

## Operations Process Instruction Manual

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### Planned TOTAL Maintenance Process Instruction

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#### Policy:

TGLN's Trillium Organ and Tissue Allocation System (TOTAL) is maintained by TGLN's Information Technology (IT) - Applications Support Department. Three to six times annually TOTAL requires scheduled maintenance which requires it to be taken offline. Maintenance includes new TOTAL releases, delivery of internal or stakeholder change requests, bug fixes, program additions and program alterations which all can occur at the same time. IT – Application Support sets release dates on an as needed basis. During the time that TOTAL is offline for maintenance, the push from iTransplant to TOTAL is suspended.

#### Process:

##### Information Systems Process

1. Clinical staff or a stakeholder (either internal or external) initiates a change request for TOTAL.
2. IT – Application Support reviews the change request and if approved by the appropriate TGLN business and technical stakeholder, then development of the change request is implemented in the test environment.
3. Clinical staff and affected stakeholders perform User Acceptance Testing (UAT) on all requested changes to confirm the changes have been delivered accurately. Once all affected stakeholders have approved and accepted delivery; the Clinical Director approves the changes for TGLN. Once UAT is complete IT – Application Support schedules a release date for the change(s) to the live environment. IT – Application Support may launch an individual request or a group of requests as per its standard practice.
4. TGLN Service Desk (SD) sends a notification email one week prior to the scheduled maintenance on TOTAL to all users that will be affected by the scheduled downtime to the TOTAL production environment. The notification will include the estimated duration of the shutdown. A list of affected users is maintained in the following directory: S:\Hospital & Professional Services\Donor Management System Project\Maintenance Notification.

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5. Manager-on-Call (MOC) reviews case activity 90 minutes prior to the planned shutdown of TOTAL:
  - 5.1. Should case activity not allow the shutdown of TOTAL for maintenance, the MOC notifies the TGLN SD of the “no go” status. Information Technology Director cancels scheduled maintenance and reschedules it for another time/date. IT – Application Support sends notification to all users that the scheduled maintenance is cancelled and has been rescheduled for another time/date.
  - 5.2. If case activity allows for the shutdown, the MOC notifies the Information Technology Director of the “go” status. TGLN SD notifies all affected users that the planned maintenance will go ahead as planned.
6. If the planned shutdown is expected to last more than one hour, IT – Application Support will print off waitlist reports for the PRC a maximum of one hour prior to the shutdown for all organs and provides the reports to the CSC Team Lead.
7. TGLN SD sends notification to all affected users that TOTAL will be shut down for maintenance in 5 minutes and to log off the system.
8. At the scheduled maintenance time TOTAL is taken offline for maintenance. IT – Application Support performs the necessary changes while TGLN coordinators manage case activity as prescribed below. If a user attempts to log-in during this period, they will be notified that the system is currently not available.
9. CSC Team Lead performs sanity testing once the system is back online. IT – Application Support notifies the CSC Team Lead when maintenance is complete.
10. The CSC Team Lead and IT – Application Support staff perform the sanity testing by performing the following tasks.
  - 10.1. Using an existing test donor case in iTransplant and performs a push to TOTAL to ensure the changes made to TOTAL has not affected the data connection between the two systems.
  - 10.2. Runs allocation/offer screens to ensure changes made to TOTAL have had the desired outcome
11. If the CSC Team Lead determines the sanity test is not successful, the IT – Application Support staff informs the Director, Application Support and MOC of the problems discovered. The MOC

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and the Director, Application Support review the problems discovered and determines if the problems are minor or significant in nature.

- 11.1. Problems minor in nature (e.g. visual), IT – Application Support determine a workaround for the time being and will fix the issue outside of the maintenance window.
- 11.2. Problems significant in nature, the MOC determines if the maintenance window can be extended to fix the problem. If the maintenance window cannot be extended, IT – Application Support will revert TOTAL to the previous release and reschedule the maintenance. TGLN SD notifies all users that TOTAL has not been upgraded and that the planned maintenance has been rescheduled.

12. If the CSC Team Lead and IT – Application Support staff determine the sanity test is successful, TGLN SD notifies all users that the system is back online and to open a new Internet Explorer session before accessing TOTAL.

### TOTAL User Process

13. Once the MOC gives the “go” status, the designated CSC pushes all active donor cases into TOTAL and runs respective allocation reports, if able.
14. At the scheduled maintenance time TOTAL is taken offline for maintenance. If the CSC requires the National Organ Waitlist (NOW), they contact Canadian Transplant Registry (CTR) as per *Business Continuity - Exchanging Recipient and Donor Data with Canadian Transplant Registry Process Instruction, OPI-9-103*.
15. For active cases, the Referral Triage Coordinator (RTC)/CSC continues to take donor referrals in iTransplant.
16. If a transplant program wishes to register a high status recipient, the CSC registers the recipient as per *OPI-9-103*. If the transplant program requests to register a living donor, the CSC requests that they call back when the maintenance window is complete.
17. If an out of province (OOP) offer is made during the shutdown, the CSC informs the OOP program that TGLN’s systems are undergoing maintenance and that a response may take longer than usual. The CSC may choose to assess the organ based on quality and make interest calls to programs. The CSC request OOP program fax TGLN the donor typing results.
18. Users will be notified by TGLN SD when TOTAL has been restored to service. Any instructions given in the notification shall be followed prior to accessing TOTAL.

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19. If an organ algorithm was updated during the shutdown and that organ type was not offered during the shutdown, the CSC will re-run organ algorithms for all new offers.

#### Records:

- No records.

#### References:

- Business Continuity - Exchanging Recipient and Donor Data with Canadian Transplant Registry Process Instruction, OPI-9-103.