LEGACY FOR AIRWAY HEALTH

Strategic Plan 2019-2022

VGH UBC hospital foundation

Vancouver Coastal Health

Vancouver Coastal Health Research Institute

UBC THE UNIVERSITY OF BRITISH COLUMBIA

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1. Executive Summary

Asthma and Chronic Obstructive Pulmonary Disease (COPD) are the two most common chronic respiratory conditions worldwide, causing devastating physical, psychological and financial hardships, and significant cost to the health care system. Despite extensive and excellent research continuing to occur around the prevention and treatment of people living with asthma and COPD, the impact of the research is insufficient, as noted by the increasing incidence of these conditions in the global population and the lack of wide and consistent adoption of best practices and policies for prevention and improved clinical care. Accordingly, a pathway to more rapid and efficient targeting and translation of research is needed.

This suboptimal impact and inefficient targeting and translation of research into practice and/or policy change can be attributed to a range of barriers to effective translation that include: insufficient or distorted appreciation of the key drivers of airways disease, inadequate use of systems science, modeling and analytic tools, incomplete harnessing of informatics and data-power, lack of expertise in meaningful translation, weak stakeholder engagement, misunderstanding of cultural, sex/gender-based, geographical and/or socioeconomic barriers to implementation, changing political and institutional priorities, lack of funding, poor incorporation of individual genomic, biochemical and clinical factors that personalize health, lack of interdisciplinary communication and coordination of efforts, and missed opportunities to leverage cost-benefit analyses related to interventions and policy change. Collectively, these barriers have forestalled the effective movement from complexity to *bona fide* prevention and treatment of devastating airways disease.

The Legacy for Airway Health (LAH) provides a unique opportunity to overcome these barriers by focussing on research and complementary evidence-based implementation efforts that are grounded in consultation, collaboration and coordination with a particular emphasis on meaningful partnerships with patients, communities at risk and other key stakeholders such as researchers, government, administrators, payers, industry and regulators. This three year (2019-2022) Strategic Plan describes the goals, activities and expected outcomes that are centred on the major themes of prevention and improvement of care of asthma and COPD and which will be supported by enhancing capacity in research and evidence-based implementation efforts as well as ensuring the long-term sustainability of LAH. Learnings and outcomes from the activities described in this plan will be used to identify longer (5-, 10- and 20-year) goals and objectives that build upon the foundational components established during the initial term of this plan. Ultimately, LAH's commitment to better integration and application of data will accelerate knowledge mobilization and impact patients at the local, national, and international level.

2. WHAT: Asthma and COPD – *The Airway Disease We Will Prevent and Care For*

Asthma and Chronic Obstructive Pulmonary Disease (COPD) are the **two most common chronic respiratory conditions worldwide**, causing major physical, psychological and financial hardships. Asthma and COPD are rooted in interactions between genetic, environmental, and socio-cultural factors.

Asthma is a chronic inflammatory respiratory disease. The main symptoms of asthma are: shortness of breath, wheezing, coughing and chest tightness. Asthma currently affects approximately 8% of Canadians. As a chronic disease that can extend from childhood into old age, asthma is a major financial stressor for patients and the health care system overall. Asthma's direct costs (drugs, hospitals, and physicians) and indirect costs (long-term disability, mortality) in Canada were over $2.2 billion in 2010, with projections of $4.2 billion by 2030. In particular, direct costs of severe asthma (prevalent in 5-10% of asthma population) are two times higher than non-severe asthma. The causes of asthma are only partially understood and cure is rare once the window of prevention is missed.

COPD is a progressive lung disease characterized by obstruction to exhaling air and loss of lung tissue. The main symptoms of COPD, which typically appear in middle adulthood, are shortness of breath, coughing, and mucus production. Recent Canadian studies reveal that a substantial increase will occur in the number of COPD patients over the next decade. COPD is now the fourth leading cause of death in Canada, and mortality rates, especially in women, have been climbing in the last three decades. More than 1.2 million Canadians and over 400 million people worldwide have been diagnosed with COPD, but these are likely underestimates. COPD is the top medical cause for hospitalization in Canada. The economic burden of COPD in Canada alone is approximately $8 billion annually in direct costs. COPD is caused primarily by inhaled toxicants and, once prevention fails, is currently an incurable disease.

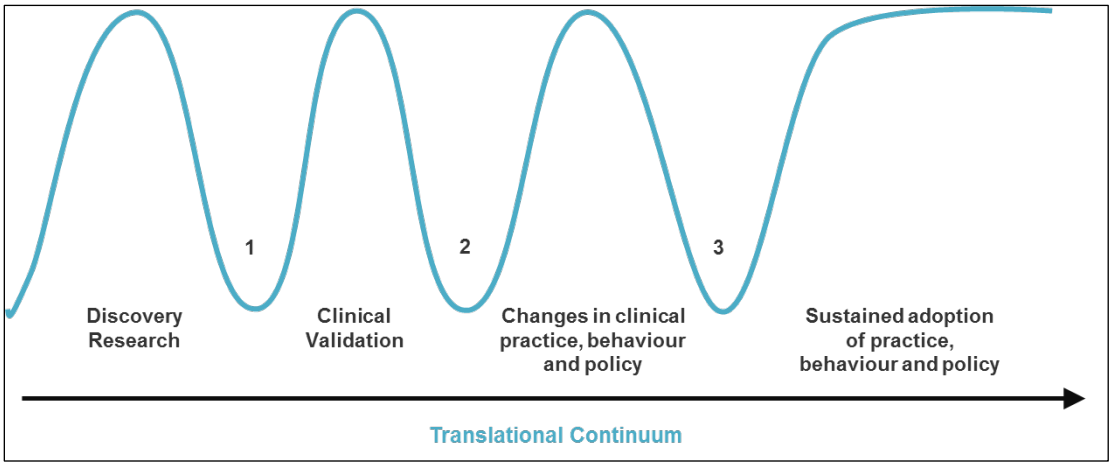
3. WHY: The Translation Challenge - *The Rationale for Bridging Valleys*

Extensive and excellent research continues to occur around the prevention and treatment of people living with asthma and COPD. We have amassed an unprecedented volume of 'big data' – genomic, socio-cultural, clinical, etc – but we have not linked the fruits of data integration to tangible preventive and therapeutic solutions for those with airways disease. So, the impact of the research has been elusive, as noted by the increasing incidence of these conditions in the global population and the lack of wide and consistent adoption of best practices and policies for prevention and improved clinical care.

The inefficient translation of research into practice and policy change is not unique to asthma and COPD. **Many of the identified obstacles for translation, often referred to as "Valleys of Death" (VoD)**, occur between basic research to clinical research ("Valley 1") to clinical practice implementation and/or policy change, ("Valley 2") and to uptake and sustainability ("Valley 3") (Figure 1). Examples of common translation obstacles for Valley 1 include: insufficient understanding of the condition, lack of expertise in translation, limited funding for clinical research (from investors, granting agencies and/or industry), recruitment challenges for clinical trials, as well as regulatory challenges. Obstacles for Valley 2 include: lack of understanding of cultural, gender, geographical and/or socioeconomic barriers to implementation, lack of coordination of efforts, reimbursement challenges for interventions and the inefficient use of health and economic data and cost-benefit analysis of interventions and policy change.

Obstacles for Valley 3 include: changing political and organizational circumstances such as priorities and funding, reduced efficacy or cost-effectiveness of interventions or policies.

Figure 1: Translational Valleys of Death



BC and Canadian researchers are leaders in the field of prevention and care of asthma and COPD. However, the translational VoDs continue to be a major issue. For example, despite all the literature on the risks of cigarettes and poor air quality, policies are not harmonized to minimize their impacts on asthma and COPD. In addition, we, as a society, are also dealing with emerging inhalation threats (EITs), such as marijuana, e-cigarettes and wildfire smoke (worsening in this era of climate change), the effects of which are poorly understood. Similarly, the diagnosis and care for patients with asthma and COPD are inconsistently applied across BC and Canada despite the existence of known best practices and published clinical practice guidelines.

There is a clear need to address the obstacles within the translational VoDs for the prevention and care of asthma and COPD in BC using a strategic and collaborative approach. Accordingly, we need leadership in coordinating and supporting stakeholders in our mission to synthesize evidence, identify knowledge gaps, support targeted research to fill knowledge gaps, and recommend pathways for practice, behaviour and policy changes. Such leadership would emphasize meaningful patient and public engagement to ensure that patients and those at risk remain the focus of all research and implementation efforts.

4. HOW: Legacy for Airway Health – *A Knowledge Cycle for BC and Beyond*

The Legacy for Airway Health (LAH) initiative was created in 2018 with the intent to overcome the aforementioned translational VoDs and thereby accelerate research and its efficient translation into improved policy changes, behaviour and practices for the prevention and care of asthma and COPD.

The translation cycle is often too linear, without sufficient feedback from observations to inform and support further research necessary to fill gaps and effectively inform policies that will ultimately be transformative. **Accordingly, the LAH approach is based on a knowledge cycle (Figure 2) that is cyclical and therefore more informative to the specific context within which we live**. This approach is iterative and: a) allows for feedback through research and consultations that promote further targeted research in the areas most critically needed, b) emphasizes best-in-class scholarship and investigation within an environment of continuous improvement and rigorous evaluation, c) ensures that our work can lead to policy change, d) attracts researchers to the nexus of world-class science within a mandate for tangible translation, and e) most importantly, does so by including patients and those at risk for airways disease as true partners in the process. This will allow for more precise and personalized approaches to health, from prevention to treatment. Thus, **LAH will create a unique milieu, not typically funded by traditional funding agencies, that provides solutions for dynamically addressing the barriers constituting the VoDs**. Areas of focus include building: 1) capacity for ongoing collaborations, convening and coordination, 2) expertise in implementation, knowledge translation, outcomes and evaluation sciences, 3) expertise in data analytics and artificial intelligence, integration of biological research to clinical data and applications in the healthcare setting, clinical trials, patient engagement and policy change. In this way, LAH will occupy a niche that does not otherwise exist, particularly with respect to airways disease that complements regional collaborators who focus on discovery science more proximal in the translation continuum.

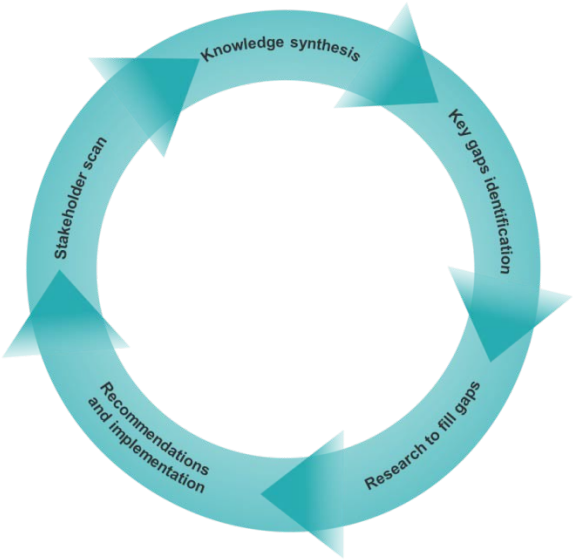


Figure 2. The LAH Knowledge Cycle

*Preventing and improving the quality of life for those with, or at risk for, COPD and asthma will be based on the **LAH Knowledge Cycle**: stakeholders provide input into key needs, input and the relevant literature is synthesized, the gaps critical to meeting stakeholder needs are revealed, research to fill those gaps is performed, results from that research (integrated into prior knowledge) leads to recommendations and implementation after which the success of the process is assessed by appropriate stakeholders.*

Leveraging this environment, LAH will enable research in close alignment with its mandate, so LAH will focus on targeted research projects that fill critical gaps identified by the knowledge cycle. As such, it will emphasize more mature elements of the translation continuum rather than "basic" research typical of cellular and animal models. Key gaps emergent from the knowledge cycle will be associated with informed challenges that are developed by LAH in partnership with other stakeholders, including patients and those at risk within the community. These challenges will be met by hypotheses (proposed

answers/solutions) that will are addressed by research that is carefully crafted so as to meet the challenges and close the gaps. The results of this process will propel the knowledge cycle forward.

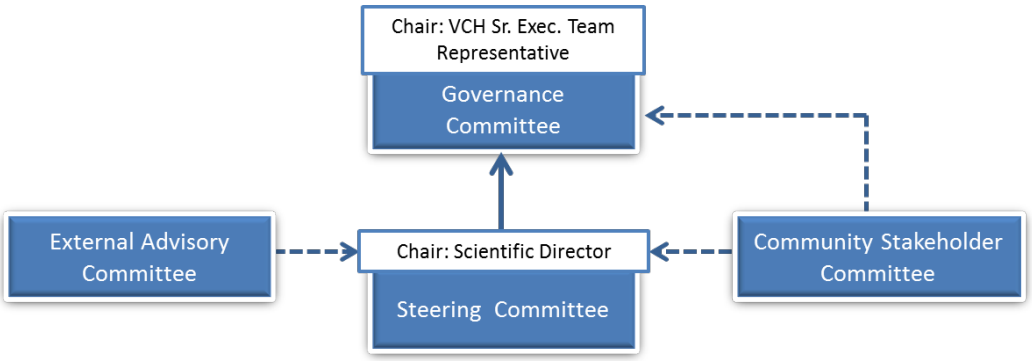
LAH support for such focused research will be in the form of modest levels of operational support (for strategic pilot and start-up projects) and in supporting faculty who themselves obtain the bulk of operational support for research endeavours through grants and other means.
Recognizing that LAH resources are finite, we will seek opportunities to identify areas of common interest and to partner with other asthma and COPD researchers and research institutions to collaborate towards expediting the translation of existing research endeavours. LAH will therefore support targeted research projects, as noted above, but will not offer open grant competitions for research or implementation projects outside LAH, and the majority of LAH financial resources will support people who power the knowledge cycle forward.

LAH was made possible through an unprecedented legacy gift to the VGH&UBC Foundation in 2017 of approximately $29 million for investment in research and care of asthma and COPD. LAH leverages our already well established and globally respected clinical research and care programs at the Vancouver General Hospital (VGH), its affiliated hospitals, and the University of British Columbia (UBC). Vancouver Coastal Health Authority, the Vancouver Coastal Health Research Institute (VCHRI), VGH&UBC Hospital Foundation, and the VGH and UBC Divisions of Respiratory Medicine are key partners of LAH and provide overall leadership. LAH goals are aligned with UBC Faculty of Medicine's top priorities areas including *Heart and Lung Health* and *Chronic Disease* and its formal themes of *Prevention and Complex Disease Management* and *Precision Health*, amongst others. This shared leadership reflects the imperative of LAH to better integrate existing as well as innovative new research results (whether or not supported directly by LAH) into the care continuum by overcoming the VoDs. The initiative provides a unique opportunity to enable key stakeholders (e.g. patients, communities, health authorities, health care providers, researchers, policy makers, administrators, industry, non-governmental organizations and government) to collaborate to drive research and clinical innovation and, in turn improve outcomes in asthma and COPD, locally and internationally. In particular, the partnerships with VCH and VGH provide a unique opportunity for LAH that will enable all partners to identify and work collaboratively on common research and implementation priorities, resulting in accelerated and meaningful impact on patients and communities. LAH is committed to extending findings from these partnerships to other jurisdictions beyond VCH and VGH.

5. LAH Governance and Leadership

The LAH initiative is committed to ensuring robust and transparent governance and leadership. The organizational structure (Figure 3) consists of strong oversight and expert advisory committees supported by effective scientific and operational leadership.

Figure 3: LAH Governance Structure



Governance Committee

The LAH initiative is overseen by the LAH Governance Committee (GC), which ensures the establishment and implementation of an integrated program of research and improvements in prevention and care for those with asthma and COPD. The committee provides strategic guidance and oversight of LAH, in terms of program priorities, sustainability planning and interface with appropriate partners to ensure success. The GC consists of executive leadership from Vancouver Coastal Health (VCH), Vancouver Coastal Health Research Institute (VCHRI), VGH/UBC Respiratory Medicine Researchers/Clinicians, VGH & UBC Hospital Foundation, and representatives from the LAH Patient Partners Committee (see below). The committee also includes external expert(s) with real world experience in research translation and implementation. The GC is chaired by a representative from the VCH Senior Executive Team. See Pg. 16 for full membership list of GC.

Steering Committee

The Steering Committee (SC) leads the strategic and operational activities of LAH. Working with the Director of Operations, the SC committee ensures that the mission of LAH is effectively oriented and operationalized to ensure success. This is achieved by providing direction and oversight regarding the activities of LAH, including establishment of program priorities, resource allocation and utilization, development and implementation of processes to ensure transparency, operational best practices and mitigation of conflict of interest. The SC also interfaces routinely with appropriate operational, academic and other partners. The SC is composed of representatives from organizations contributing leadership to LAH and is chaired by the LAH Scientific Director. See Pg. 17 for full membership list of SC.

External Advisory Committee

The primary purpose of the LAH External Advisory Committee (EAC) is to provide advice and make recommendations to the LAH Scientific Director on emerging trends and gaps in knowledge and implementation regarding effective prevention and care of asthma and COPD. More specifically it will also provide external validation for the overall high-level direction of the LAH. This committee is

composed of experts in airway health research, care, knowledge translation and policy change and is chaired by the LAH Scientific Director.

Community Stakeholder Committee

Community stakeholders include people with lived experience/expertise, caregivers (family and friends), and those at risk of developing COPD or asthma. The LAH views community stakeholders as important partners in its endeavours. Community stakeholders participate in LAH governance, strategic planning and research and program activities through the Community Stakeholder Committee (CSC). The committee reflects diversity in gender, ethnicity, age, disease type and geographical region. The committee chair is selected by the members of the committee.

Scientific Director

The LAH Scientific Director provides overall scientific leadership to LAH, leads the development and implementation of the LAH strategic plan and chairs the LAH Steering and External Advisory Committees. A search is currently underway to recruit a full-time Scientific Director with the expectation that the position will be filled by 2021. LAH has appointed an interim Scientific Director to fulfil the role until then.

6. Purpose of this Strategic Plan

In 2018, LAH leadership commissioned consultations with health system leaders, patient groups, researchers and clinicians to inform the development of the strategic direction of the initiative. The feedback encouraged LAH leadership to create a strategy that integrates research in prevention and clinical care and focusses on meaningful patient engagement, collaborations, identification of gaps, knowledge generation, and the implementation of best practices across the care continuum.

The LAH Strategic Plan is based on these consultations. The plan is intended to guide our efforts for the period 2019-2022 and describes the goals, objectives and activities planned in order to help achieve the LAH vision and mission. The goals and objectives are strategically oriented to advance the LAH vision and mission and to enable its success through additional funding empowered by the initial financial support for LAH. During the term of this plan, the aim is to lay the foundation for LAH to be a centre of excellence for research and translation promoting improved practice, behaviour, personalization and policy change for the prevention and care of asthma and COPD. Consultations will continue with the broader airway health community and stakeholders, including patient partners, to identify specific translation opportunities and to identify new research and implementation needs. The activities described in the plan are aligned with the health care priorities of the Government of BC and will contribute significantly towards achieving the government's goals of chronic disease prevention and management.

Learnings and outcomes from the activities described in this plan will be used to identify longer (5-, 10- and 20-year) goals and objectives to leverage the foundational components established during the term of this plan. As this trajectory develops, LAH leadership is committed to regular evaluation of its activities. This strategic plan includes performance indicators for each activity, against which progress will be measured over the term of the plan.

7. Guiding Framework: LAH Vision, Mission and Values

Vision

Airway health through knowledge creation, dissemination and application

Mission

***Legacy for Airway Health* will lead and accelerate the creation and translation of knowledge into world-class prevention of, and care for, persons living with asthma and COPD**

Values

Patient-centricity: *work for and with patients and those at risk; focus on impact to them*

Excellence: *strive for the highest calibre of effort and outcomes; never accept mediocrity*

Innovation: *seek novel and practical solutions; bring creative lens to challenges*

Collaboration: *embrace interdisciplinary thinking and alternative views; cooperate for synergy*

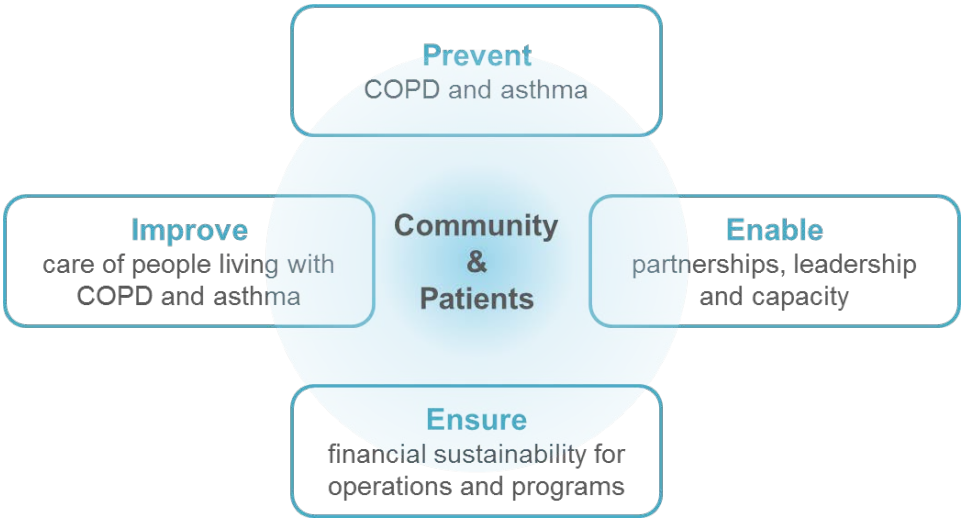
Impact: *Ensure transformational outcomes by accountability to objectives and goals*

LAH is rooted in the philosophy that remediating the huge burden of asthma and COPD requires strategic research, proven prevention tactics, and delivery of optimal care for those who suffer from these airway diseases. Accordingly, ***Prevention*** -- preventing disease onset and progression -- as well as ***Care*** – relieving the suffering of those living with asthma and COPD across the continuum of care -- are the two driving themes motivating the LAH strategic plan. To ensure that we achieve the ambitious LAH goals related to prevention and improvement of care, we will lead and enhance the capacity in research and implementation science-driven efforts for accelerating improvements in practice, personalization, behaviour and policy change. These efforts will require scientific excellence, collaborations, strong partnerships, and resource stewardship. Accordingly, LAH will be uncompromising in its insistence on teamwork, transparency, and adherence to its mission. The focus will be on hiring the right people and working with the key stakeholders around the LAH mission.

Leadership is committed to ensuring long-term sustainability of LAH by leveraging existing funding and actively seeking opportunities for funding and co-funding from granting agencies, government, academic, industry and philanthropic partners. During the term of this plan, a strategy for short- and long-term sustained funding will be developed.

The LAH Strategic Plan consists of 4 goals (Figure 4) that support our care and prevention themes. Each goal has specific objectives, activities and key outcomes.

Figure 4: LAH Goals



8. Strategic goals, objectives and activities for 2019-2022

Strategic Goal 1

Create an evidence-based strategy for prevention of asthma and COPD

In order to prevent asthma and COPD, emphasis needs to be placed on protecting the vulnerable and increasing our knowledge around existing, as well as emerging inhalant threats (EITs) such as e-cigarettes, wildfires and marijuana. The aim of Goal 1 is to deepen our understanding of the threats to airways health, how our understanding of biology therein can be leveraged, and to develop a comprehensive and long-term strategy for asthma and COPD prevention based on stakeholder engagement and collaboration. The strategy will guide future implementation and policy change efforts to be led by LAH and its partners.

Objective 1: Identify barriers to protection from existing and emerging inhalant threats (EITs)

Activities:

1. Develop an asset map of research resources regarding existing (cigarettes, traffic-related pollution) and emerging ITs in BC;
2. Organize a BC-wide stakeholder meeting to share knowledge and goals for reducing the impact of EITs;
3. Support the development of a BC-wide EIT research and implementation strategy, in partnership with stakeholders.

Outcome: A BC-wide research and implementation strategy for mitigating the harms of EITs

Objective 2: Understand the connection between EITs and lung health, and identify interventions to protect those susceptible to these threats

Activities:

1. Clarify how EITs cause and exacerbate airways disease;
2. Identify exposures and susceptibility factors that are critical to informing policy mandates and guidelines regarding EITs, using translational tools such as data analytics and integrative biology;
3. Determine key interventions to reduce impact of EITs at personal and public health level.

OUTCOME: Improved evidence base for interventions that decrease the incidence and progression of asthma and COPD

Strategic Goal 2

Create a framework to improve the care and quality of life of people living with asthma and COPD

Patients across BC suffering from asthma and COPD receive disparate care and have varying quality of life. These differences are due to unequal access to diagnosis (e.g. spirometry and other lung function tests) and medical care, poor leveraging of rich but complex databases, lack of effective patient education programs to ensure adherence to medication and self-management tasks (e.g. through respiratory rehabilitation and disease-specific case management), lack of understanding of best prevention strategies, and the uneven application of known best practices across the health care continuum (acute, rehabilitation, primary care and end of life). The aim of Goal 2 is to create a comprehensive BC-wide strategy of care through research informed by engagement and consultations with patients and other relevant stakeholders to identify gaps and barriers to optimal and equitable care and developing strategies for overcoming them.

Objective 1: Develop a framework for improved care for asthma and COPD in BC by identifying gaps and barriers to optimal care and quality of life of people with asthma and COPD

Activities:

1. Describe the journey of people living with asthma and COPD across the care continuum, cognizant of health literacy and cultural challenges at VCH and at least one other health authority;
2. Distill existing datasets (clinical, biological, genomic, socio-economic) into products most amenable for translation within the current challenges of health care for airways disease.
3. Support the development of local and provincial asset maps of spirometry access, respiratory rehabilitation and airway disease education;
4. Engage in partnerships with VCH and at least one other health authority to develop a framework for implementation using logic model and evaluation of management strategies using “Cascades of Care” with the ultimate goal of creating models of care that will be scalable and have impact provincially, nationally and internationally.

OUTCOME: A data-driven implementation and evaluation framework for equitable, improved, cost-effective and quality of life-oriented care for people living with asthma and COPD across BC

Strategic Goal 3

Build leadership, capacity and partnerships for achieving LAH Mission

We will focus on building capacity and partnerships in areas that are critical for filling gaps of knowledge and improving care for people living with asthma and COPD. Areas of focus include research (data analytics including artificial intelligence and machine learning, integration of biological research to clinical data and applications in the healthcare setting, implementation science, environment and public health, clinical trials), knowledge translation, and coordination and engagement with patients and other stakeholders, including the BC Ministry of Health given its focus on chronic disease prevention and management. Capacity will be built through the recruitment of experts and supporting the development of the next generation of clinician-scientists with an interest and passion for prevention and improvement of care for asthma and COPD.

In addition, we will recognize and build upon a long-term partnership between patients, the BC Lung Association, and a diverse group of researchers and clinicians across BC in improving outcomes for patients with airways diseases by developing a province-wide airway health network for collaborating in research and implementation efforts.

Objective 1: Build capacity in data analytics, public health outcomes and policy, knowledge mobilization and implementation science

Activities:

1. Recruit three new faculty members (at least two of whom would be clinician-scientists) at interface of research and clinical care with expertise in the clinical management of asthma and COPD, data analytics, precision health, behaviour change, knowledge and/or policy implementation;
2. Recruit M.Sc/Ph.D scientist for supporting grant applications, systematic reviews, development of asset maps, determination of patient journeys and stakeholder engagement/meetings;
3. Recruit a Knowledge Translation (KT) Specialist to support LAH KT activities, stakeholder engagement events and LAH-related communications;
4. Enable airways disease registries that strategically support LAH goals, in partnership with key stakeholders.

OUTCOME: Internal capabilities and resources for enhancing research and translation of knowledge into practice benefitting the community, patients and other stakeholders

Objective 2: Build capacity for community and patient (community stakeholders) engagement

Activities:

1. Identify and recruit members for Community Stakeholder Committee (CSC);
2. Facilitate training of CSC members for partnering in research and care delivery;
3. Facilitate training to lung health researchers in patient-oriented research (in partnership with BC SUPPORT Unit).

OUTCOME: A framework for meaningful community and patient engagement in lung health research and LAH activities

Objective 3: Enable clinical research studies of interventions for asthma and COPD

Activities:

1. Determine criteria for prioritization of clinical studies (behavioural, pharmaceutical, technological, etc.) enabled by LAH;
2. Support recruitment and coordination into clinical studies most aligned with LAH mission

OUTCOME: Access to, and validation of, novel interventions to treat and prevent asthma and COPD

Objective 4: Support the development of a BC-wide Lung Health Network in collaboration with key stakeholders

Activities:

1. Identify and consult with patients, research and care delivery stakeholders in BC as partners to develop scope of the Network;
2. Support the planning and hosting of a BC-wide summit with BC Lung Association and develop a Network strategy and plan of action;
3. Organize conferences for network members to share current and emerging research and clinical care in asthma and COPD;
4. Work with applicable communication teams to develop and distribute electronic newsletters, as well as adopt social media-based and web-based collaboration platforms for asthma and COPD researchers, patients and caregivers.

OUTCOME: A BC-wide Lung Health Network for fostering knowledge exchange, research collaborations and patient engagement

Strategic Goal 4

Develop a framework to ensure financial sustainability of LAH operations

LAH leadership intends to use the annual interest generated from the donation. We also intend to leverage existing dollars to raise additional funds from diverse sources, which will enable us to expand our programs and operations. The aim of Goal 4 is to develop a realistic fund development plan that can be implemented effectively.

Objective 1: Develop and begin to implement a fund development plan

Activities:

1. Identify and apply for grants from funding agencies;
2. Explore the feasibility of revenue generation from fee-for-services related to outcome research, knowledge translation and clinical trials at LAH;
3. Develop messaging and seek opportunities for engaging provincial and federal governments for funding LAH operations and programs;
4. Develop donor and industry relations strategy;
5. Identify and develop partnerships for co-funding opportunities.

OUTCOME: A long-term funding strategy, including key targets, for LAH

9. Governance and Steering Committee Members

Governance Committee	
1. VCH, Chair	Patricia Daly, Vice-President, Public Health and Chief Medical Health Officer
2. VGH & UBC Hospital Foundation	Barbara Grantham, President & CEO, VGH & UBC Hospital Foundation
3. Vancouver Coastal Health Research Institute (VCHRI)	Robert McMaster, Executive Director, VCHRI and Vice-President Research, VCH
4. External Academic/Research Representative	Julio Montaner, Director, Infectious Disease Clinic and Physician Program Director for HIV/AIDS at Providence Health Care and Director, BC Centre of Excellence in HIV/AIDS
5. External Academic/Research Representative	Michael Allard, Vice Dean, Health Engagement. University of British Columbia
6. VGH Clinical Care Representative (acute/medical/specialist care)	Mark FitzGerald, Professor of Medicine, UBC, and Director, Centre for Heart and Lung

	Health, VCHRI
7. VGH Clinical Care Representative (medical/primary care)	Nardia Strydom, Department Head of Family and Community Medicine, and Regional Medical Director of Primary Care, VCH
8. VGH Clinical Care Representative (community)	Carmen Rempel, Respiratory Therapist
9. Public/Patient Representative(s)	TBD
10. Ex-Officio: Director of Operations, LAH Interim Scientific Director, LAH	 Phalgun Joshi Christopher Carlsten, Professor of Medicine and Head of Respiratory Division, UBC; Investigator, Centre for Heart and Lung Health, VCHRI

Steering Committee	
1. Interim Scientific Director, LAH (Chair)	Christopher Carlsten, Professor of Medicine and Head of Respiratory Division, UBC; Investigator, Centre for Heart and Lung Health, VCHRI
2. VCH	Patricia Daly, Vice-President, Public Health and Chief Medical Health Officer
3. VGH & UBC Hospital Foundation	Cathy Helliwell VP Strategic Partnerships VGH + UBC Hospital Foundation
4. VGH Clinical Care Representative (acute/medical/specialist care)	Mark FitzGerald, Professor of Medicine, UBC, and Director, Centre for Heart and Lung Health, VCHRI
5. VGH Clinical Care Representative (medical/primary care)	Nardia Strydom, Department Head of Family and Community Medicine, and Regional Medical Director of Primary Care, VCH
6. Vancouver Coastal Health Research Institute (VCHRI)	Faydra Aldridge, Director, Stakeholder Relations & Strategic Initiatives
7. Ex-Officio: Director of Operations, LAH	Phalgun Joshi