

## How MedlinePlus Connect Works

**MedlinePlus Connect** puts high-quality, context-relevant health information into the hands of patients and health care providers at the point of need by delivering information packages tailored to patients' diagnoses, medications, and laboratory tests.

To achieve this level of customization, **MedlinePlus Connect** relies on coding standards already in use by health care organizations and health information technology (IT) systems. These standards include:

- International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM);
- Systematized Nomenclature of Medicine, Clinical Terms (SNOMED CT);
- RxNorm Concept Unique Identifier (RxCUI);
- National Drug Code (NDC); and
- Logical Observation Identifiers Names and Codes (LOINC).

**MedlinePlus Connect** will support ICD-10-CM when it becomes the US standard.

Upon receiving a request, **MedlinePlus Connect** leverages these coding standards through manual mappings and search-based processes that tie the codes to relevant patient health information from MedlinePlus.gov. For diagnoses code requests, **MedlinePlus Connect** returns patient health information from MedlinePlus.gov, which brings together information from NIH, other U.S. government agencies, and reputable health information providers. For drug code requests, **MedlinePlus Connect** returns appropriate drug information from *AHFS Consumer Medication Information*, which is licensed from the American Society of Health-System Pharmacists. For lab test code requests, **MedlinePlus Connect** returns licensed content from the A.D.A.M. encyclopedia.

**MedlinePlus Connect** currently supports requests for information on diagnoses and lab tests in English or Spanish, and requests for drug information in English only. **MedlinePlus Connect** is intended for use within the United States health care system and cannot support coding systems not used in the United States.

## Implementing MedlinePlus Connect

Any health IT system or service that uses one or more of these coding standards can implement **MedlinePlus Connect**. EHR, patient portal, or other health IT system vendors can offer **MedlinePlus Connect** as a feature or option to their clients. Alternatively, health IT system purchasers or coordinators for hospitals, clinics, provider offices, or other facilities can implement **MedlinePlus Connect** directly, depending on their administrative rights in their systems.

To provide maximum implementation flexibility, NLM makes **MedlinePlus Connect** available as a web application or a web service. **MedlinePlus Connect** needs to be set up only once in a health IT system, because NLM maintains the code-based mappings, topic links, and retrieval technologies.

Additional technical information for developers and demonstrations of the **MedlinePlus Connect** web application and web service are available online at <http://nlm.nih.gov/medlineplus/connect/technical.html>.

## MedlinePlus Connect Web Application Example



## History

**MedlinePlus Connect** allows patient portals, electronic health records (EHRs), and other health information technology (IT) systems to link to relevant, authoritative consumer health information from MedlinePlus.gov.

The National Library of Medicine (NLM), part of the National Institutes of Health (NIH) and US Department of Health and Human Services (HHS), first announced this free service with a focus on providing health information related to patient diagnoses and prescription and over-the-counter medications in November 2010. NLM later enhanced **MedlinePlus Connect** to also supply information about laboratory tests.

In March 2011, **MedlinePlus Connect** received the coveted HHSinnovates award from HHS Secretary Kathleen Sebelius, recognizing NLM's achievement in harnessing technology to improve the public health.

## More Information

- Sign up for the **MedlinePlus Connect** email list: <http://nlm.nih.gov/medlineplus/connect/emaillist.html>
- Examples of **MedlinePlus Connect** in use: <http://nlm.nih.gov/medlineplus/connect/users.html>

## Questions? Comments?

For questions or comments, contact the **MedlinePlus Connect** team at <http://apps.nlm.nih.gov/medlineplus/contact/>, or call your local Regional Medical Library at (800) 338-7657.

## MedlinePlus Connect Quick Facts

- **MedlinePlus Connect** provides easy access to authoritative consumer health information for patients and providers.
- NLM provides **MedlinePlus Connect** at no cost to an organization and requires no licensing or registration to use the service.
- **MedlinePlus Connect** leverages existing coding standards that may already be in use at an organization.
- **MedlinePlus Connect** supports the Health Level 7 (HL7) Context-Aware Knowledge Retrieval (Infobutton) standard, which facilitates the integration of information resources into health IT systems.
- Because **MedlinePlus Connect** helps EHRs identify patient-specific education resources, it may assist eligible health care providers in meeting one of the criteria for meaningful use of health information technology.



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This resource is freely available at:

<http://nnlm.gov/training/resources/mpconnect.pdf>

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<http://medlineplus.gov/connect/>

**MedlinePlus Connect** is a free service of the National Library of Medicine (NLM), National Institutes of Health (NIH), and the Department of Health and Human Services (HHS). This service allows health organizations and health IT providers to link patient portals and electronic health record (EHR) systems to MedlinePlus.gov, an authoritative up-to-date health information resource for patients, families, and health care providers.



<http://medlineplus.gov/connect/>