UNOS Information Technology Advisory Committee

Chair
Bob Merion, MD

June 24, 2013
IT Advisory Committee
Observations

- As available resources have not been sufficient to complete all projects, UNOS IT has been prioritizing its own work
- Emphasis on Chrysalis has delayed implementation of board-approved actions
- BOD must assume responsibility for prioritizing IT work, identifying resources, and communicating with transplant community
- UNOS IT could benefit from hiring specialized software development experience
IT Advisory Committee
Observations

- Enormous mismatch between available IT programming resources and accumulated requirements

- Hardware infrastructure needs cannot be maintained for the long run at the current funding level

- UNOS IT has been prioritizing available resources among maintenance, incremental change, and transformative change
Funding Challenges

- Funding in fiscal year 2012 was 1.4 M in Capital and 16.5 M in Operating Expenses
- Funding barely covers the basic requirements of maintaining the existing system
  - Capital
  - Hardware & software maintenance costs
  - Maintenance Support
  - Regulatory & Contract Requirements
Recommendations
Staffing Recommendations

Approach new product development as a distinct skill set

- Hire a director with commercial software development experience
- Create a separate department within UNOS IT for new software delivery
- End the practice of using new software developers and maintenance developers interchangeably

UNOS IT is already working to implement these recommendations.
Staffing recommendations

Phase 1

- 17 IT positions will be posted
- Recruiters will be notified of openings
- Target is to hire 77% by October 1, 2013
- Remaining 23% hired by November 1, 2013

Phase 2

- 11 IT Positions will be posted
- Recruiter will be notified of openings
- Target is to hire 55% by November 1, 2013
- Remaining 45% hired by January 1, 2014

Phase 3

- 13 IT Positions will be posted
- Recruiters will be notified of openings
- Target is to hire 46% by January 14, 2014
- Remaining 54% hired by March 1, 2014
Future Capacity – Project Teams

Board Actions (per prioritization)

KAS, K/P and New Match

Waitlist Rewrite

.Net 4.5 & IE9

OMB/Tiedi

IT Operational Improvements Projects
Future Capacity – Project Teams

2013

- KAS, K/P and New Match
- Waitlist Rewrite
- IT Operational Improvements Projects

2014

- Board Actions (per prioritization)
- KAS, K/P and New Match
- Board Actions (per prioritization)
- Transformational Change
- .Net 4.5 & IE9
- OMB/Tiedi
Governance Recommendations

Current process when committees decide to develop a project:

- Committee develops a one-page description of the problem and potential approaches
- UNOS IT develops a high level estimate based on the type of project, characterizing each proposal as one of four “t-shirt sizes”
- Policy Oversight Committee (POC), a committee made up of the vice-chairs of the other standing committees, reviews proposed projects and suggests a priority ranking
- Executive Committee considers total available staff (non-IT) hours and approves or disapproves each proposed project

NEW STEP:

- Committees now include a projected completion date for policy development. POC should assemble and track a projected IT burden for future years.
Governance Recommendations

Current process when Board of Directors decides whether to approve a proposal:

- Proposed policy change, public comments, and mid-level IT estimate presented to Board. IT estimate is based on the proposed policy language, but not on thorough programming requirements
- Board approves or disapproves each policy proposal

NEW STEPS:
- Business Analysts should participate in committee meetings to help committees understand the size of their proposals while in development, and help explore less expensive alternatives
- Proposals will be presented to the Board with complete business requirements, to ensure the most accurate possible estimates at the time of the policy approval
- After discussing all policy proposals, Board should consider the cumulative IT cost of all policies approved at each meeting
- Staff should present IT estimates to Board in terms of the effect on the registration fee
Governance Recommendations

Current process when Executive Committee determines programming order

- One month after each Board meeting, the Executive Committee considers the place in which each newly approved project should fit in the queue

- IT staff recommends whether there are projects that could be combined, or projects that should occur in a particular order for greater efficiency

- IT staff provide the best available estimate for each project, even though at present some have full business requirements and others do not

NEW STEPS:

- Requirement that all projects have fully developed requirements before presentation to the Board will also ensure that all projects being placed in the queue have solid cost estimates

- Board should establish an goal for implementation time for IT programming projects

- Programming queue should be continually updated to provide estimates for completion of all Board-approved policies. Projected programming calendar should include a comparison to the Board-established goal for implementation time.
# Fiscal Calendar

**FY 2010 – FY 2018**

**5/6/2013**

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**Graph:**

- **Capital in support of OPTN**
- **Hdwr & Sfwr Maint Cost**
- **Maintenance & Support**
- **Regulatory/Contract**
- **BOD Backlog**
- **New Infrastructure**
- **Transformation**
- **New BOD**
- **Total Expenses (Cap & Ops)**

**Fiscal Calendar**

**UNOS DONATE LIFE**

**UNITED NETWORK FOR ORGAN SHARING**
In order to implement the recommended staffing and provide sufficient capital investment, the ITAC recommends an IT budget of $24.58 million, as detailed on the previous slide.

That amount will require an OPTN fee increase of $95 per registration, and a UNOS fee increase of $17 per registration.
UNOS Information Technology Advisory Committee

Chair
Bob Merion, MD

June 25, 2013
## Potential Project Plan – Fiscal 2014

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### BOD Backlog
- BOD: LAS
- BOD: KPD
- BOD: Clarify 2A & 2AB
- BOD: Reg. Deceased Donor Typing by DI
- BOD: Mod Patient Safety

### BOD New Work -2
- BOD: KAS - KIRPA Wait Time

### BOD Backlog -3
- BOD: Mod Liver
- BOD: Update CPRA, etc.
- BOD: Consent to Authorization
- BOD: Improve Vessel
- BOD: Ped Liver Remove ICU Reg & Mod Ped Liver Hepat.
- BOD: Require Report Non Utilized Living
- BOD: Liver HCC Imaging
- BOD: Hemodynamic Data
- BOD: Re-instate No Appeal
- BOD: Require Report Non Utilized Living
- BOD: OME Changes

### Transformational Change
- DonorNet Enhancements

### Maintenance Projects
- US: Waitlist Re-write
- US: Waitlist .Net 4 & IEB support for Liver

### IT Operations Projects & Security/Compliance
- US: Windows 7 deployment
- US: SQL Upgrade & Cube Rebuild
- US: SharePoint Upgrade Planning
- US: SharePoint Upgrade
- US: POAMS - System and App Security Remediation
- US: Service Desk Strategy
- US: Network Target Architecture & Design
- OEL: Network Refresh

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**UNOS**

**Donate Life**