

MOVING AHEAD ON TRANSFORMATION OF LABORATORY SERVICES IN ALBERTA

January 18, 2016

BACKGROUND

In December 2013, a Request for Proposal (RFP) was issued by Alberta Health Services (AHS) for comprehensive laboratory services for the Edmonton Zone, with the option of a later expansion in scope of services for northern Alberta. The initial phase of service delivery would also include those services being provided throughout northern Alberta by a longstanding third party contractor. The overall value of the proposed service contract was estimated at \$3 billion over 15 years.

In October 2014, a preferred proponent was announced by AHS. In November 2014, one of the unsuccessful bid respondents launched a formal vendor bid appeal under the terms of the RFP.

In August 2015, the Bid Appeal Panel appointed by AHS, made three supplementary findings:

- each of the three proponents met the mandatory criteria set by AHS and therefore would have been qualified to deliver the laboratory services as described;
- the evaluation methodology and process employed by AHS in the RFP gave rise to some doubt as to the validity of the selection of the preferred proponent; and
- the issue of “value for money” surrounding the RFP process remains outstanding and the true costs associated with the implementation should be established prior to the award of any contract.

Given the Panel’s report and that during the AHS RFP process all available options for the delivery of laboratory services were not considered, the RFP was cancelled on direction of the Minister of Health under the Minister’s legislative authority. On September 15, 2015, the Minister requested that the Health Quality Council of Alberta (HQCA) undertake a comprehensive review of the options for delivery of laboratory services and provide advice to the Minister in regard to next steps, ensuring that the way forward would best serve the interests of Albertans. The Minister acknowledged that the Edmonton Zone and northern Alberta were the priority focus for the way forward; however, the HQCA was asked to ensure that any recommendations were aligned with an overall provincial plan for laboratory services.

PROCESS

The HQCA undertook the following activities in response to the Minister’s request:

- Review of documentation provided by AHS and others regarding the RFP process and the delivery of laboratory services with emphasis on the Edmonton Zone.
- Discussions with key senior staff in Ministry of Health.
- Discussions with select AHS Executive members, and senior management and medical leaders responsible for the delivery of laboratory services.
- Interviews with stakeholders and those that had expressed an interest in speaking with the HQCA including: laboratory administration and support services; physician groups including pathologists and specialists; as well as representatives from public, private and wholly-owned subsidiary organizations. Participants were asked to share constructive feedback on the current

model and services provided in the laboratory sector and any insights into what they felt were important and relevant factors for the future of service provision. These discussions were not intended to be exhaustive, but were limited to providing an opportunity to those that had expressed an interest in talking directly with the HQCA.

- Select laboratory tours.
- External expert engaged to provide advice, review documentation and lead the development of the report.

SUMMARY OF FINDINGS

The following findings are compiled from the documentation review and are reflective of the information brought forward through the stakeholder discussions and interviews.

1. Through the RFP process, AHS was working to address tangible and urgent issues related to the delivery of laboratory services in the Edmonton Zone and Northern Alberta, with a goal to ensure the delivery of high quality and sustainable laboratory services. A number of significant risks were identified by AHS which were driving the need for a change in the model for delivering laboratory services:

a) Short term risks

DynaLIFE (DLD), a private sector laboratory services provider, has provided laboratory services under contract to AHS and its preceding regional health authorities for over 15 years. The services provided account for approximately 30 per cent of the total volume of diagnostic tests in the province, primarily in Edmonton and Northern Alberta. At the time of the release of the RFP in December 2013:

- The facility lease for the DLD high volume diagnostic laboratory was set to expire in June 2017.
- The service contract between AHS and DLD was set to expire in March 2015. It has since been extended twice and is now set to expire in March 2017.
- AHS confirms that only 50 per cent of current testing performed by DLD can be absorbed within the rest of the existing laboratory infrastructure in northern Alberta.

b) Medium to long term risks:

- Volume, complexity and costs of laboratory services are growing – volume by six per cent per year and inflation by approximately two per cent per year. This growth curve is distinct from the growth of available resources; stated in supporting documentation to be three per cent per year over the next two years and two per cent per year thereafter. In addition, there are challenges with managing the growth of costs, the capacity to introduce new breakthrough tests, ensuring appropriate utilization, achieving economies of scale and sustaining appropriate access outside of urban areas.

- Challenges with the need to expand and assure high quality testing across multiple laboratory sites due to aging buildings and equipment and outdated informatics at many sites.
 - Recruitment and retention of laboratory professionals is becoming more difficult due to demographic shifts in the current workforce.
 - For a capital intensive business, there have been considerable constraints on access to capital funds for the purpose of replacing/upgrading technology (e.g., equipment) on a scheduled plan; investing in equipment for introduction of new laboratory tests; and replacing and/or renovating facilities to support laboratory transformation in the public sector.
2. The challenges listed above are not unique to Alberta. Having recognized these challenges AHS came to a conclusion, after three years of review, that a broad-scoped and comprehensive contracting out of laboratory services to the private sector was the proposed solution. Apart from the process issues inherent in the RFP, the strategy to outsource the vast majority of laboratory services in the Edmonton Zone and northern Alberta to the private sector is associated with a number of other substantial risks and raises further concerns which need to be addressed:
- a) There are many unknowns in regard to the financial and feasibility/risk metrics of alternate options which need to be answered. The documentation reviewed did not identify that a comprehensive review of these alternate options was undertaken in terms of cost, benefit and risk or the opportunities that may exist in leveraging current laboratory systems.
 - b) The scope of the proposed shift of comprehensive laboratory service delivery in the Edmonton Zone and Northern Alberta to a single private sector partner would be associated with significant transition and outcome risks. Examples of key risks include:
 - Labour relations challenges.
 - Employment models and long term management of physicians and clinical scientists.
 - The advancement of research, training and academic interests.
 - Multiple stakeholder involvement in the proposed change (e.g., Ministry of Health, Alberta Medical Association, regulatory bodies, post-secondary institutions, rural municipalities, research funders, etc.) all of whom would have to develop a relationship with the chosen provider during a period of critical and significant change.
 - A clear statement of available funding over the coming decade was present in the RFP, but there was a lack of clarity regarding the actual costs for capital, transition of services from the current private sector provider, and ongoing operations over the proposed 15 year contract. This makes it very difficult to forecast the ultimate cost of a service contract with the preferred proponent and how that cost will align with services available to the public.
 - The governance structure proposed in the RFP and supporting AHS business planning documents is complex and involves multiple committees with various reporting and accountability requirements. This structure has been in place in AHS for oversight of the

delivery of current services; however, it is an untested and atypical structure for oversight of a broad scoped private sector contract. This could result in significant risk transfer to AHS and government.

- A heavy reliance on the private sector provider to successfully manage the transition strategy.
- The proposed timelines would be very difficult to achieve given the number of decisions to be made in critical areas such as: the scope and location of new facilities; choice of a laboratory information system; scope of operations and related timing issues; labour relations and others.

Advantages and opportunities for leverage in the transformation of laboratory services

There are a number of advantages and opportunities that exist in Alberta including assets and experience to support moving ahead with transformation of laboratory services and the development of a more coherent and sustainable system for the province. These include:

1. A single governance structure for the health sector – AHS has the opportunity to provide a strategic advantage for improving quality, appropriate standardization, utilization management, and consistent accessibility to appropriate diagnostics for the residents of Alberta. There are key areas, given the issues outlined above, which should be examined and pursued:
 - Laboratory information systems (LIS) – AHS is in an ideal position to reduce multiple non-integrated LIS currently in use across the province to a single system through a robust procurement and a staged, well managed implementation plan.
 - Economies of scale can be achieved in many areas, including supplies and equipment, if laboratory services are consolidated and less fragmented. With careful planning, this would be compatible with sustaining appropriate service to small communities.
 - Availability of public capital funding is key to pursuing an expanded laboratory system which will meet the needs of Albertans and the health sector to deliver services. A successful laboratory sector would be supported by consolidated and technologically advanced laboratory facilities; enabled by a robust information system; and informed through strong research and innovation partnerships.
2. The people working in the laboratory sector - there are thousands of skilled staff working across the many elements of laboratory services in the health sector. They are skilled, dedicated and committed to the provision of high quality laboratory services.
3. Calgary Laboratory Services (CLS) –is an existing public sector model for the delivery of comprehensive laboratory services, incorporating all elements of an integrated laboratory system.
 - In operation for 20 years as a public private partnership and most recently as a wholly owned subsidiary of AHS.

- Evolved through careful stewardship of its operations by an independent board which had balanced representation from the regional health authority, the University of Calgary and the private sector partners.
 - Some of the well documented success which has been experienced by CLS relates both to its history of significant autonomy as an organization, and clear accountability and alignment with the health system.
 - The history of CLS is unique in Canada and provides a rich source of data and experience which can inform moving ahead with the necessary consolidation of the Edmonton Zone and northern Alberta laboratory services.
4. Academic partners – key academic partners have always been a part of the overall laboratory sector. They were an integral part of the RFP process and will continue to be key partners who are available to leverage the capacity for innovation in both development and implementation of new tests and technology. The work of these partners is also critical to patient care in the future to support areas such as translational diagnostics, genomics, and personalized therapeutics.
 5. Private sector partners – a number of successful private sector corporations have been involved in providing high quality public laboratory services in Alberta, across Canada, and in other international jurisdictions. These partners are a resource which can be tapped as appropriate to meet the needs of the health system. The terms of private sector involvement needs to reflect that their contribution is aligned and fully integrated with the needs of the public and the health system; with full transparency regarding value for money and the cost/benefit of their involvement.

RECOMMENDATIONS

Laboratory services are a foundational component of effective high quality health services. Information from laboratory testing supports over 70 per cent of the decisions impacting patient care across the province. Managing growth and access; ensuring safety and quality; sustaining the ability to introduce breakthrough advances in care; enhancing the appropriateness of decision-making at the bedside; and overall, ensuring the system is financially and operationally sustainable is the challenge faced by health service delivery organizations across the world.

Reform of laboratory services is complex and operating a successful high quality system requires a significant resource commitment. The system itself involves multiple stakeholders; requires careful analysis of accessibility (particularly in rural areas); and is capital intensive due to aging infrastructure, advances resulting from research and innovation, and the opportunity technological change provides to achieve efficiencies of economies of scale. Critical to the successful implementation of any changes is appropriate stakeholder consultation and engagement.

There are urgent issues to be addressed in the Edmonton Zone and northern Alberta and the following recommendations reflect that urgency. At the same time there is clearly more work to be done to strengthen, using an evidence based approach, the foundations of the laboratory services sector across the whole province – reducing fragmentation, streamlining delivery of services and enhancing quality and safety where needed. This work should be undertaken thoughtfully, taking advantage of the assets which currently exist, including the highly skilled people in the sector. Building a firm foundation is

prudent and will create opportunities and options for innovation in the future. A further retrospective review of the RFP process and related documentation will not add value in the work ahead to establishing a patient-centered, integrated provincial model for laboratory services.

The current economic situation in Alberta is an important part of the context in which clear decisions will have to be made in regard to the way forward. Since December 2013, when the RFP was issued, there has been a very significant decline in resource revenues to government due to a global situation which is projected to persist for some time yet. The options going forward must recognize the practical constraints this fiscal situation places on undertaking extensive and broad scoped change in such a critical area of patient care.

The recommendations to the Minister reflect this significantly changed economic reality. They are based on an appreciation that there are urgent issues, particularly in Edmonton, which must be addressed without further delay. Furthermore, as with all parts of the health system, significant change has to be undertaken with thoughtful and careful oversight which ensures continuity of service and an assurance of quality and safety. The plan for expansion and modernization of laboratory services must proceed in a manner that can be carried out with consistency and stability, particularly in the current fiscal environment.

The recommendations support an enhanced value for the investment on behalf of Albertans in the context of the changed economic environment, provide a nimble and expedited process for decision making, and leave the system flexible and open for future opportunities.

1. Act quickly to address the urgent issues in the Edmonton Zone and northern Alberta.
 - a) Undertake the renewal and, if appropriate, the expansion of laboratory facilities in Edmonton, Fundamental to this will be a bridging strategy to ensure continuity of services to the Edmonton Zone and northern Alberta during the renewal phase.
 - b) Implement a feasible, expedited and cost-effective plan for a move to one laboratory information system in the Edmonton Zone and Northern Alberta, and ultimately across the province. This objective should be informed by work already underway in AHS and will be the single most important step toward strengthening the foundation and understanding laboratory operations across the province.
 - c) Reduce the fragmentation of laboratory services in the Edmonton Zone and northern Alberta through a process of streamlining and consolidating with the goal of achieving better care at an enhanced value.
 - d) Deliver to the Minister robust estimates of the capital funding required to meet the above goals.
2. Develop options for the creation of a single public sector platform for the delivery of laboratory services through an integrated provincial plan. This platform would align with the needs of the health system, but be structurally separate and include appropriate transparency, accountability requirements, and improved clinical and business metrics; while enhancing safety, quality and overall service to patients.

This approach is designed to ensure the ability to be flexible, nimble and innovative in managing the rapidly evolving expectations generated by research and new technologies in this area of health care delivery, particularly in this time of economic uncertainty.

The following should guide the development of the plan:

- a) Anticipate the needs of the health system and be pragmatic, feasible (particularly in view of the current economic situation), appropriately sequenced and phased with clear deliverables and milestones.
 - b) Accommodate and anticipate the fast tracked changes which need to be made in the Edmonton Zone and northern Alberta outlined in recommendation #1.
 - c) Provincial, national and international benchmarking and comparators, whether public or private, should be integral to informing any changes and additions to the system.
 - d) Relevant financial, operational, human resource and quality data/metrics are needed to fully understand the scope of current operations (both public and private).
 - e) Phasing and bridging strategies should be used as appropriate given the current fiscal constraints in the province and the risks associated with significant change, particularly as they relate to disruption of services to the public.
 - f) Maximize opportunities for leveraging existing assets and opportunities including: people and partners in the sector, the existing wholly owned subsidiary (Calgary Laboratory Services), laboratory facilities which have recently been brought on stream, and existing funding available for operational and capital expenses.
 - g) Continued involvement of academic partners is key to foster research and development which informs the sector. This is essential for training of laboratory professionals and for providing opportunities for commercialization of innovation which is of benefit to the overall economy. This involvement must be cognizant of the accessibility and sustainability of laboratory services for all Alberta residents.
 - h) The private sector can and does play a role in the laboratory services sector and brings a number of advantages (e.g., introduction of innovation, flexibility, private capital). Involvement of the private sector must assume that the value for public investment can clearly be demonstrated.
3. Establish a robust project management structure to move ahead quickly to address the urgent issues facing the laboratory system.
- a) A steering committee should be structured with senior level membership which will ensure that key policy and financial decisions can be made on an expedited basis.
- Proposed Steering Committee membership (CEO/ Deputy Minister or equivalent designate):
- Ministry of Health (Deputy Minister) – Chair
 - Ministry of Health – Strategic Planning and Policy Development Division
 - Health Quality Council of Alberta

- Infrastructure Alberta
- Alberta Finance
- Alberta Justice
- Alberta Health Services
- Post-secondary institutions (one senior representative from the University of Alberta and the University of Calgary)
- Alberta Society of Laboratory Physicians
- College of Medical Laboratory Technologists of Alberta

The Steering Committee will:

- Establish an independent project office for laboratory service transformation which will report to the Steering Committee.
 - Select a senior project manager and ensure the necessary team structure is in place to support the project.
 - Ensure the availability of any resources and or specific skill sets needed for supporting the project related to the recommendations.
 - Provide clear policy direction and timely decisions for action related to recommendations 1, 2 and 3.
 - Structure advisory processes/mechanisms to ensure patients, the public and other key stakeholders can provide input and information as needed.
 - Oversee the development of robust implementation plans.
 - Report regularly to the Minister of Health and the Board of Alberta Health Services.
4. Clarify urgently the planning assumptions related to capital funding. The availability of capital funding is fundamental to a successful laboratory services sector and will be needed for:
- renewed and, as appropriate, expanded laboratory facilities
 - implementation of a single laboratory information system
 - a refresh of laboratory equipment to assure that safety, quality and access to appropriate testing is sustained and that transformative technology can be introduced to achieve economies of scale

A portion of the required capital should be leveraged through a robust business plan approach where operational efficiencies through new technology and economies of scale provide a return on equity invested.

Proposed Project Sequencing and Timelines

Substantial work has been accomplished to date that will assist greatly in moving ahead with the project phases identified below in a timely and expeditious manner. However, a critical next step will be to ensure any information gaps are addressed before moving forward toward an integrated provincial plan for laboratory service delivery.

The proposed initial phases of the project and related timelines may require some flexibility pending clarity on the degree of due diligence already achieved across the various project elements.

Step 1: Establish project leadership and roles – January 2016

- Project leadership and scope announced
- Steering committee members appointed
- Project Lead appointed
- Roles clarified (HQCA, Ministry of Health, other Government of Alberta (GOA) Ministries, AHS, other key stakeholders)

Step 2: Stabilize service delivery and establish key project elements – March 2016

- Stabilize services in the Edmonton Zone and northern Alberta.
- Finalize an estimate of capital (facility and equipment) requirements to meet priority needs across the province with the Edmonton Zone as the first priority, but inclusive of other significant capital needs in other zones.
 - Provide clear options for funding capital which are aligned with GOA financial policies related to capital.
 - Identify the relationship of research institutions to the proposed capital plan.
- Review and develop legal options for a consolidated public platform for delivery of laboratory services across the province.
 - Key considerations – legal relationship to AHS; governance appointments; status of transferred employees (e.g., pensions, seniority, etc.); ability to assign contracts; relationship of CLS; transfer of capital assets.
- Establish advisory groups and processes to guide the project.
 - Laboratory services technical advisory committee (representatives from across the province) – to provide key technical advice related to the project elements:
 - Benchmarking of laboratory services regarding access, appropriateness, utilization, and cost structure.
 - Review of key utilization data by geography and facility (urban, rural and remote).
 - Human resources review including training needs across disciplines and labour relations issues.

- Information management and information technology infrastructure.
- o Academic partner committee (University of Alberta, University of Calgary, University of Lethbridge, Northern Alberta Institute of Technology, Southern Alberta Institute of Technology) – to assess/review academic activity in relation to delivery of laboratory services.
- o Process for timely input by the public, health care professionals, laboratory service providers and other stakeholders as appropriate during the project phases.

Step 3: Facility plan for Edmonton – May 2016

- confirm scope of programs and service delivery
- confirm development timelines
- confirm transition plan for ongoing delivery of services

Step 3b: Budget for Edmonton facility – June 2016

- Finalize budget needed to deliver proposed scope of Edmonton project:
 - o operating
 - o capital
 - o funding sources

Step 4: Detailed province-wide LIS project plan and budget

(timing is contingent on the provincial clinical information system plan)

- Finalize conceptual plan for province-wide LIS consolidation and integration
- Project charter and timeline – plan for strategic phasing which allows implementation in the Edmonton Zone and northern Alberta as the first priority
- Clarification of roles (relates to final platform for laboratory services)
- Funding requirement

Step 5: Integrated provincial plan for delivery of laboratory services

Develop an integrated provincial plan for laboratory service delivery that incorporates the above steps and tasks.

Conclusion

The province is well positioned to lead the way in the provision of sustainable, high quality laboratory services to the residents of Alberta. Significant work has been done, but there is a need to deepen the analysis of the options and enhance the implementation strategies. The above outlines a principled approach, with a clear and accountable decision-making structure which will enable this plan for renewed laboratory services to move forward as quickly as possible.