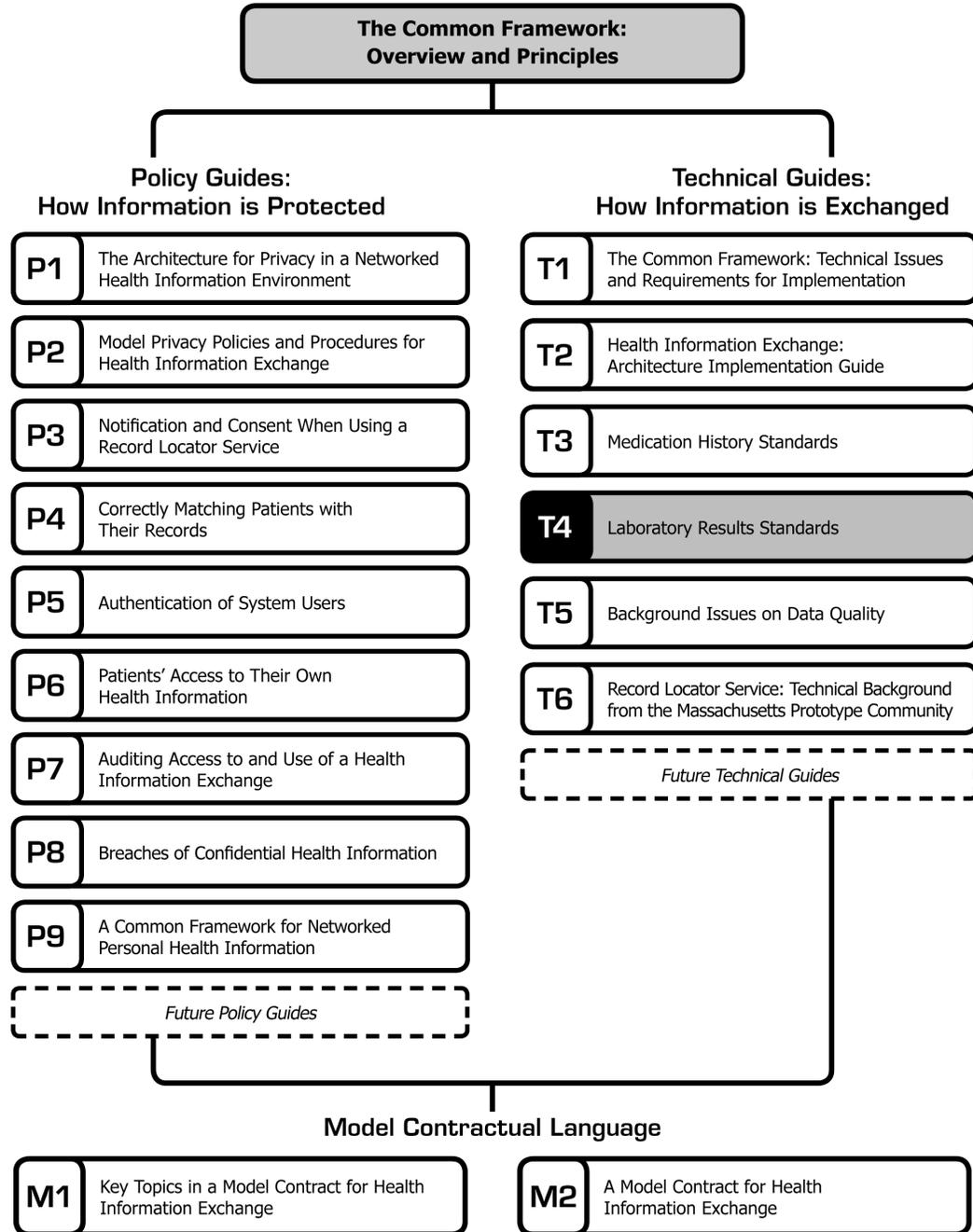P1 P2 P3 P4 P5 P6 P7 P8

T1 T2 T3 T4 T5 T6 M1 M2

Laboratory Results Standards

Laboratory Results Standards

The document you are reading is part of *The **Connecting for Health** Common Framework,* which is available in full and in its most current version at: http://www.connectingforhealth.org/. The Common Framework will be revised and expanded over time. As of October 2006, the Common Framework included the following published components:

The Common Framework: Overview and Principles

Policy Guides: How Information is Protected

P1	The Architecture for Privacy in a Networked Health Information Environment
P2	Model Privacy Policies and Procedures for Health Information Exchange
P3	Notification and Consent When Using a Record Locator Service
P4	Correctly Matching Patients with Their Records
P5	Authentication of System Users
P6	Patients' Access to Their Own Health Information
P7	Auditing Access to and Use of a Health Information Exchange
P8	Breaches of Confidential Health Information
P9	A Common Framework for Networked Personal Health Information
	Future Policy Guides

Technical Guides: How Information is Exchanged

T1	The Common Framework: Technical Issues and Requirements for Implementation
T2	Health Information Exchange: Architecture Implementation Guide
T3	Medication History Standards
T4	Laboratory Results Standards
T5	Background Issues on Data Quality
T6	Record Locator Service: Technical Background from the Massachusetts Prototype Community
	Future Technical Guides

Model Contractual Language

M1	Key Topics in a Model Contract for Health Information Exchange
M2	A Model Contract for Health Information Exchange

Laboratory Results Standards[*]

One of two use cases we tested in the **Connecting for Health** Common Framework prototype was the exchange of laboratory results. In order to do so, we adopted a format for representation in the network that had the best fit with broad adoption and potential standardization. The Laboratory Results schema we used was derived from the ELINCS v2.0 (draft) specification, created by the California Healthcare Foundation.[1]

The specification can be found at:
http://www.chcf.org/topics/chronicdisease/index.cfm?itemID=111047.

There is considerable work on laboratory results standards, and we anticipate that there will be future changes to this standard in the near term. Because the Common Framework maintains a separation between data description and transport, updates to the lab results standard will not require re-engineering the network to accommodate the new standard.

The ELINCS 2.0 version we used is still in draft form. The messages as we formatted them had several deviations from the ELINCS implementation guide in its draft form:

1. ELINCS prohibits populating many of the PID fields. NHIN permits any or all to be populated in query messages and returns most of those values when responding to a query. Our own implementation will return most of the contents of the PID segment in the query response (with the exception of SSN, which we will blank out).

2. The ELINCS draft requires a time zone accompanying all date-time values, while we do not. (We believe that that requirement will be relaxed in the balloted standard.)

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[*] **Connecting for Health** thanks the Indiana prototype team, J. Marc Overhage, MD, PhD, Clement McDonald, MD, and Lonnie Blevins for their implementation efforts on this standard.

[1] http://www.chcf.org/.

3. Only the first component of the OBR.15 (SPECIMEN SOURCE) is allowed to be valued in the ELINCS draft. We routinely get very useful specimen source information in all five components of this HL7 field, and have allowed them to be populated.

4. The draft ELINCS spec requires all units be expressed as UCUM codes. We do not expect to see all units expressed in that coding system.

5. HL7 permits OBX.14 (DATE/TIME OF OBSERVATION) when test results for some members of a test battery were preformed at a time different from the other members of the test battery. ELINCS forbids this value. We support it.

6. The ELINCS draft limits the value type in OBX results segments to be of type CE (code), SN (structured numeric), ST (string), TX (text), or FT (formatted text). HL7 defines a much longer list of allowed value types. Our messages also support the longer list for those value types, such as DT (date), etc.

7. The ELINCS draft ignores OBX.4 (SUB-ID) for all but microbiology tests. Our messages include that value. It is useful for formatted reports and for other, less common types of data.

8. OBR fields for Principal Results Interpreter, Assistant Results Interpreter, Reason For Study, Technician, Diagnostic Service Sect ID, Danger Code, Relevant Clinical Info, and Priority are prohibited from being valued in the ELINCS draft. Our messages support those values.