Driving Health Canada's Science and Research Excellence

Impact Report 2024

Assessing the impact of the Framework for Science and Research Excellence and related activities on advancing the science culture within Health Canada

Health Canada Santé Canada

Canada

Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. Health Canada is committed to improving the lives of all of Canada's people and to making this country's population among the healthiest in the world as measured by longevity, lifestyle and effective use of the public health care system.

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A strong science culture fosters trust in evidence-informed decision-making, empowers employees to thrive, and drives meaningful progress and innovation within the organization.

Health Canada relies heavily on science to help Canadians maintain and improve their health. As a science-based department within the Government of Canada, Health Canada prides itself on producing and using high-quality science and evidence to support decision-making in the interest of all people in Canada. By intentionally investing in a strong science culture, Health Canada fosters innovation and adaptability, and cultivates a workforce equipped with the necessary skills and mindset to effectively tackle complex societal challenges.

This report shares the steps Health Canada has taken to strengthen science culture within the organization, including the October 2019 appointment of Health Canada's Departmental Science Advisor and an assessment of science priorities. It follows the vision of the Executive Committee, notably the Deputy Minister, to look critically at science integration across the entirety of its relevant departmental policies and processes. This includes the achievement of pivotal milestones including the release of Health Canada's inaugural Framework for Science and Research Excellence (the "Framework"), the concurrent launch of Health Canada's first ever employee-led Science and Research Integration Network ("SciRIN"), and the creation of the EC-Science governance table.

Implementation of the Framework centers on a common lexicon and guidepost for driving culture change while talking about, and taking action on, science within the Department. Discussions under the umbrella of "Science Matters" at the executive table provide strategic direction to strengthen scientific practices, adapt to new and emerging societal trends and technologies, and remain at the forefront of scientific innovation. People, processes and structures are prioritised to cultivate a strong culture of science within the organization. Employee-driven initiatives to promote scientific literacy and awareness garner widespread interest and engagement. The results of this increase in awareness has had positive effects including the development of a department wide Science Competency Development Roadmap. Employees now feel more confident that their scientific expertise is valued, and their contributions are respected. Transparent communication about the importance of science, effective role-modeling of science leadership, and the introduction of Science Townhalls and science champions continue to elevate the voice of science and bolster the science culture across the department, ultimately reinforcing the organization's dedication to the systematic integration of science at all stages of its regulatory and decision-making processes.

The initiatives arising from implementation of the Framework are succeeding in positively impacting the often siloed, disconnected and competing scientific priorities across distinct programs. Herein we describe these initiatives and their implications for the organization and examine the impact and progress made in three areas: people, processes, and structure. We conclude with lessons learned and recommendations for the ongoing sustainability of a strong science culture. We hope Health Canada's journey inspires other science-based departments and agencies seeking to embark on a similar path.

Impact by the Numbers

Over **600** employees engaged in **SciRIN career progression surveys** to unpack pain points and inform the development of new measures.

Average of **1200** employees taking part in annual **Science Survey** to inform effectiveness of implemented measures.

1800

employees joining the new **Science and Research Integration Network (SciRIN)** to build a culture of scientific excellence across Health Canada

25 **elements in the Framework** for science and research excellence

2 department-wide science surveys to track progress on the **Framework**

1 **Departmental Science Advisor**

3 categories of **science competency development** to promote science literacy and **skills** for all members of the department

1

new Executive Committee for Science

1

Assistant Deputy Minister Science Champion

13

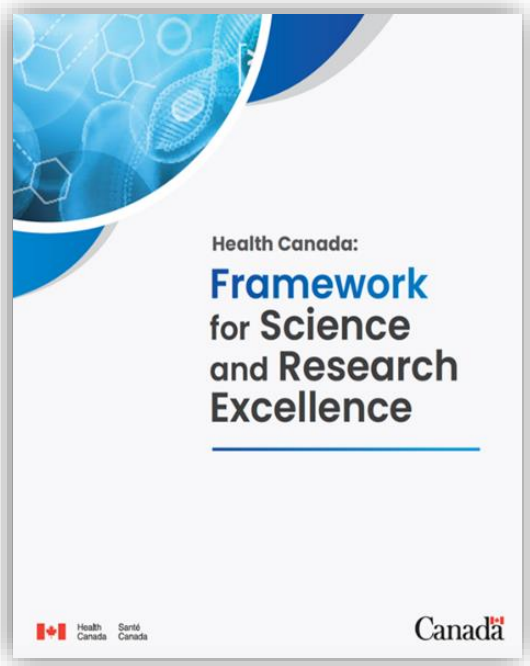
departments and agencies represented in HC-led **citizen science federal community of practice**

11

Health Canada and branch science townhalls

Framework for Science and Research Excellence

Of all the possible tools and instruments to use, a Framework was chosen to signpost the direction the department wished to take for strengthening science culture. Strategies were considered too high-level, and action plans require complicated delegation of responsibility and dedicated resourcing. The advantages of a Framework include flexibility and a sense of collective accountability for moving forward elements identified by each branch as being strategically relevant to their mandate. The Departmental Science Advisor meets monthly with the Deputy Ministers to track progress and holds semi-annual meetings with the Assistant Deputy Minister of each branch to identify priorities and initiatives of interest to their communities. Each branch is unique in the way it implements the Framework, contributing a rich and tailored adaptation to context.



Provides a common lexicon and anchor

Provides an anchoring instrument for Department-wide initiatives and conversations around science

Enabling instrument

Supports scientific excellence by reinforcing core expectations and articulating commitments in support of the scientific workforce

Focuses on key priorities to Canadians and scientists alike

Helps earn the support, trust and recognition of Canadians and peers as a world-class, highly effective and innovative scientific regulatory organization.

Underscores Health Canada's commitment to science and science culture

Engages all levels of Health Canada to strive for excellence and improvement in science

Elements of the Framework

Health Canada's Framework for Science and Research Excellence consists of 25 elements captured under three categories: foundational, communication and collaboration, and innovation and real-world learning. Not unlike structural building blocks, these elements build on one another relying on the strength of the underpinning foundation to enable growth and transformation. Efforts have focused both on general promotion and advancement of the Framework itself as well as on particular core and priority elements.

Strengthening Culture through *Structures*

"Before the inception of the Framework and the creation of SciRIN, Health Canada's Regulatory Operations and Enforcement Branch (ROEB) was not considered a scientific branch by the department nor by most of ROEB. Thanks to SciRIN's efforts in promoting the broader understanding of science beyond mere experimentation, ROEB is now recognized as a science organization within the department and branch. ROEB is now playing its proper role in how science is conceived, applied and evaluated by Health Canada to improve the health of Canadians."

- Helen Nicolidakis, SciRIN Steering Committee Member, ROEB Manager

Form follows function. Operational- or "structural" – improvements are key to supporting the cultural transformation in Health Canada, buoyed by the momentum and dialogue generated by the Framework and SciRIN, as well as conversations and decision-making relating to science.

Structures Supporting Science and Research

Notably, it is the science itself that has a profound impact on structure in Health Canada. Advances in science both globally and within the departmental science community are driving progress and maturity in areas including but not limited to data and information management, digital and IT solutions, science advice, promotion, and communication.

- The establishment in the last five years of new **Digital Transformation Branch and Chief Data Officer roles** recognizes and underpins the importance of dedicated capacity and planning in these areas, as well as the area of artificial intelligence.

- Likewise, the establishment and now regularization of a **Departmental Science Advisor (DSA) position** within Health Canada has been met with a high level of enthusiasm and support by the scientist community and management alike. The DSA reports directly to the Deputy Minister and functionally to the Chief Science Advisor of Canada, providing independent science advice and championing the scientific community's needs. The DSA's outreach efforts over the last 5 years have strengthened the linkage between management and the over 3300 scientists in the department and have resulted in increased responsiveness to their concerns.

  Overall, the DSA role has supported advice and data presented to the Health Minister's Office in areas including:

  - climate change, via input for organizing Ministerial roundtables, the One Health approach, and areas for focus such as prioritizing mental health and care of the elderly within climate adaptation;
  - modernization of the chemicals management plan;
  - selection of the HPFB Nutrition Science Advisory Committee Members;
  - input to HPFB's 2023 Strategic Foresight Report;
  - legislative review of *Cannabis Act* and the *Tobacco and Vaping Products Act;*
  - strategic directions for key Health Canada initiatives such as the new Canadian Drug Agency.

  The DSA has further supported transformative science and culture change initiatives in pesticides evaluation and regulation. For example,

  - working with PMRA science personnel and executive leadership to offer input to transformative policies that will lead to greater transparency and modernization of their scientific review processes;
  - participating in the creation of the Ministerial Special Advisory Committee for Pest Control Products as well as maximizing the expert input of the committee; and,
  - validating the selection of members of this as well as other external scientific advisory boards.

  The COVID-19 pandemic was a period of fast paced change, heavily grounded in science. The DSA buttressed internal scientific expertise and drove external expert input via CanCOVID to inform the DM and senior management on critical scientific issues that had direct impact on government policy, public communications, and ultimately empowering the Canadian public to take informed decisions. Health inequities that became apparent during the pandemic created opportunities for Health Canada to strengthen their monitoring processes to track whether industry submissions for new drugs, vaccines and other biologics disaggregate safety and efficacy data by age, sex and race.

- **Appointment of an Assistant Deputy Minister Champion for Science** – Assistant Deputy Ministers play a key role in championing numerous corporate initiatives, programs or

functional communities across the Public Service. Appointed by the Deputy Minister, the new ADM Champion for science provides their support and guidance to the Science and Research Integration Network from a strategic level and to build awareness of and advance issues.

- Introduction of the DM Science Town Hall program, often in collaboration with the Public Health Agency of Canada, serves to showcase the leadership of scientists, researchers, regulators, policy makers and other public servants, strengthening the culture and fabric of science at Health Canada. These events provide fast-paced, informative and interactive science sessions by high profile speakers on government-relevant science in language and context that is accessible to the audience. Over the past 5 years, topics have comprised contemporary matters such as the science of the coronavirus, COVID-19 vaccines, climate change and health, and anti-microbial resistance. Audiences have ranged in numbers as high as 5000 people from across the entire departmental demographic and participants have left with a better understanding of the science and how it might impact them.

- The Annual Departmental Science Forum provides a highly interactive opportunity for the scientific community to share advances in science spanning a wide range of disciplines as well as network and learn about new departmental science initiatives. The forum provides visibility and recognition for the work of scientists and an opportunity for the science community to engage directly with senior management. Held virtually during the pandemic, and in a hybrid fashion afterwards, key topics discussed at recent forum plenary sessions include the impact of Covid on science, Indigenous knowledge integration, artificial intelligence, new approach methods in science, and ethical principles for risk management decision-making.

Governance Structures for Science

- Creation of an Executive Committee on Science, or EC-Science – This new science governance table is a formal sub-committee of the organization's Executive Committee. Its mandate is to recognize and act upon the increasing importance and interconnectedness of science and policy disciplines in decision making and delivery of a complex mandate. EC-Science is co-chaired by Health Canada's Departmental Science Advisor and the Assistant Deputy Minister Champion for Science with participation from other Assistant Deputy Ministers of science and corporate service Branches, in addition to the co-chairs of SciRIN. EC-Science addresses science-related issues of interest to senior management, as well as any long-standing or emerging concerns of Health Canada's scientific community. A focus on solving issues confronting laboratory scientists has been identified as a priority.

- Introduction of EC "Science Matters" – Inclusion of monthly science-focused agenda items underpinned by the Framework at the EC Executive Table ensures science is kept at the forefront of decision-making wherever appropriate. EC "Science Matters" agenda items serve to elevate science conversations to the highest governance level of the Department and include science policy-related priorities or issues of concern, including those relating to the Framework elements, highlights of accomplishments and performance, and more.

- Branch Structural Updates – Branches have introduced a variety of efforts to advance commitments on Framework implementation and strengthening science excellence across programs. These include aspects such as the appointment of science champions, establishment of new Branch science tables as well as science plans and strategies. Furthermore, space has been created at Branch Executive Committee Meetings for SciRIN steering committee (SC) members and branch science champions to report on activities and progress, as well as planning and hosting science-focused town halls and gatherings.

Strengthening science culture by supporting *People*

"The impacts of the Science Framework for Research Excellence on human resources (HR) have been groundbreaking. It has introduced a conduit for the science community to directly reach HR via the new HR Science Lead. This has allowed HR to be a catalyst connecting and providing better tools and services to the community." *- Tammy Lewis, HR for Science team*

Health Canada has a workforce exceeding 10,000 employees who contribute, within their programs, to sustain the highest level of excellence through their scientific activities including research, evaluation, collaborations, policy support and publishing. In examining the impact of the Framework and related initiatives on people within the Department, the natural tendency would be to look at scientists alone. However, the Framework has also supported a greater scientific literacy and appreciation of the interconnectedness of a wide variety of disciplines including non-scientists working in human resources, communications and management alike. A sense and appreciation of belonging to and within a science-based department continues to grow, including by those not working in science classifications.

Impacts can be summarized along three lines: greater access to professional development opportunities and support for career advancement for scientists, increased employee engagement and empowerment, and higher levels of confidence in the organization's accountability to scientists because of leadership's strong commitment to science.

- Greater access to professional development opportunities and career support

  Efforts relating to human resources (HR) for science have been widespread since the Framework's inception. An ADM-appointed HR Executive Science Lead has been appointed and develops and implements action plans for advancing career-progression for scientists. Seeking a stronger sense of pride for all employees in belonging to a vibrant science-based department, scientists were consulted through SciRIN's Steering Committee on desired measures and areas of focus leading to a number of strategic improvements.

- A revamped *Mentorship Plus* program was launched and subsequently expanded to accommodate the high level of interest from scientists, notably from equity seeking groups.
- A *Science in French* initiative, which aims to support employees looking to maintain their level B and C oral skills and expand/acquire specialized scientific vocabulary in French, is currently in its second year due to the level of interest and uptake.
- Building science awareness and skills across the entire department is the objective of the newly launched *Science Competency Development Roadmap (the Roadmap).* Housed in the MyLearning Platform, learners can choose learning activities at their level (baseline, functional, expert). Managers are encouraged to discuss employee commitments during their talent and performance discussions and to include learning activities in their learning and development plans. HR is tracking participation and will continuously improve the roadmap content to remain current and to meet learning needs. This roadmap model is expected to be adapted for other horizontal learning programming such as anti-racism in science.

- Creation of Health Canada's first Science and Research Integration Network (SciRIN) Established concurrently with the launch of the Framework, Health Canada's Science and Research Integration Network fills what has proven to be a critical need within the Department. SciRIN:

  - provides a platform for scientists to exchange perspectives and opinions with key influencers in the Department.
  - offers input and even leadership into a variety of key initiatives and Framework elements, all while crossing disciplinary siloes.
  - is a forum for advancing solutions to pain points and Framework issues of direct relevance to the workforce, with growing importance to the culture and advancement of excellence of science. For example, further to raising concerns over barriers to open access, Health Canada now has an Open Access Publishing Fund to meet its open access commitment while ensuring science program budgets are used for science.
  - is now approaching 1800 members and growing

There are over 30 representatives appointed from Branch programs to SciRIN's steering committee. The Steering Committee and SciRIN working groups have proven to be fertile ground for science competency, career, and leadership development, as well as key

consultative bodies for departmental and government-wide priorities. An annual general meeting solicits input from the broader membership community on priorities for action in the coming year.

- SciRIN's Career Progression Working Group – Reflective of its importance to the scientific workforce of the Department, representatives from SciRIN's Steering Committee volunteered to lead the first of SciRIN's working groups- an initiative focusing on career progression. The Career Progression working group actively promoted two successive surveys to unpack scientists' concerns related to career advancement opportunities. The results of the surveys have helped inform sessions co-delivered with HR, on awareness of opportunities to support career progression and tips for performance during competitions.
    -  *HC Science Survey results in 2023 revealed a marked improvement from 2022 both in terms of familiarity of available opportunities for career progression (up 10% to 52% familiarity) and confidence in career progression (64% had confidence in career advancement versus 60% in SciRIN's 2021 career progression survey).*

- Science Leadership - The priority of science leadership development is driven by the Deputy Minister and Departmental Science Advisor, in collaboration with ADMs. A key parameter is that scientists should be supported in their career advancement whether they choose to achieve science expertise or to carry their science skills into a management stream. In addition to the learning and development opportunities comprising the Roadmap, additional actions have been undertaken by and for leadership. These comprise:
    - For five years running, the Deputy Minister and DSA hold a candid, interview-style armchair discussion on the importance of science leadership at Health Canada's annual Science Forum. The discussions share personal stories as well as commitments to advancing science within the department, through the uptake of artificial intelligence to navigating tensions between the need for science security and science collaboration, and the benefits of networking and attending international conferences. Participants report finding these discussions both validating and inspiring.
    - The flagship *Health Canada Science Management Development Program* strives to identify high potential science candidates and to support their capacity to successfully compete for an EX position through structured programming, development, and language training. In 2023 the program was audited and found to be effective, albeit with room for improvement as elaborated upon in audit recommendations. Health Canada is targeting a significant increase in enrollment capacity.

- An *EX performance commitment to Science Leadership* was introduced to executive performance agreements in 2023-24. Performance indicators include leadership in implementing the Framework, supporting open science, open data, and effective science communication practices, and promoting a culture of science competency by encouraging uptake of the Roadmap.

Processes that strengthen science culture

"Health Canada has long been a science-based organization and the Framework for Science and Research Excellence became an opportunity to reflect on what that really means. It helps us highlight the impact of science on all aspects of Health Canada's mandate. It shows how science goes beyond laboratory and field work, and how it matters across all disciplines. This includes policy development, development of legislative and regulatory frameworks, regulatory science, science that supports guidelines to promote healthy living, science that underpins risk management to protect the health and safety of people in Canada, and science used to analyze the impact of our communications products and approaches, among others. Science is a competency that forms the foundation of all the work we do."

– Celia Lourenco, Assoc. ADM, Health Products and Food Branch

The third and final area of assessment of impact lies with processes and tools, and it is here that arguably the most impact has been demonstrated. Metrics have been introduced via biennial surveys to track quantitative progress and iterative learnings on implementation of the Framework. Initiatives, including new policies, are underway/introduced to make science more

open and inclusive and ensure that our regulatory operations benefit all Canadians equally. And finally, a focus on science communication skills, where tools have been developed to improve science communication and promote open and collaborative science which is known to play a critical role in increasing levels of trust with the public and helping to combat mis- and dis-information across the whole of society.

- Launch of biennial science surveys to support data-driven interventions – Data speaks volumes. The biennial science survey, managed by SciRIN, measures both familiarity with the various Framework elements as well as employee confidence in their application. Branch-level analysis provides data that has been instrumental in helping Branches and programs identify priority areas in need of ongoing or heightened support. The most recent science survey showed improvements in familiarity with all elements of the Framework.

- Science Policy Integration is a priority area in the Framework. Baseline assessment of familiarity with barriers and facilitators for effective science policy integration received among the lowest rates of familiarity in the HC Science Survey (2021/22), and have been noted as a pain point for scientists[1]. Efforts to advance this Framework element in recent years include:
  - ROEB's development of a roadmap and platform for *systematic integration of science into regulatory decision-making*.
  - a SciRIN information session provided by SciRIN's co-chair and science policy expert on Policy for Scientists, attended by over 300 employees.
  - EC discussions showcasing best practices for systematic integration of science into policy decision-making.
  - Development of a course entitled *Strengthening Science-Informed Decision-Making*, developed by the DSA, to enable a common understanding not only of science concepts and policy considerations, but an understanding of each others' lexicon.

  Repeat assessment of this element in the 2022/2023 Science Survey yielded a 46% increase in familiarity with key concepts and principles related to science policy integration.

- Inclusive and representative science, both within government operations and in the evidence shared with Canadians, is vital. It includes antiracism in science, Indigenous Knowledge Integration, participatory research, and sex and gender based analysis (SGBA) Plus. As a consequence of initiatives being undertaken within Health Canada, awareness and actions are rising to ensure that science is, and remains, rigorous and bias-free.

[1] HC Science Survey results, 2022

Anti-racism in Science - According to the most recent HC Science Survey results, 70% of survey respondents now cite familiarity with anti-racism in science principles, a 26% increase from baseline results.

- Branches are now acknowledging, educating and redressing biased wording on websites, such as changing words to read pigmented skin versus dark skin. Measures also include the addition of considerations of skin pigmentation in the guidance for medical devices, and the re-evaluation of the validity of certain skin scales used to assess skin irritation across a range of skin tones when testing cosmetic products.

- Branch specific initiatives are being launched and considered at BEC tables across the Department. For example, HECSB's Inclusive Science Network, launched in 2023, shares efforts and experiences to promote inclusivity in Branch science, share best practices and encourage scientists to consider racialized differences in data and outcomes. Additionally, poster judges at the Health Canada Science Forum now include criteria related to SGBA Plus and anti-racism in science.

- The development of a Departmental Action Plan to combat racism in science has been presented to the DM science and technology community to inspire other departments to follow suit. The plan is to be implemented in 2024.

Indigenous Knowledge integration - Numerous efforts have been launched in programs across the department. Within SciRIN, the Indigenous knowledge working group has launched two successive surveys seeking to identify knowledge gaps and promote cultural competency development, organized panel discussions at the Health Canada Science Forum and created opportunities for knowledge exchange and advancement of efforts with the goal of integrating Indigenous knowledge and western science and making advances towards reconciliation. Within the Office of Indigenous Affairs and Engagement, a newly created Indigenous Cultural Advisor is expected to offer appropriate support for scientists.

Citizen science/participatory research – Worldwide there are increasingly mobilized populations engaging publicly on matters of scientific interest. The Framework recognizes this global movement and the immense potential that exists in harnessing public interest and participation in addressing science data, knowledge and capacity gaps. Health Canada leadership in this space includes innovation seed funding investments towards infrastructure development, a highly motivated, multi-disciplinary Departmental task

force, a federal interdepartmental community of practice on citizen science and a commitment in the National Action Plan on Open Government. Citizen science is increasingly being recognized in branch strategic plans (e.g. HECSB), partnerships (e.g., Digital Transformation Branch, Laboratories Canada) and for its value in promoting transdisciplinary collaboration (e.g., presentation at Canadian Science Policy Conference.)

- Science communications – Effective science communications are no longer a 'nice to have' function and the skillset is valuable for both producers and users of science, especially when communicating with the public. Efforts to advance science communications have been widespread and include:
  - The Pest Management Regulatory Agency (PMRA) staffing a science communications team in 2021 to support, in part, its transformation agenda.
  - The Communications and Public Affairs Branch (CPAB), in 2023, forming a dedicated team to support science activities across the health portfolio and serve as a hub of science communication excellence.
  - CPAB producing and updating a Communications Handbook for HC-PHAC Scientists and Researchers.
  - Within SciRIN, an employee-led working group delivers a CommCMe program in collaboration with CPAB (communications pairing support), that has yielded exceptional results. Responding to the needs of scientists to communicate their science effectively to varied audiences while using plain language, in addition to hosting journal clubs and numerous events with high engagement and attendance.
  - CPAB coordinating media training for over 140 scientists in the Department, since 2020, to support science employees in communicating about their work in a public forum.
  - The Science Literacy working group collaborating with Health Canada Science Forum organizers to establish a new award for scientific posters, SciCLEAR, at the 2024 Forum.
  - CPAB producing and launching a Healthy Canadians podcast in 2023 to highlight the Department's work and science expertise through nuanced conversations and expert insights on important health topics.
  - SciRIN working alongside partners, including CPAB and laboratory scientists, to deliver three Lab Crawls to showcase and celebrate the work of scientists in HC Labs.

- Innovative science – Innovation in science is critical to ensuring ongoing relevancy and adaptation amid a constantly changing landscape. Innovation across the department is supported by means including the DM-sponsored Solutions Fund, providing seed funding and support for innovative proposals of value, artificial intelligence experimentation, and shifts towards

real world learning and implementation science. SciRIN efforts include focused working group efforts on regulatory preparedness, social, behavioural and implementation science, and artificial intelligence. The regulatory preparedness working group conducted a pulse survey of employees that revealed the organization may not be optimally prepared to regulate innovative products. Nor are we prepared to integrate and validate new approach methods (NAMs) that prioritize non-animal methods to assess toxicity of chemicals, pesticides and new drugs and biologics. As a result, forward-thinking early adopter scientists are mobilizing to advance Departmental thinking in these areas. Users of AI are collaborating through a community of practice established by the Office of the Chief Data Officer, and have put forward recommendations and tips for the uptake of AI across the organization. NAMS scientists are also formulating recommendations for senior executives. Finally, social and behavioural sciences are increasingly receiving recognition for their immense value in supporting relevant and effective decision-making.

- Science for all – Tearing down siloes across related disciplines and building collaborative bridges have been some of the intangibles associated with the Framework implementation and associated measures. Members from areas considered previously to be non-science include Library Services, Human Resources, Communications Policy, IT/Digital Services and Legal Services. Examples of specific efforts include:
  - The inclusion of non-science/science enabling Branch programs as core members of SciRIN's Steering Committee. This recognizes the collaborative potential and importance of having all perspectives and key players identifying barriers and developing collective solutions to advance science and the voices of HC scientists
  - An onboarding video for new employees, developed by the DSA, provides an overview of Departmental science and the Framework priorities and underscores the message that Health Canada values science and its workforce who produce or support the production of science.

Key lessons learned for sustaining a strong science culture into the future

Science leadership is key for transforming culture. Deputy Ministers who create an executive sub-committee on science, make space for science discussions at executive tables, and encourage and reward the development of science competencies, clearly value and recognize the importance of a strong science culture across the organization. The impacts permeate the science produced and collected for use, and they send a message to the entire organization.

Implementing a stronger science culture necessitates a multi-faceted approach that encompasses people, processes, tools and structures. Central to this approach is the recognition that top-down commitments must be balanced by grassroots engagement. By empowering employees to lead initiatives, organizations foster a sense of ownership, pride, and belonging among staff members. A science and research network can cross branch silos and cultivate a more cohesive and aligned science community. Moreover, appointing a departmental science advisor reporting directly to the deputy ensures dedicated guidance and advocacy for scientific endeavors. This structure facilitates alignment with organizational goals while fostering innovation and collaboration.

A guiding Framework provides the necessary nimbleness and adaptability to navigate evolving priorities and challenges. Branches within the organization benefit from the flexibility to tailor scientific initiatives according to specific needs and circumstances. This agility allows for swift adjustments in response to emerging opportunities or obstacles, ensuring that scientific efforts remain relevant and impactful.

Not only has the Framework provided a backdrop and a common lexicon for talking about science, it has also enabled, empowered and motivated the workforce to take action – a strategic objective of the Framework. It is here where science considerations will continue to drive momentum, laterally and vertically. Key drivers have been both the close collaboration between the DSA and Assistant Deputy Ministers on both branch-based and cross-cutting matters but moreso the empowerment and amplification of scientists' voices in decision making through SciRIN. By embracing this dynamic approach, departments and agencies can foster a culture of continuous improvement and innovation, ultimately driving long-term success and resilience in the face of change.