Saskatchewan Renal Transplant Program
Review Recommendations

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for the Saskatchewan Transplant Program Steering Committee

1. Transplant numbers are related to donor rates. Therefore, there must be immediate attention to misconceptions regarding *Saskatchewan* donors and their utilization for *Saskatchewan* patients, despite current transfer of patients to Alberta. This includes education of staff and physicians in intensive care units and emergency departments, as well as positive media stories. Donor numbers need to increase immediately. The transplant program in Saskatchewan has had a temporary setback and is on track, but requires public support in the form of altruistic donation.

2. The quality of a transplant program, maintenance of competency and excellent outcomes does not require volumes substantially higher than the volumes prior to July 2009. There is support and infrastructure in place sufficient to restart the living donor transplant program. This initiative can be planned well in advance and would not stress current surgical support. The resumption of deceased donor transplants within Saskatoon without changes in surgical personnel, however would stress surgical support. Until changes are made in Saskatoon, our recommendation would be to continue with the Edmonton collaboration until a stable model in Saskatoon can be agreed upon.

3. Highly sensitized and more complex patients need to be served by Edmonton. As this does not represent the majority of waitlisted Saskatchewan patients, patients could be reviewed in Edmonton prior to transplant, and patient management pre-and post-transplant could be agreed upon between Edmonton and Saskatoon. There is considerable experience with high-risk immunological patients in Saskatoon, and the previous significant limitation in immunological follow-up by the HLA Lab has been addressed. Again, Edmonton would have to accept cross matching results as well as antibody determination by Saskatoon. Regardless, it would not be either fair or beneficial to carry on a system in which only some Saskatchewan patients received an opportunity to have a renal transplant.

4. Both nephrology and surgery require transplant champions. In the case of nephrology, Dr. Shoker will be in place to continue his excellent care of transplant patients, carry out administration of transplant nephrology, and to eventually transition his responsibilities to younger faculty. Currently, there is no identified surgical champion of transplantation, and this needs to be addressed immediately. The administration of the transplant program requires co-management by both surgery and medicine. While new recruits may serve in this co-management as well as being future champions within surgery, the Department of Surgery needs to identify at least an interim champion. Several names were discussed. The interim surgical director could be identified from either vascular surgery or urology.

5. The preferred model of transplantation would be to have dedicated kidney transplant urologic surgeons who are able to perform the anastomosis and ureteric implantation as well left laparoscopic donor organ retrieval. The existing urologist who can perform the laparoscopic donor nephrectomy is near retirement, but still participates in the living donor program. There are well-trained individuals that are currently undergoing transplant training in Canada and may be available soon. However, the environment must be made attractive for such recruits, which includes financial incentives in order to permit clinical and research dedication to transplantation, rather than participating extensively in general urology to maintain a reasonable income. A transplant surgeon is unlikely to maintain a reasonable income solely on transplant activity, and thus new funding must be found. As well, there needs to be consideration of required on-call time and activity, a factor which has led to the current suspension of the transplant program. A critical number of transplant surgeons would be 2, and additional support would be required from the current structure of vascular surgery and urology to perform transplants, as needed on an on-call basis. It was clear that dedicated renal transplant surgeon(s) would be able to provide stability to the Transplant Program, by maintaining call coverage, continuing the laparoscopic donor

nephrectomy program, and exploring methods to increase donor rates (i.e. donation after cardiac death kidney transplantation).

The immediate recruitment of a dedicated transplant surgeon would be possible by ***aggressive*** attraction strategies, both environment and financial. A second transplant surgeon would be a longer-term goal as the vascular surgery and urologic support could transition for a second recruit over the next several years.

6. A sustainable transplant program must have its foundation in an academic program. There are no models currently in Canada in which transplantation is solely based on a service component, and all have an academic basis in the form of research, teaching of fellows, and administration. An academic program as defined by the University requires 5 personnel which would ideally be blended between transplant surgeons and transplant nephrologists. Therefore 4 academic positions would be required in addition to the existing position held by Dr. Shoker. However, although the Dean of Medicine is in support of an academic program in transplantation along with Departments of Medicine and Surgery heads, the 5 academic personnel need to reside within departments. Medicine and Surgery therefore need to identify 5 existing or recruited individuals within respective departments that fit the academic criteria to obtain University support. The Dean may be able to obtain funding for these positions through the Ministry of Health.

7. The Departments of Medicine and Surgery (as well as Pathology) need to adopt a greater accountability/responsibility for the transplantation program. This includes a dual reporting structure by the Medical as well as the proposed Surgical Directors of Transplantation to their respective department chairs. Department chairs need to be engaged in transplantation to remain vigilant to future opportunities as well as threats. These departments also need to contribute to the environment of new recruits including mentoring, space, and finances. If a successful Alternate Funding Program (AFP) emerges within Saskatchewan, there should be priority given to the support of the transplant program. As well, within the Division of Nephrology, given the importance of transplantation to the academic success of nephrology and development of a Royal College-approved training program, there should be greater integration. This includes stabilizing financial support of the transplant nephrologists, and certainly support for transplant clinics and assessments. For example, donor assessments should be provided by independent non-transplant members of the division of nephrology. Donor assessments by transplant nephrologists have perceived conflict of interest and generally this situation is not desirable.

8. The Ministry of Health should consider a model of consolidated funding for renal transplantation, which covers the recruitment of transplant surgeons and support of transplant nephrologists, as well has funding for translational research that enhances transplant outcomes. This consolidated funding should also include current costs for all parts of transplant which will allow long term projected costs. The administration, control and responsibility of the consolidated funding as related to the medical staff and establishing the academic program should reside with the co-directors but audited by appropriate hospital administration. Such models that currently exist within Canada have demonstrated benefit, with such centers being recognized for clinical and research excellence, innovation of transplant care, as well as retention of staff and greater ability to recruit.

9. It was clear from the review that communication and collaboration between Medicine, Surgery, Laboratory Medicine (HLA lab) could be improved. Regular meetings (i.e. monthly) with expected if not mandatory attendance of surgeons/physicians/ lab directors/ coordinators should be planned. This should one of several action items that would foster bonds between the members of the transplant program, promote communication and allow opportunities for research collaborations within and between groups.

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