability Leadership Council chaired by MGBI's Chief Financial Officer and comprised of executive leadership from across all organizational areas. This Council is responsible for organizing a strategy to achieve goals in three principal areas: eliminating our contribution to climate change and pollution, promoting health equity through environmental justice, and transforming climate and sustainability through research and education.

At this time, MGBHP is participating in the health equity work of the Council.

Mass General Brigham Incorporated ("MGBI") is the ultimate controlling parent of the Mass General Brigham Health Plan Companies (together MGBHP) which includes Mass General Brigham Health Plan Holding Company, Inc. ("Holding Company"), Mass General Brigham Health Insurance Company, Mass General Brigham Health Plan, Inc. (Mass General Brigham Health Plan) and Mass General Brigham Health Plan Select, LLC. ("Mass General Brigham Health Plan Select").

MGBHP is part of the larger Mass General Brigham (MGBI) system. As such, governance around climate-related risks and opportunities are based on the overall system goals, and answers that follow reflect initiatives, priorities, or plans of the system, except for answers that require differentiation based on payor-specific questions.

MGBI believes it is imperative to address health care facilities' climate-related vulnerabilities in the face of extreme weather events that are increasing in frequency and severity as well as the risks these events pose for communities disproportionately affected by climate change.

- a. MGBI has already conducted a comprehensive assessment of threats posed by various weather events on over 30 facilities in our system, including both impacts on infrastructure and systems and impacts on clinical operations. This exercise has led to a Climate Action Plan that outlines specific steps for ensuring continuity of operations, focusing on mitigative improvements and emergency operations plans in the short term and prioritization of climate resiliency in all future construction. Additionally, MGBI is engaged in an effort to update and analyze the flooding risk for 59 facilities, ensuring the incorporation of climate change from both sea level rise and precipitation events.
- b. MGBI is in the process of developing systems, processes, and programs to identify and support vulnerable members of its population at greatest risk from extreme weather events. MGBI is dedicated to educating clinical and non-clinical staff on the importance of climate change's health impacts and sustainable health care delivery, including how to support resiliency and link at risk individuals to local resources.
- c. MGBI is leading other academic medical centers by formally integrating climate- health and health care sustainability into graduate medical education, hosting a monthly seminar series on intersections between environment, health, and health care delivery, and conducting regular conferences for clinical departments.
- d. MGBI is a founding partner, with the Global Consortium on Climate and Health Education at Columbia University and the University of San Francisco School of Medicine, of the Climate Resources for Health Education program, a partnership to develop and disseminate tools for undergraduate and graduate medical education.

These financial risks are managed at the MGBI level. There is no specific Climate Change Committee or Board at the insurance level. There is a Diversity, Equity, and Inclusion (DEI) Committee. Specific risks related to business continuity and insurance risk are reflected in the plan's Enterprise Risk Management framework which is reviewed by the Executive Committee and the Board's Audit and Compliance Committee.

As referenced above, overall climate-related risks and opportunities are managed at the MGBI level. There is no specific Climate Change Committee or Board at the health plan level. As part of our enterprise risk management framework, management reviews the impact of climate related risks on business continuity and medical trends. In addition, the health plan's DEI Committee monitors MGBI efforts in health equity which are relevant to climate change and its impact on our members health care quality and access to care.

## STRATEGY

2. *Disclose the actual and potential impacts of climate-related risks and opportunities on the insurer's businesses, strategy, and financial planning where such information is material.*

*In disclosing the actual and potential impacts of climate-related risks and opportunities on the insurer's businesses, strategy and financial planning, insurers should consider including the following:*

- Describe the steps the insurer has taken to engage key constituencies on the topic of climate risk and resiliency. \*

MGBI is developing a pilot to communicate with patients/plan participants to support climate resiliency and mitigate potential health impacts to those at higher risk to climate change related hazards (i.e., extreme heat). This communication pilot will provide resources and key tools to patients to support them prior to a climate related event - for example, providing information on mitigating extreme heat and providing references to resources such as subsidies for electricity and free air conditioner programs.

- Describe the insurer's plan to assess, reduce, or mitigate its greenhouse gas emissions in its operations or organizations. \*

*A. Describe the climate-related risks and opportunities the insurer has identified over the short, medium, and long term.*

*In describing the climate-related risks and opportunities the insurer has identified over the short, medium, and longer term, insurers should consider including the following:*

- Define short, medium, and long-term, if different than 1-5 years as short term, 5-10 years as medium term, and 10-30 years as long term.

*B. Describe the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning.*

*In describing the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning, insurers should consider including the following:*

- Discuss if and how the insurer provides products or services to support the transition to a low carbon economy or helps customers adapt to climate-related risk.
- Discuss if and how the insurer makes investments to support the transition to a low carbon economy.

*C. Describe the resilience of the insurer's strategy, taking into consideration different climate-related scenarios, including a 2 degree Celsius or lower scenario.*

## Response to Strategy

Through the work of the Center for the Environment and Health, Mass General Brigham Incorporated (MGBI) aims to ensure that all institutional decisions and actions account for environmental sustainability.

Areas of focus for the center relate to the health and welfare of the community, the mission to expand medical knowledge through research and a commitment to educate staff, trainees, patients, and the community about the links between the environment and health.

MGBHP, as a member of MGBI, participates as a member of the US Healthcare Climate Council. MGBI has been recognized with a 2020 Health Care Climate Challenge Champions award from Global Green and Health Hospitals. Specifically, MGBI has been recognized for using innovation, ingenuity, investments, and voice to lead the transformation to climate-smart health care.

The award highlighted these achievements:

- Greenhouse Gas Reduction
- Climate Resiliency
- Climate Leadership

Other MGBI-level initiatives include:

- Conducting a comprehensive Scope 1, 2, and 3 GHG emissions inventory that will be used to guide emission reduction targets and timelines.

- Developing a Decarbonization Master Plan that will inform initiatives to reduce operational emissions across the organization.
- Specific to MGBHP, the company does engage in activities to reduce the climate impact of the organization including but not limited to:
  - Encouraging use of electronic communications for members and employees to reduce the need of paper and mail
  - Proceeding with a remote-first employment model, thereby reducing greenhouse gas emissions associated with commuting.
  - Adopting work schedules that encourages employees to opt for eco-friendly public transportation
  - Our Assembly Row campus headquarters, a shared MGBI facility, achieved a Gold Certification under the LEED V4 Building Design and Construction standards

MGBI aims to reduce scope 1 and 2 organizational emissions by 50% by 2030 (from a baseline no earlier than 2008) and achieve net-zero by 2050, publicly accounting for progress on this goal every year.

Share publicly strategies for reducing on-site emissions (where relevant addressing sources related to on-site energy usage, waste anesthetic gases, vehicle fleets and refrigerants).

- a. Designate an executive-level lead for the work on reducing emissions by 2023 and conduct an inventory of Scope 3 (supply chain) emissions by the end of 2024.
- b. Develop and release a climate resilience plan for continuous operations by the end of 2024 anticipating the needs of groups in our community that experience disproportionate risk of climate-related harm. These commitments are consistent with the commitments of federal government health systems as outlined in Executive Order 14057 and we will gladly join in a public-private collaboration to share learning in pursuit of these goals.

Mass General Brigham's "Center for the Environment and Health" aims to make sustainability a core consideration of all clinical and non-clinical actions. The center's specific objectives are:

- Leverage evidence-based best practices and global standards to make a positive impact on the natural environment
- Set science-based measurable goals and report on performance regularly to ensure accountability, transparency, and innovation
- Collaborate with others in health care and across industries
- Educate individuals and influence public policy to improve the health of MGB's and the Greater Boston area
- Encourage all employees to participate in sustainability efforts and empower them to become advocates
- Advocate for the protection of human health through environmental conservation
- Create new knowledge in sustainability science and at the intersection of the environment and human health

As a member of the MGBI system, we participate actively in these activities. However, we do not have a climate change policy explicitly outlined as part of the risk management and investment strategy.

As MGBHP, our primary risks relate to health insurance risk and the risk of higher- than-expected claims payments, relative to premiums. As a result, our risk mitigation strategies are focused on maintaining

sufficient funds to cover unexpected surges in health claims, including holding adequate reserves, purchasing reinsurance, and maintaining sufficient liquidity through our investment portfolio and line of credit. In addition, our clinical and care management teams use a variety of tools to ensure effective and individualized care for our members. This may include suspending authorization requirements, easing up on in-network requirements, overriding quantity limitations on prescriptions, deferring premium payments; arranging payment plans; premium forgiveness.

Climate change is one of many risks considered throughout the investment process, and underlying investment opportunities that are meaningfully susceptible to climate change are unlikely to meet the requirements for investment. As further described in the answer to question three, the investment portfolio is designed to be broadly diversified, which is also likely to prevent it from being imprudently correlated with our underwriting.

MGBHP maintains a robust emergency operations plan (EOP), business continuity plan and a disaster recovery program. The Emergency Operations Plan and Business Continuity Plan are developed as all hazard plans that focus on maintaining capabilities and essential functions; this includes climate change hazards and scenarios.

## RISK MANAGEMENT

### *3. Disclose how the insurer identifies, assesses, and manages climate-related risks.*

*In disclosing how the insurer identifies, assesses, and manages climate-related risks, insurers should consider including the following:*

- Describe how the insurer considers the impact of climate related risks on its underwriting portfolio, and how the company is managing its underwriting exposure with respect to physical, transition and liability risk. \*
- Describe any steps the insurer has taken to encourage policyholders to manage their potential physical and transition climate related risks, if applicable. \*
- Describe how the insurer has considered the impact of climate-related risks on its investment portfolio, including what investment classes have been considered. \*

#### *A. Describe the insurers' processes for identifying and assessing climate-related risks.*

*In describing the insurers' processes for identifying and assessing climate-related risks, insurers should consider including the following:*

- Discuss whether the process includes an assessment of financial implications and how frequently the process is completed. \*

#### *B. Describe the insurer's processes for managing climate-related risks.*

#### *C. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management.*

*In describing how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management, insurers should consider including the following:*

- Discuss whether climate-related risks are addressed through the insurer's general enterprise-risk management process or a separate process and how frequently the process is completed.
- Discuss the climate scenarios utilized by the insurer to analyze its underwriting risks, including which risk factors the scenarios consider, what types of scenarios are used, and what timeframes are considered.
- Discuss the climate scenarios utilized by the insurer to analyze risks on its investments, including which risk factors are utilized, what types of scenarios are used, and what timeframes are considered.

## Response to Risk Management

As a health insurer writing primarily short duration (one year) renewal contracts, our climate related risks are limited to expected short term changes in claims experience related to a catastrophic event or infectious outbreak. We consider case characteristics such as industry and geography that may increase the risk of climate related events for a particular group policyholder. Other impacts, such as an increase in chronic illness are gradual and incorporated into our medical expense trend projections.

As MGBHP, we continue to promote wellness and chronic disease management efforts to alleviate the health impacts of climate change. These may include member education related to extreme heat risks, for example, and how best to mitigate them depending on a member's underlying risk factors.

In addition, we encourage policyholders to reduce the potential losses caused by climate change-influenced events. Specifically, we encourage our members to reduce their own impact on the processes that influence climate change, such as encouraging members to move from paper-documents to electronic documents. Additionally, we have expanded access to telemedicine for our members, including outreach and assistance to smaller providers organization to enable telehealth.

We have considered the impact of climate-related risks on its investment portfolio in a variety of ways. Primarily, the portfolio's investment approach is diversified across both fixed income and equity strategies designed to balance the portfolio and mitigate the effects of individual risks, including climate-related risk. Second, we have outsourced the daily investment decisions to the expertise of an asset manager that emphasizes ESG (Environmental, Social, and Governance) considerations in its investments. In December 2020, the manager became a founding member of the Net Zero Asset Managers initiative, and it continues to encourage regulators and companies to strive for better climate-related disclosures. Finally, the quality of the companies in the underlying investable universe of the selected investment products is a key consideration across the portfolio's investments, and quality is often driven by the companies' own consideration of and preparedness for climate change.

Currently, we operate primarily in Massachusetts. According to the Massachusetts Department of Public Health/Bureau of Environmental Health (MDPH/BEH), "the most noticeable and publicized consequence of climate change is an increase in temperature leading to more intense heat events; however, climate change creates additional hazards such as air pollution events, sea-level rise, flooding, and severe weather that can result in both acute and chronic health impacts, including mental health." (Climate Change | MEPHT ([state.ma.us](https://state.ma.us)))

We have identified three specific risks that climate change could pose to our business. These risks impact the state, although certain localities may be more vulnerable than others.

1. The spread of pandemic-causing organisms affected by climate change, resulting in a disruption to operations relating to employee illness and higher claims from members becoming ill.

Comprehensive procedures for pandemic responses are outlined in our Emergency Operations Plan and Business Continuity Plan, with respect to a disruption due to lower employee availability. Liquidity and capital needs were addressed above in question two.

2. A surge in claims related to catastrophic weather events such as a hurricane or severe weather.



As mentioned in previous answers, we employ several strategies to ensure the ability to cover unexpected surges in health claims.

3. An increase in chronic illness related to climate change, such as asthma.

We routinely monitor the changing health patterns of our members. Rates are renewed annually, enabling us to build in the impact of these changing utilization patterns into premium rate setting, underwriting, and product design. Geographic rate factors are evaluated regularly to ensure that they adequately adjust for differences in cost and utilization by area. In addition, we pursue member education initiatives and clinical programs to encourage measures to mitigate the impact of chronic illnesses.

Our risk management process begins 1) through the Risk Registry portal where employees can report incidents, issues, and risk or 2) our compliance hotline or 3) direct report to managers and Executive Committee members. The Senior Vice- President for Legal, Regulatory Affairs & Compliance reviews risk reports when submitted and works with the appropriate Executive Business Owner within our organization to evaluate the materiality of the risks identified and refer to the relevant business owner. If a reported risk is determined to be an enterprise risk, it is captured on the Enterprise Risk Registry and assigned to an Executive Committee member to document the risk by soliciting input from business owners throughout the organization. The risks are addressed quarterly by our Executive Committee.

We utilize an automated workflow to govern a comprehensive Enterprise Risk Management process and classify risk into incidents, issues, and risks.

We maintain an Enterprise Risk Management process compatible with MGB's process and specifically tailored to health insurance and the Massachusetts Division of Insurance's and other regulatory requirements. This includes an enterprise-wide Risk Registry with online risk reporting. The Risk Registry is regularly reviewed by our Senior Vice President, Legal, Regulatory Affairs & Compliance.

Our Executive Committee functions as the Risk Management Committee and is primarily responsible for the identification and prioritization of risk and development of mitigation strategies, consistent with our strategic goals.

Our Senior Management is evaluated, and compensation includes assessment of strategic objectives with metrics established to measure the success of the strategic plan (e.g., financial results, membership growth, membership loyalty and attainment of personalized goals that align with organizational objectives). Key metrics used to monitor risks are captured on the Strategic and Operational Dashboards. These metrics are an important component for the Executive team reviews and enterprise risk management. These dashboards are reviewed and updated as part of day-to-day operations by designated Executive Business Owners.

Once reviewed by our Executive Committee, the Standards Expectations and Compliance Committee ("SECC") reviews the Enterprise Risk reports and updates quarterly. SECC is an internal cross-functional group whose responsibilities include approval, oversight and implementation of written standards and procedures, training and education, internal compliance monitoring, auditing, and response to identified incidents, issues, and risks.

The Enterprise Risk Management process is reviewed at least quarterly by our Audit & Compliance Committee, with high level results also reviewed by our Board of Directors.

Climate risk, from the perspective of a health insurer, is mostly relevant on the investment side of the business and how much climate change is being incorporated into the investment strategies within the portfolio. A significant concern, as a health insurer, is ensuring that our business continuity responses would be effective if a climate event were to occur in an operational area of the plan or in the geography of one of our essential vendor partners.

We include a review of climate disruption scenarios during the review of Emergency Operations Plan and Business Continuity and Operations Recovery Plan. Any proposed changes to the Emergency Operations Plan and Operations Recovery Plan will be reviewed and coordinated with MGBI Department of Emergency Preparedness and Continuity.

We have not explicitly utilized climate scenarios to analyze investment risk since the investment portfolio is designed to generate long-term returns while minimizing the risk of permanent capital loss from a variety of factors. The portfolio is allocated across a broad array of asset classes and investment opportunities, the correlations among which are expected to diversify individual factor risks, including those related to climate issues.

As discussed previously, we consider pandemic risk as well as a rise in chronic illness as the two major scenarios relating to climate risk. Our enterprise risk plan includes scenario planning for adverse fluctuations in medical expense reflecting these scenarios.

## METRICS AND TARGETS

4. *Disclose the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material.*

*In disclosing the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material, insurers should consider including the following:*

- Discuss how the insurer uses catastrophe modeling to manage the climate-related risks to your business. Please specify for which climate-related risks the insurer uses catastrophe models to assess, if any.

*A. Disclose the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process.*

*In disclosing the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process, insurers should consider including the following:*

- In describing the metrics used by the insurer to assess and monitor climate risks, consider the amount of exposure to business lines, sectors, and geographies vulnerable to climate-related physical risks [answer in absolute amounts and percentages if possible], alignment with climate scenarios, [1 in 100 years probable maximum loss, Climate VaR, carbon intensity], and the amount of financed or underwritten carbon emissions.

*B. Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.*

*C. Describe the targets used by the insurer to manage climate-related risks and opportunities and performance against targets.*

## Response to Metrics and Targets

MGBI engages in robust risk assessment processes annually, and climate related risks are included in



these assessments. This includes annual Hazard Vulnerability Analyses (HVAs) conducted at all its hospitals and a system-level HVA (Hazard Vulnerability Analyses) that incorporates these findings. Priority risks are identified in the HVA process, and influence Emergency Preparedness focus areas and use of resources for the coming year. The system HVA process is continually being reviewed and updated with a focus on quantitative risk analysis, which enhances our ability to assess and manage risk in the future.

To assess vulnerabilities to climate change related weather events, MGBI has undertaken a process to comprehensively analyze the potential impacts of several types of weather incidents on over 30 separate facilities within its health system. To do this, the system engaged a consultant group with climate change expertise and leveraged recent city and state level reports on projected changes in weather patterns over time, focusing on extreme heat, flooding, and high winds as the primary threats. Projected scenarios were then applied to each of its facilities, and vulnerabilities in each scenario were assessed by a multidisciplinary team including structural engineers, facility managers, research, operations, and emergency preparedness leaders, as well as clinical leaders from every site. For each site, the following specific structural/systems features were explicitly analyzed:

- Main grid power, emergency power, natural gas, medical gases, fuel oil, HVAC system, potable water, non-potable water, storm water removal, wastewater removal, medical waste, information technology, communications, among others.

In addition, the following operational functions were also analyzed:

- Patient transfers, staff availability, on-site accommodations for staff, capacity for patient surges, medical supply chain, lab and pharmacy operations, and food and nutrition availability, among others.

A comprehensive list of vulnerabilities for all sites was generated, organized by likelihood of an event and the potential consequences of that event based on its models. Consequences from a vulnerability were organized into three categories: Major, Severe, and Catastrophic. Work then commenced with a team of facility engineers along with operational and emergency preparedness leaders to develop plans for what would be needed to reduce or eliminate each vulnerability. Through this process, an exhaustive list of over 300 potential projects was generated, with a description of the work requirements and estimated costs for each.

To prioritize next steps, projects were organized into the following categories:

- 1) Immediate priorities for urgent mitigation
- 2) Projects in need of investigative study for medium-term mitigation
- 3) Priorities for planned capital improvement projects.
- 4) Priorities for integration into new facility construction

This rational blended approach facilitates the creation of a plan that will increase preparedness in the short term while also ensuring that climate resiliency will improve over time – in line with increasing levels of threat over time – as new construction projects are undertaken across the system. Where physical plant improvements are not feasible or may be delayed for later phases of implementation, emergency preparedness and operational leaders have been tasked with developing emergency plans for the relevant climate-driven events.

MGB now has a comprehensive list of potential facilities improvements, prioritized as described above. These are actively being incorporated into a comprehensive plan for hardening its facilities against both near and long-term climate threats.

Additionally, MGBI has engaged in an update of this effort focused on flooding. This initiative will assess the flooding risk (SLR and precipitation) at 59 facilities and will have a forward- looking approach to incorporate climate change.

MGBI plans to use a 2008 baseline to determine organizational (scope 1 and 2) emission reductions. MGB has already made substantial progress in reducing scope 1 and 2 emissions, with a 58% reduction in energy-related emissions from 2008 to 2018. MGB's Strategic Energy Master Plan has set a goal of achieving carbon- neutrality for energy procurement by 2025. Success to date relates to robust efforts at energy conservation, renewable electricity purchases, on-site renewable energy deployment, and virtual power purchase agreements. MGB is addressing its scope 3 emissions through the following actions:

A. MGBI is in the initial stages of performing a complete accounting (scopes 1, 2, and 3) of GHG emissions across all its operational units. This will serve as the basis for identifying specific targets and timelines for scope 3 emissions reductions. After more formal analysis, MGB will determine how to reduce scope 3 emissions in line with science-based targets. b. MGB will establish a process for public reporting of GHG emissions. c. As a member of the US Health Care Climate Council and as a National Academy of Medicine Action Collaborative on Decarbonizing the Health Sector Network Organization, MGB is actively working with others in the health sector to encourage greater commitments to emissions reductions from its suppliers.

MGB is already identifying local opportunities to reduce scope 3 emissions through initiatives such as, but not limited to, improved waste segregation and management, maximizing medical device reprocessing, eliminating, or recycling blue wrap, and increasing plant-forward menu options. MGB intends to continue its involvement in robust advocacy efforts that address policy and regulatory solutions to reducing health sector related GHG emissions.

MGB has undertaken a comprehensive assessment of the vulnerability of its operations in the face of extreme weather events up to and beyond 2070. This assessment led to the identification of \$250M in property, infrastructure, and protection projects required to ensure continuity of service of our key clinical, research and operational facilities. MGB's approach is to fund priority mitigation projects annually over a five-year period and reevaluate its risk factors at that time.

\* Asterisks represent questions derived from the original Climate Risk Disclosure Survey.