

Ministry of Health's plans to address gaps in evidence-based programs arising from the events described in the Ombudsperson's Report

Introduction

Efforts are underway to address the gaps identified by the Ministry in the report *Review and Assessment of the Termination of Evidence-based Programs in Pharmaceutical and Related Health Services: Ministry of Health Response to Ombudsperson's Recommendation 34*. A table with additional details about the objectives, milestones and timelines for addressing these gaps is included in Appendix 1. Furthermore, a table with additional details about research projects that were planned or underway in 2012 supporting evidence-based programs in the Ministry is included in Appendix 2.

In a public assessment of this response to Recommendation 34, it was noted by Justice Thomas Cromwell, who is overseeing government's response to the Ombudsperson's report, that the Ministry's gap analysis fulfilled the requirement of the Ombudsperson but that some researchers and contractors had noted it "does not, in fact, identify the most serious gaps and that the report does not reflect the advice provided by some of the people most familiar with the impact of these events on evidence-based research in the Ministry."

In conducting the gap analysis, the Ministry attempted to identify the research projects underway that were supporting evidence-based¹ decision making at the Ministry of Health. In addition to effects on evidence-based programs, the Ministry has noted several research projects that had been identified for future consideration, whose planning may have been impacted at the time of the investigation – some of these are now complete, some are underway, and some are no longer considered priorities (see Appendix 2). As reported in the gap analysis, the Ministry concluded that there were some evidence-based programs that were impacted during the time of the investigation that have largely been restored (e.g., Population Health Surveillance) and there are some programs, most notably the optimum drug usage programs in the Pharmaceutical Services Division and the capacity for efficient and timely systematic evaluation, where gaps remain. Additionally, the Ministry acknowledged that the restrictions and delays in access to Ministry data during the investigation had an impact on other research projects underway for purposes other than supporting Ministry decision making. These were acknowledged under intangible impacts and researcher access to data.

¹ The term evidence-informed is more frequently used in recognition that other factors such as clinical expertise and public values in addition to scientific evidence are also considered in the development of policy. We use the term evidence-based throughout this report to be consistent with the Ombudsperson's recommendations.

The information that follows in this excerpt provides details about the Ministry's plan to address each of the 10 gaps identified in the Review.

Gaps identified in the Review and plan to address

The information that follows provides details about the Ministry's plan to address each of the 10 identified gaps.

1. Intangible gaps - rebuilding and strengthening the relationships between the Ministry and the research community

Rebuilding and restoring the relationships and networks between the Ministry and the research community will require communication, clear processes and respectful engagement opportunities that engender and sustain goodwill. The Ministry's *Research and Knowledge Management Strategy*, to be released in February 2018, is a public commitment to strengthen relationships between the Ministry and the research community. One practical action the Ministry has taken to do this is to sign a multi-year agreement with the Therapeutics Initiative.

2. Quality prescribing (optimal drug use) support for health professionals

To enhance existing initiatives in quality prescribing and building upon the previous Education for Quality Improvement in Patient Care (EQIP) program, the Ministry is developing a new optimal drug use program in collaboration with the Therapeutics Initiative. The EQIP program provided family physicians with tools for self-evaluation, including personalized prescribing portraits for a particular disease or health topic. The program was implemented in phases to enable rigorous evaluation. The Ministry's Pharmaceutical Services Division will operationalize this program by the end of 2018/19 fiscal year. Additionally, the Ministry will continue to operate the Provincial Academic Detailing Service and ensure its integration with this new program.

3. Systematic approach to utilization and therapeutic reviews to inform decision making

The Ministry will establish a program for systematic drug utilization reviews and systematic monitoring for select targeted drugs and drug classes to expand its capacity for using and generating therapeutic reviews to inform policy and decision making. This new program, in collaboration with the Therapeutics Initiative, will be launched in summer 2018. The program is designed to align with the work of the Drug Benefit Council, to supplement the Ministry's existing analytical work, to support evidence-informed decisions and to ensure contemporary and cost-effective PharmaCare programs.

4. Optimal utilization of the expertise of researchers to inform PharmaCare policies, programs and drug listing decisions

There are evidence-informed PharmaCare policies, programs and drug listing decisions, but these will be further enhanced through more independent research. By September 2018, the Pharmaceutical Services Division will systematically review opportunities for collaboration and engagement between the Ministry and pharmaceutical policy researchers to inform PharmaCare policies, programs, and drug listing decisions. As part of the commitment to the Drug Safety and Effectiveness Network (DSEN), the Ministry will be facilitating timely data access by April 2018 and has already approved an approach that provides DSEN with preapproval for projects meeting particular criteria.

5. Sufficient internal capacity focused on the integration of evaluation and research outputs

The Pharmaceutical Services Division will assess its capacity needs and ensure that any gaps are filled by summer 2018. Capacity needs will be regularly assessed and adjusted going forward.

6. Access to the Canadian Community Health Survey

The Canadian Community Health Survey (CCHS) is a cross-sectional survey that collects information related to health status, health care utilization and health determinants for the Canadian population. To restore access to CCHS data and connect it with the Ministry's administrative health data, the Ministry will enter into a data sharing agreement with Statistics Canada enabling the transfer of B.C. CCHS data to the Ministry. Subject to the approval of Statistics Canada, the Ministry will store the CCHS data in a secure environment and provide access to approved personnel. Planning for the reacquisition of CCHS data has begun. Security requirements will be reviewed and related processes and supporting technologies will be established by the end of fiscal year 2017/2018. Access to CCHS data is expected to be restored by December 2018.

7. Systematic evaluations

Development of B.C.'s AHSN provides the necessary infrastructure to support health system level evaluation, on a much more robust and sustainable level than the Monitoring, Evaluation, and Learning System² that was discontinued in 2012. The Ministry can leverage the AHSN's network of researchers, health authorities, policy makers and patients to support collaborations that will increase the rigour of evaluations and the applicability and value of their findings.

² In 2010, the Ministry, working with the MSFHR and the health authorities, collaborated on the Monitoring, Evaluation and Learning System (MELS) initiative, a project to develop capacity to undertake provincial evaluations of major health care initiatives. MELS featured a provincial network of 15 evaluators embedded in the 5 regional health authorities, external expert advisory groups and initial work on a secure data collection and reporting system. MSFHR made a significant investment in funding and staffing to support the initiative.

As a an initial step, the Ministry will commission a proof of concept for a new initiative, that will serve as an evaluation platform for rapid-cycle evaluation of services, programs, and policies at a provincial level by:

- Promoting implementation in waves: first, pilots, then designed delays;
- Using outcome data from the health data platform for comparisons of early versus delayed groups; and,
- Enabling economies of scale and efficiency that are not possible when evaluations are done as one-off projects.

This strategy will enable the Ministry to move forward judiciously with incomplete evidence while allowing for any necessary course correction after each cycle of evaluation and re-evaluation.

The proof of concept will be tested in 2018/19 as an internal Ministry project with a commissioned researcher and using the existing administrative data in *Healthideas*. During this time, an implementation plan will be developed for approval addressing governance (potentially within the AHSN), budget, project selection, and work plan.

8. Optimized development and maintenance of *Healthideas*, the Ministry data warehouse, to support secondary data access

Optimizing the development and maintenance of *Healthideas* will support secondary data access for Ministry analysts as well as researchers who will access the data through PopData. Particular areas of focus include: the management of data (metadata) that provides information about other data, summary indicators to support health system reporting and sets of analysis-ready data to support easier access to health data.

A request for proposals to procure a Ministry metadata management solution will be developed and posted to B.C. Bid in the summer of 2018. An initial version of a metadata management solution is expected to be deployed for Ministry staff by the end of 2018. The benefits of improved metadata content will flow through to the research community via PopData.

The Ministry is developing summary indicators to support health system reporting. These will enable consistent responses to ad-hoc requests and allow for consistent aggregate and summary reports. Ministry analysts will also have the ability to conduct additional drill down analysis from aggregate/summary reports where required for policy and decision making. This indicator set will be complete by April 2018.

The commitment to develop sets of data that are analysis-ready will be an on-going iterative process where these data sets are identified, prioritized and operationalized over time to meet evolving health sector strategic priorities. The first analysis-ready data set, for Medical Services Plan data, will be available by April 2018. The Ministry is also enhancing its population grouping methodologies and significantly increasing the granularity of groupings. This will enable the Ministry to monitor population health, predict health care utilization patterns and support strategic decision making. The improved methodology will be tested and run, and the resulting data will be made available to Ministry staff through *Healthideas* in the fall of 2018.

9. Ready access for Ministry staff to aggregate statistics

Before and since the investigation, the Ministry has invested in powerful business intelligence tools (i.e. advanced SAS and MicroStrategy) that can enable visual display and support the effective interpretation of data. These reports can be generated in response to stakeholder and program area needs, and new reports will continue to be developed to meet current and evolving business priorities. A self-service portal that gives Ministry staff ready access to policies, routine reports and key indicators has been developed and is in the pilot stage. By April 2018 the portal will be fully established making select aggregate reports available to Ministry users.

10. Appropriate and timely data access for Ministry internal staff, health authorities and researchers

The Ministry is leading the initiative to develop a federated data sharing ecosystem for the health sector health system data held across health organizations in support of analysis and research. The BC SUPPORT Unit is contributing financially and in planning to the development of the Health Data Platform, and the projects under this initiative, which are described in the following paragraphs. These, in addition to others, led by the BC SUPPORT Unit will be an integral part of transforming the data and services that will be provided to researchers.

The Ministry is exploring the development of a secure data environment to enable access to linkable data across health organizations in support of research and analytics. Work on a Proof of Concept for the technical environment is currently underway and scheduled to be delivered by March 2018.

BC Data Scout™ will be a data query service that provides information in the form of highly aggregated, approximate results to researchers who are planning a study using Ministry data. The information provided in the report is intended to be complete enough to determine if a study is feasible, but not detailed enough to answer research questions, or replace the need for a full Data Access Request. Data Scout™ will be made available through PopData before the end of fiscal year 2017/18.

To ensure appropriate and timely access to Ministry data, work is underway to support PopData, as a trusted research organization, to extract data directly from the Ministry's

Healthideas environment. PopData direct access to PharmaNet data has been established and is in the pilot stage. Planning is currently underway to provide direct access to other sets of Ministry data in Healthideas, which is expected to be operational by April 2018. This access will provide more up-to-date data than what is available through the annual Ministry data extracts PopData currently receives.

The Ministry will be refreshing its data application and access policies and processes in order to ensure efficiency, appropriateness and timeliness. An expert review is underway and recommendations will be complete by April 2018, and revised policies and processes are to be implemented by December 2018. In addition, the Ministry and health authorities are working to reduce the time it takes to get approval for data requests across multiple health organizations by streamlining related processes, with a focus on data held by the Ministry and the health authorities. An anticipated outcome of this BC SUPPORT Unit funded work is a reduction in the complexity of forms and approvals needed for data access requests. A proposed model for streamlining data access requests across multiple organizations will be developed by April 2018.

Appendix 1 - Table of plans for addressing the gaps

Identified Gap	Objective(s)	Deliverable	Timeline/ Milestones
Intangible Gaps – Rebuilding and strengthening the Relationships between Ministry and the Research Community	<p>To support both researchers and Ministry staff with the information and resources they need to promote and sustain lasting relationships.</p> <p>To generate new connections, support the integration of research into policy, and use the expertise of established researchers in health system policy and decision making.</p> <p>To explore opportunities, where possible and feasible to enter into responsive multi-year agreements with research centres.</p>	<p>The Ministry <i>Research and Knowledge Management Strategy</i></p> <p>Develop agreements that provide flexibility as well as some degree of certainty so that researchers and research organizations can act as trusted and supported partners in pharmaceutical and related health care services.</p>	<p>The Strategy will be released in February 2018</p> <p>The Ministry and the TI have signed a multi-year agreement. Activities are ongoing.</p>
Quality prescribing (optimal drug use) support for health professionals	To enhance existing initiatives in quality prescribing (optimal drug use) to support health professionals.	Establish a new program in collaboration with the Therapeutics Initiative building upon the previous EQIP program and ensuring it is integrated with the ongoing Provincial Academic Detailing Services.	Pharmaceutical Services Division to operationalize this program by the end of FY 2018/19.
Systematic approach to utilization and therapeutic reviews to inform decision making	To expand the use and generation of therapeutic reviews that inform Pharmacare program policy and decision making.	Establish a program for systematic drug utilization reviews and systematic monitoring for select targeted drugs and drug classes.	Launch this new program, in collaboration with the Therapeutics Initiative, by summer 2018.
Optimal utilization of the expertise of researchers to inform PharmaCare policies, programs and drug listing decisions	To strengthen Pharmacare policies, programs and drug listing decisions through more independent research.	Systematically review the PharmaCare drug plan and identify areas where the Ministry and the Therapeutics Initiative, as well as other pharmaceutical policy researchers located in B.C. or those who are part of national collaborations (e.g. DSEN) could productively collaborate.	<p>Systematic review of opportunities for collaboration and engagement with pharmaceutical policy researchers by September 2018.</p> <p>Process for timely data access for the DSEN facilitated by April 2018.</p>

<p>Sufficient internal capacity focused on the integration of evaluation and research outputs</p>	<p>To ensure there is sufficient internal capacity to effectively integrate evaluation and research outputs into evidence-informed policy and decision making.</p>	<p>Increase capacity to support research knowledge translation.</p>	<p>Sufficient capacity in place by summer 2018 and regularly assessed and adjusted thereafter.</p>
<p>Access to the Canadian Community Health Survey (CCHS)</p>	<p>To restore access to CCHS data and enable linkage with the Ministry's administrative health data.</p>	<p>Enter into a data sharing agreement with Statistics Canada to enable the transfer of B.C. CCHS data to the Ministry; and, subject to the approval of Statistics Canada, store the CCHS in a secure environment and provide access to personnel approved for access.</p>	<p>Planning for the reacquisition of CCHS data has begun. Security requirements will be reviewed and related processes and supporting technologies will be established by the end of FY 2017/2018. Access to CCHS data is expected to be restored by December 2018.</p>
<p>Systematic Evaluations</p>	<p>To expand efforts on the evaluation of implementation and impact of strategic policies and to support collaborations that will increase the rigour of evaluations and the applicability and value of their findings.</p>	<p>Establish an evaluation platform for rapid-cycle evaluation of services, programs, and policies at a provincial level.</p>	<p>Proof of concept for evaluation platform to be tested in 2018/19 as an internal Ministry project with a commissioned researcher and using the existing administrative data in <i>Healthideas</i>.</p> <p>Implementation plan to be developed for approval addressing governance (potentially within the AHSN), budget, project selection, and work plan by February 2019.</p>
<p>Optimized development and maintenance of <i>Healthideas</i>, the Ministry data warehouse, to support secondary data access</p>	<p>To enhance the <i>Healthideas</i> data holdings in the areas of metadata management, summary indicators and sets of analysis-ready data, to support high quality analytics.</p>	<p>Procure a metadata management solution for the <i>Healthideas</i>.</p> <p>Develop summary indicators to allow for consistent aggregate and summary reports.</p> <p>Identify and develop high value sets of analysis-ready data.</p>	<p>An RFP will be developed and posted to B.C. Bid in the summer of 2018. An initial version of a metadata management solution is expected to be deployed for Ministry staff by the end of FY 2018/19.</p> <p>Complete indicator set by April 2018.</p> <p>Ongoing, iterative process. The first set of analysis-ready data, for MSP data, will be available by April 2018.</p>

		Enhance the Ministry's population grouping methodologies, significantly increasing the level of granularity.	Data to be made available to Ministry staff through Healthideas in the fall of 2018.
Ready access for Ministry staff to aggregate statistics	To ensure access to readily available aggregate reports in a visual display that supports the effective interpretation of data.	Continue to leverage the Ministry's business intelligence tools to create consistent and reliable data products, and make routine aggregate reports available to specific people via a self-service portal.	Self-service portal for Ministry staff established by April 2018; new aggregate reports will continue to be developed to meet current and evolving business priorities.
Appropriate and timely data access for Ministry internal staff, health authorities and researchers	To ensure appropriate and timely access to linkable health data held across health organizations for research and analytics.	<p>Develop a secure data environment to enable access to linkable data across health organizations.</p> <p>Refresh data application and access policies and processes to ensure efficiency, appropriateness and timeliness. Establish direct access to Ministry data for PopData, enabling more timely access to more up-to-date Ministry data for researchers.</p> <p>BC Data Scout™ will be a data query service that provides cohort information in the form of highly aggregated, approximate results to researchers who are planning a study using Ministry data and need help determining the feasibility of the study.</p>	<p>A Proof of Concept is scheduled to be delivered by March 2018.</p> <p>An expert review of the current state is underway and recommendations for a future state will be complete by April 2018 for development and implementation by Dec 2018.</p> <p>PopData direct access to PharmaNet data is in the pilot stage. Planning is underway with a goal of providing direct access to additional sets of Ministry data in Healthideas by April 2018.</p> <p>BC Data Scout™ will be made available through PopData BC before the end of FY 2017/18.</p>

Appendix 2: Research projects planned and underway in 2012 supporting evidence-based programs in the Ministry

Evidence based program	Area of research	Project description	Effects of investigation	Status
Drug Use Optimization and Drug Review Process	Alzheimer's Drug Therapy Initiative (ADTI)	ADTI was a "coverage with evidence" development project. The ADTI was a series of research studies launched in 2007 to examine and confirm the real-world effectiveness, safety, and cost-effectiveness of a class of Alzheimer's drugs, the cholinesterase inhibitors. The research was intended to address gaps in clinical evidence and to make an informed listing decision. Temporary coverage of the cholinesterase inhibitor drugs was provided for British Columbian patients while the research was ongoing.	ADTI research studies were delayed	Complete. ADTI project concluded and PharmaCare formulary decisions were announced for the cholinesterase inhibitor drugs on April 1, 2016.
	Education for Quality Improvement in Patient Care (EQIP)	EQIP was a quality prescribing program. It provided family physicians with personalized computer-generated prescribing portraits and educational messaging. The EQIP program's educational materials and messages were also used in the prototype learning sessions of Doctors of BC Practice Support Program (PSP) initiative called Optimal Prescribing Update and Support (OPUS). OPUS' aim was to improve prescribing of selected medications by providing assistance to physicians to develop action plans to prompt reviews of a patient's use of selected medications.	EQIP was not continued and a formal launch of OPUS did not occur	In mitigation. Ministry is developing a new optimal drug use program in collaboration with the Therapeutics Initiative (TI). The Ministry's Pharmaceutical Services Division will operationalize this program by the end of 2018/19 fiscal year. Additionally, the Ministry will continue to operate the Provincial Academic Detailing Service and ensure its integration with this new program.

	Medication Management Program (MMP)	MMP was a pilot project established in 2009. MMP was intended to support specific changes to dispensing practices and pharmacists' reviews of patient medications in order to evaluate specific impacts of patient prescription adaptation and the costs to pharmacies of providing patient consultations related to prescription adaptation.	Project evaluation planning was delayed pending data access	Complete. Pilot project concluded.
	Provincial Academic Detailing (PAD)	PAD is a program that disseminates health research so that doctors and pharmacists can make evidence-informed decisions on prescribing and dispensing practices. A national evaluation project called Professional Academic Detailing Partnership Team (ADEPT) was conducted.	Some planned evaluations of selected topics and the contribution of BC research towards ADEPT were not continued	Ongoing. PAD program continues. BC contributed an evaluation of one topic to the completed CIHR-funded national evaluation of academic detailing.
	Canadian Network for Observational Drug Effect Studies (CNODES)	CNODES, funded by the Canadian Institute for Health Research, is intended to examine drug safety and effectiveness through collaborative, population-based approaches. It is one of the arms of the Drug Safety and Effectiveness Network (DSEN).	Researcher data access was not streamlined, hampering BC-based researchers' effective participation in CNODES	In mitigation. As part of the commitment to the Drug Safety and Effectiveness Network (DSEN), the Ministry will be facilitating timely data access by April 2018 and has already approved an approach that provides DSEN with pre-approval for projects meeting particular criteria.
Research projects from the 2012 Pharmaceutical Services' Research Team Prioritization List	Dabigatran Pharmaco-epidemiological group(PEG)	Pharmacoepidemiological evaluation of atrial fibrillation drug.	Not directly affected by investigation.	No longer prioritized. At the time, this project was on hold pending more time needed post-listing decision to gather more utilization data.
	Bisphosphonates PEG	Pharmacoepidemiological evaluation of bisphosphonates.	Not directly affected by investigation.	No longer prioritized.

	BGTS = Blood Glucose Test Strips	Process and impact evaluations were performed to evaluate the success of educational interventions to change the rate of BGTS usage.	Not affected by investigation	Complete. Internal initial evaluation was completed. The policy for BGTS reimbursement was changed in 2015 and utilization monitoring is ongoing.
	Benzodiazepines PEG	Pharmacoepidemiological evaluation of benzodiazepines.	Possibly affected by investigation.	No longer prioritized. At the time, this was a possible new project under consideration.
	Prasugrel and clopidogrel	Pharmacoepidemiological evaluation of prasugrel and clopidogrel.	Not affected by investigation	No longer prioritized. Not approved to start, prior to investigation.
	Opioids	Collaborate with TI on high level paper on opioid trends in utilization and mortality.	Delayed pending reinstatement of TI contract	Restored. 3 pharmacoepidemiological evaluations are underway under the current agreement with the TI. This is complemented by surveillance by the Ministry which was restarted in 2015/16. Ongoing opiate use surveillance using administrative data sources, where complementary to opiate crisis response activities.
	Insulin pumps	Intended to evaluate new PharmaCare coverage of insulin pumps in children.	Not affected by investigation	No longer prioritized. Not approved to start, prior to investigation.
	Evidence-based formulary	Intended to assess the degree of coverage based on the strength of supporting evidence.	Possibly affected. This was a new project under consideration	Under consideration. Part of ongoing national discussions around essential meds and national pharmacare approaches.
	PharmaCare Immunization	Evaluate pharmacy based immunization in rural communities.	Not affected	Completed. Work published in 2014 by UBC researcher
	Coverage with Evidence Development (CED)	Explore developing a CED framework approach to other potential drugs under review.	Possibly affected. At the time, PSD had not yet determined future approach using CED	In Mitigation Evaluation platform will enable efficient coverage with evidence development projects for both drugs and other health technologies Potential consideration on selected drugs under

				review
	RePORTR	Project funded by CIHI.	Possibly affected. Project was underway in 2012	In mitigation. Ministry is developing a new quality prescribing program; work related to RePORTR will be considered in the new program going forward.
	Prescription Adaptation by Pharmacists	Effects of prescription adaptation by pharmacists.	Not affected	Completed. Work published in 2016 by UBC researchers
	e-Drug	Develop evaluation strategy for PharmaNet modernization funded by College of Pharmacists.	Possibly affected. Project was underway in 2012	Completed. Done by external researchers at UBC/UVic
	Generic drug policy impacts	Assess impacts of generic drug policies with UBC researcher.	Not impacted	No longer prioritized. Project was not started.
	Atypical Antipsychotics	Pharmacoepidemiological evaluation of atypical antipsychotics.	Possibly affected. Project was underway in 2012	Not currently prioritized. May be considered in the future.
Public Health Surveillance	Canadian Chronic Disease Surveillance System (CCDSS): Federal Agreement	Signing of new 3-year MOA (2012/13-2014/15) between Ministry and Public Health Agency of Canada to complete work related to national chronic disease surveillance.	Delayed by six weeks	Restored. MOA signed after 6 weeks of delay; proportion of funds lost due to delay (\$26,800 of \$255,000 for 2012/13). CCDSS work currently continues under new 3-year MOA.
	National Population Health Study of Neurological Conditions: Federal Agreement	3-year project on neurological conditions in British Columbia for contribution to national study.	Project activities in year 3 halted for 10 months	Restored. PHAC extended project from March 31, 2013 to July 31, 2013 to accommodate delays. National project now complete.
	Health Care Costs by BMI Category	2-year project to describe health care utilization and costs for different categories of BMI and for chronic diseases.	MOA extended 5 months but Ministry unable to complete Phase 3 of the project in that time frame	In mitigation. MOA was terminated – Phase 3 deliverables not completed, \$11,305 of Phase 3 funds not received. Mitigation in process to establish project to link CCHS (Share File) data with chronic disease and utilization data to understand relationship between BMI (and other risk factors), chronic disease, utilization and costs. Described in further detail in report (6. Access to Canadian

				Community Health Survey).
	Identifying intentional injury cases and utility of physician billing data in the CCDSS	6-month project with Public Health Agency of Canada.	Delay in data access not congruent with completion	No longer prioritized. Project cancelled and funds (\$15,000) redirected by PHAC. Ministry in discussion with PHAC to participate in current national longitudinal injury surveillance working group, feasibility and pilot projects.
	Natural Unintentional Injury Pilot	Planned follow up project to Identifying intentional injury cases and utility of physician billing data in the CCDSS	Not started	No longer prioritized. Ministry in discussion with PHAC to participate in current national longitudinal injury surveillance working group, feasibility and pilot projects.
	Provincial Chronic Disease Surveillance (Ministry, iFNHA)	Supporting chronic disease surveillance for Status Indians under direction of the Tripartite Partners to be used for iFNHA planning and monitoring.	Delayed by 7 months	Restored. Annual chronic disease surveillance for general and First Nations population currently underway.
	PHO Report development (PHO)	Preparing data, analysis, presentation materials to be used in PHO reports (e.g., joint PHO/iFNHA report on the Health of Aboriginal Women, Motor Vehicle Report, etc.).	Report release delayed (time estimate not available as release date is contingent upon full completion of report)	Complete. Reports published.
	RCY Pathways Research Initiative (Representative for Children and Youth)	Chronic disease information for mother and child cohorts as requested by RCY.	Delayed (time estimate not available, project was in a priority queue)	No longer prioritized. No longer a priority for the Representative for Children and Youth. Ministry prepared to re-initiate if requested.
	Health Impact of Problem Gambling (PHO)	Extraction and analysis of data for preliminary report to PHO.	Delayed (time estimate not available, project was in a priority queue)	Complete. Report completed July 2013.
	Child/Maternal Health Risk Analysis (PHO)	Extraction and analysis of data for preliminary report to PHO.	Delayed (time estimate not available, project was in a priority queue)	No longer prioritized. No longer a priority for the PHO. Ministry prepared to re-initiate if requested.
	Opiates Addiction Surveillance (PPH)	Development of a surveillance stream to understand the magnitude of opiate addiction in the	Delayed (time estimate not available, project was in a priority	Restored. Restarted in 2015/16. Ongoing opiate use surveillance using

		population.	queue)	administrative data sources, where complementary to opiate crisis response activities.
	Evaluation of BC Smoking Cessation Program	Cohort analysis to understand the impacts of BC's Smoking Cessation Program.	Evaluation delayed and then restarted	Complete. Evaluation completed in 2015. This evaluation used a different methodology than what was originally reviewed in 2012
	Surveillance of Mental Health and Substance Use Disorders	Project to establish surveillance streams for significant mental illnesses.	Project design delayed and then transferred	Restored. In 2016, Ministry contracted Simon Fraser University (CARMHA - Centre for Applied Research in Mental Health & Addiction) to assess feasibility to perform surveillance using administrative data for 12 mental health conditions.
	Surveillance of Neurological Conditions	National project to establish surveillance streams for significant neurological conditions.	Delayed for 10 months	Restored. Surveillance for selected neurological conditions has been implemented and BC participates in national surveillance.
	Risk Factors and Health Care Costs	Project to develop utilization and cost estimates for populations with risk factors.	Not completed due to lost access to CCHS	In mitigation. Mitigation in process to establish project to link CCHS (Share File) data with chronic disease and utilization data to understand relationship between BMI (and other risk factors), chronic disease, utilization and costs. Described in further detail in report (6. Access to Canadian Community Health Survey).
	Health Surveillance for Seniors	Project to create a surveillance data source focused on the health needs of seniors.	Not completed due to lost access to CCHS	No longer prioritized. No longer a priority for PPH. Ministry prepared to re-initiate if requested.
	Flu Surveillance	Process to prepare and maintain daily data streams to monitor the population during flu season and other acute situations (e.g., H1N1, forest fires).	10-week "outage" of flu surveillance streams to BCCDC before re-establishment at the end of November 2012	Restored. BCCDC is currently responsible for flu surveillance.

	Provincial Fall Surveillance	Extracting/summarizing data for falls for yearly and quarterly reporting.	Delayed (time estimate not available, project was in a priority queue)	Restored. Responsibility transferred to HSIAR for concurrent management of all quarterly and annual reporting.
	VIHA Mental Health Report	Creation and analysis of treatment of mood and anxiety cohorts in the population.	Delayed for 2 years (due in part to priority queue)	Complete. Scope adjusted, report completed.
	Ad Hoc Epidemiology Support for PPH and PHO	Low team capacity to respond to ad hoc requests.	Low capacity until January 2014	Restored. Capacity restored.
	Surveillance SharePoint site	Development of a SharePoint site to assemble surveillance products, share documents and manage projects.	Delayed (time estimate not available, project was in a priority queue)	Restored. Restarted in 2016, currently in progress.
	Re-engineering of chronic disease surveillance processes following 2014 hardware technology change	Process redevelopment to support continued use of surveillance products developed before technology change.	Low capacity until January 2014	Restored. Process changes underway, depending time available and need.