Working with the Protocol Document
Guidelines and Recommendations for Working with the Protocol for Exchange and Shared Responsibility for Institutional Data, Version 1.0

Section One – Context for the Protocol for Exchange and Shared Responsibility for Institutional Data (Exchange Protocol)

**Background:**
Local Management Information Systems (LMIS) frequently connect with, receive information from, or exchange data with Northwestern University systems of record. The institution recognizes these systems and the services they support as valuable parts of the community’s sharing of information. In support of these services, as well as the need to maintain integrity, consistency, and the most effective levels of service across University systems of record, Northwestern has established an Exchange Protocol that informs, guides, and governs key elements of LMIS data sharing practices.

**Process:**
In collaboration with the Consulting and Project Office (CPO), LMIS stewards wishing to receive, exchange, or supply data with or to NU systems of record are required to complete the “Protocol for Exchange and Shared Responsibility for Institutional Data” document – http://www.it.northwestern.edu/policies/ExchangeSharedResponsibilityData.pdf – and undergo a “review” by relevant members of the University Community. Generally, but not exclusively, this review includes members of NUIT and data stewards of the relevant systems of record. The purpose of the Exchange Protocol review is to provide current best practice information, conduct needed security analyses, and offer a functional review of the proposed data sharing. The process helps ensure that the University’s interests are protected, risk is appropriately managed, and that the University is in compliance with all relevant policies and regulations.

**Purpose of this Document:**
This document provides an outline of the Exchange Protocol review process and identifies areas that LMIS stewards can focus on to help ensure the quickest and most effective review. It also describes the stages of the Exchange Protocol review process itself and serves as a guide for the participants.

**Contact Information:**
Consulting and Project Office, nuit-consult-project@northwestern.edu
http://www.it.northwestern.edu/about/departments/itms/services/contracts/index.html
Section Two – Guidelines for the Completion of a Quick and Effective Review

Things to Include in the Application
- Deadlines and/or timelines reflecting compliance issues, or business requirements
- Controls as dictated or recommended by project, program or contractual requirements
- The items required of the “Protocol for Exchange and Shared Responsibility for Institutional Data.”

Areas requiring particular attention include, but are not limited to the following:

<table>
<thead>
<tr>
<th>Port</th>
<th>What TCP/UDP ports are open and how they are allocated?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>What processes are running? (Assuring that only required processes are running and only those ports necessary for data processing are exposed to the world)</td>
</tr>
<tr>
<td>Patch Procedures</td>
<td>What process is used to automate notifications?</td>
</tr>
<tr>
<td>Persons Involved</td>
<td>What persons have administrator access?</td>
</tr>
<tr>
<td>Physical Location and Security</td>
<td>Where are all the machines located? How are they secured? What network security/firewalling is utilized?</td>
</tr>
<tr>
<td>Data</td>
<td>Specifically, what information/data elements are being exchanged? How is data stored locally? Is critical data (e.g. non-public personally identifying information) encrypted?</td>
</tr>
<tr>
<td>Backup</td>
<td>How are local backups secured?</td>
</tr>
</tbody>
</table>

Section Three – The Review Process Itself

Three Stages of Review:
Typically, the Exchange Protocol review follows the stages shown below. These descriptions are a rough outline of the process, with individual stages comprising multiple meetings. Individual experiences may vary.

(Note: formal development follows “Acceptance.” Development details are not governed by the Exchange Protocol or this document.)

Stage One: Design
LMIS representatives meet with the CPO and appropriate members of NUIT to outline the project and identify a recommended development path. Potential concerns and
requirements are discussed. A project description is created and forwarded to NU system of record data stewards. Depending on the nature of the project, stewards may or may not participate in these meetings. Steward approval of all projects is required.

Stage Two: Review
LMIS representatives complete and submit the Protocol Document – [http://www.it.northwestern.edu/policies/ExchangeSharedResponsibilityData.pdf](http://www.it.northwestern.edu/policies/ExchangeSharedResponsibilityData.pdf) – to the CPO. The completed application is circulated for review among relevant resources, commonly NUIT – Telecomm and Network Services, Information and Systems Security/Compliance, and Management Systems. Reviewers’ comments are collated by the CPO and returned to LMIS representatives for comment and/or revision.

Stage Three: Acceptance
Reviewers present the revised and completed application to the CPO which in turn forwards the application to system of record data stewards for review and disposition. Data stewards will approve the application or return it for the purpose of further review.

If the application is returned, the Data stewards will provide the reasons for its return.

Protocol Appeal
Should LMIS representatives not receive approval for a proposed development project, a request for appeal can be presented – through the Consulting and Project Office – to the NUI Office of Vice President (OVP) and the Data Steward(s). The OVP and Data steward(s) together will determine if further action is warranted.