MedBiquitous
Activity Report Implementation Guidelines

Version 1.0

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MedBiquitous Activity Report Working Group
MedBiquitous Point of Care Learning Working Group

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MedBiquitous Activity Report Guidelines

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2. Overview

Within professional medicine, there is a need for societies, certifying boards, licensing entities, and other organizations to exchange information about the educational activities of physicians and other medical professionals. Professional societies often serve as the providers of medical education and other resources to enhance the competency of physicians and other medical professionals. Many certifying boards track these educational and competency activities as part of their requirements for maintaining certification. The Activity Report Schema provides a lingua franca for the structure of this data and facilitate the educational and public service missions of these organizations and others. The schema in no way compromises the confidentiality, integrity, or security of activity data.

3. General Guidelines for Producing Activity Report XML

Activity Report is used for two main purposes: exchanging data related to certification or Maintenance of Certification (MoC) activities and exchanging CME activity data. The recommended elements for each of these uses are described in the sections that follow.

3.1 Maintenance of Certification Activities

In the United States, the American Board of Medical Specialties' move to an ongoing Maintenance of Certification process has required that specialty boards increasingly collaborate with specialty societies to deliver the educational and assessment components required by MoC. Often the specialty society will provide education, quality improvement, or assessment activities that meet the requirements of a component of maintenance of certification. The board must track completion and status of these activities and do so in a scaleable manner. The Activity Report provides a common structure for this data, enabling boards to develop scaleable mechanisms of maintaining MoC data. The following data elements are recommended for exchanging data about MoC activities.

No.	Element	Description	Guidance
-	ActivityReports	Container element	
1	DateTimeCreated	The date and time this activity report was created.	
2	ActivityReport	Container	
2.1	ReportingOrganization	The name of the organization reporting the MoC activity.	

No.	Element	Description	Guidance
2.2	Member	Container	Member references the MedBiquitous Professional Profile. Note that prior work to resolve an individual's identity must take place so that unique identifiers from the specialty society can be mapped to unique identifiers of the specialty board. If mapping is complete, indicate the user ID of both the sending organization and the receiving organization using the UniqueID element of the Professional Profile. Use the domain attribute to indicate the organization that is the source of the ID. See section Identity Resolution for more detail. For information on using the MedBiquitous Professional Profile, see MedBiquitous Professional Profile Guidelines (pending).
2.3	Activity	Container	
2.3.1	ProviderOrganization	The name of the organization providing the MoC activity.	
2.3.2	ActivityName	The name of the activity.	The activity name may be a broad term used to describe a type of activity. For example, the American Academy of Pediatrics' eQIPP (Education in Quality Improvement for Pediatric Practice) is a quality improvement activity. Physicians choose a specific topic or module, such as asthma management, to complete. In these cases, use the name for the broader category of activity as the activity name and use the subtopic or specific activity within the broader category as the module name.
2.3.3	Module	Container	
2.3.3.1	ModuleName	The name of the module within the broader activity.	If there is no broader category of activity, the ModuleName is identical to the ActivityName. Otherwise the ModuleName is the subtopic or specific activity within the broader category (see ActivityName comments). Use the moduleID attribute to indicate the unique id for the activity within the provider organization.
2.3.3.3	Status	The individual's status in relation to the activity module.	Valid values are registered, completed, and expired. If the status is registered, use the StartDateTime to indicate the date the individual started the module. If the status is completed, use the CompletedDateTime element to indicate the date the individual completed the activity. Other dates can be indicated as necessary.

3.2 CE Activities

The Activity Report can be used as a digital CE certificate or transcript to facilitate the exchange of CE data to and from CE providers, portfolio providers, and certifying and licensing boards. The following data elements are recommended for exchanging data about CE activities.

No.	Element	Description	Guidance
-	ActivityReports	Container element	
1	DateTimeCreated	The date this activity report was created.	
2	ActivityReport	Container	
2.1	ReportingOrganization	The name of the organization reporting the MoC activity.	
2.2	Member	Container	Member references the MedBiquitous Professional Profile. Note that prior work to resolve an individual's identity must take place so that unique identifiers from the specialty society can be mapped to unique identifiers of the specialty board. If mapping is complete, indicate the user ID of both the sending organization and the receiving organization using the UniqueID element of the Professional Profile. Use the domain attribute to indicate the organization that is the source of the ID. See section Identity Resolution for more detail. For information on using the MedBiquitous Professional Profile, see MedBiquitous Professional Profile Guidelines (pending).
2.3	Activity	Container	
2.3.1	ProviderOrganization	The name of the organization providing the MoC activity.	
2.3.2	ActivityName	The name of the activity.	The activity name may be a broad term used to describe a type of activity. In most cases, there is no broader category that must be specified, and the activity name is simply the name of the activity.
2.3.3	Module	Container	
2.3.3.1	ModuleName	The name of the module within the broader activity.	If there is no broader category of activity, the ModuleName is identical to the ActivityName. Otherwise the ModuleName is the subtopic or specific activity within the broader category (see ActivityName comments). Use the moduleID attribute to indicate the unique id for the activity within the provider organization.
2.3.3.2	Metadata	Container	

No.	Element	Description	Guidance
2.3.2.2.1	lom:lom	Container	See "Guidelines for Describing Educational Resources and Activities Using Healthcare Learning Object Metadata" for core metadata recommendations as well as recommendations for metadata for continuing professional development resources and activities. If the activity is an in-person activity, also see the section on additional metadata for in-person activities.
2.3.3.3	Status	The individual's status in relation to the activity module.	Valid values are registered, completed, and expired. Use the Status element to indicate that the individual completed the CE activity.
2.3.3.8	CompletedDateTime	The date and time the individual completed the activity	
2.3.3.12	CreditCertificate	Container	Repeat the CreditCertificate element for each type of CE credit awarded to this individual for this activity. For example, if both AMA PRA Category 1 and AAFP Prescribed credit are awarded for an activity, two CreditCertificate elements would be used, one to describe the AMA credit and one to describe the AAFP credit.
2.3.3.12.1	CreditReceived	Container	CreditReceived uses the creditsType from Healthcare Learning Object Metadata. The receommended subelements are described below.
2.3.3.12.1.2	activityCertification	The category of credit awarded.	Recommended values include: AAFP Prescribed, AAFP Elective, AAP, AAP Prep, ACEP, ACOG, AMA PRA Category 1, AMA PRA Category 2, AOA, APA Category 1, CECBEMS First Responder, CECBEMS Basic, CECBEMS Advanced, CECBEMS Operational, CECBEMS Educator, CECBEMS Administrator, CPHQ, EBAC CE Credit Hours, NCHEC Category 1, NCHEC Category 2, Synergy CERPS A, Synergy CERPS B, Synergy CERPS C, RCP. A learner may request credit certificates in two or more categories, such as AAFP Prescribed and AMA PRA Category 1. If a learner received multiple types or categories of credit for an activity, repeat the credit certificate element to describe each type or category of credit received.
2.3.3.12.1.3	creditType	The type of credit awarded.	Valid values are: CME, CE, CNE, CPE, and CHES, CPD. A learner may request credit certificates for more than one type of CME. If a learner received multiple types or categories of credit for an activity, repeat the credit certificate element to describe each type or category of credit received.

No.	Element	Description	Guidance
2.3.3.12.1.4	creditUnit	The unit of credit awarded.	Valid values are: CECH, CEH, CEU, Cognate, Contact Hour, Credit, Hour, Unit, Credit Hour, and Point.
2.3.3.12.1.10	numberOfCredits	The number of credits awarded.	The value can be a decimal provided the credit system accepts fractional credits. For example, 1.5.
2.3.3.12.2	CreditID	A globally unique id for the credits awarded to a learner for a specific activity.	CreditID uses the Credit Certificate Identifier (heid) Uniform Resource Name (URN) format as shown below: ccid:*providerdomain*:*localidentifier* *providerdomain* is a the domain name that uniquely identifies the provider of the educational activity. If the provider has multiple domain names, choose one to use for credit identifiers. *localidentifier* is a locally unique identifier for the credit certificate created by the provider. The local identifier can be the identifier assigned by the provider for this credit, if one exists. If not, the provider may choose to combine a course id with a learner id (or some version of learner id transformed to protect privacy) and credit. The following is a sample CreditID: ccid:aap.org:123654.789456.amapra1 *aap.org* is the domain name for the organization. *123654* is the member id for the learner. *789456* is the identifier of the course. *amapra1* indicates that the credit awarded was AMA PRA Category 1. This is just an example and is not an actual identifier or format in use.

3.3 Point-of-Care Learning Activities

The Activity Report can be used to transfer documentation of Internet Point of Care Learning as described by the American Medical Association and American Academy of Family Physicians credit systems. In addition to using the elements for describing CE activities, use the following data elements specific to point-of-care learning.

No.	Element	Description	Guidance
2.3.4	PointOfCareLearningData	Container element	

No.	Element	Description	Guidance
2.3.4.1	ClinicalQuestionOrTopic	The question asked or topic selected by the learner.	
2.3.4.2	SearchParameters	The parameters the learner used to search a collection.	If the clinical question or topic served as the search parameters, this element is not necessary. If a learner conducted a search and later documented their clinical question, use the search parameters filed to document the search parameters used.
2.3.4.3	ResourceUsed	Container element	Repeat this element for every resource used by the learner.
2.3.4.3.1	Title	Title of the learning resource or article.	
2.3.4.3.2	Collection	Name of the collection that is source of the article.	Use this element only if the learner referenced a collection, such as the Cochrane Library.
2.3.4.3.3	CollectionID	An identifier for the article used by the collection.	Many collections use digital object identifiers (DOIs) to identify articles. If so, use the DOI.
2.3.4.3.4	ResourceLocation	The URL of the article or resource.	
2.3.4.3.5	Relevant	Indicates if the learner found the article or resource relevant.	A learner may access several articles but only find a few of them relevant. Use this field to allow learners to distinguish relevant articles from those that are not relevant, developing a more complete picture of the learner's activity.
2.3.4.4	ApplicationToPractice	How the learner applied the learning to practice.	Some systems use a restricted list to allow learners to indicate the application to practice more quickly; others provide a free-text field for the learner to describe the application to practice. If the learner cannot apply the learning to their practice, this field should indicate that with a value of None, Not applicable, or something similar.

3.4 Schema Locations

In order to validate activity report instance documents, you may wish to store all of the associated schemas on a local server and reference those local copies for validation. To use local copies, the schema locations of the other schemas referenced must be changed within the activityreport.xsd schema document. Change the schemaLocation attribute of the import element to change the location used for validation. The following example shows import statements that have been changed to use local versions of the schemas. In this example, the healthcarelom.xsd and member.xsd files are in the same directory as the activityreport.xsd. The file healthcaremetadata.xsd sits in a subdirectory called healthcare. The schemaLocation attribute may use relative referencing as in the example.

```
   <xsd:import namespace="http://ltsc.ieee.org/xsd/LOM"
schemaLocation="healthcarelom.xsd"/>
   <xsd:import namespace="http://ns.medbiq.org/lom/extend/v1/"
schemaLocation="healthcare/healthcaremetadata.xsd"/>
```

```
   <xsd:import namespace="http://ns.medbiq.org/member/v1/"
schemaLocation="member.xsd"/>
```

If you change the schema locations within activityreport.xsd, you must also change the schema locations in these schemas:

- member.xsd
- healthcarelom.xsd
- healthcaremetadata.xsd

XML Activity Report instance documents may then reference the local copy of the activityreport.xsd schema in the schemaLocation attribute of the root element as in the example below. In this example, the activityreport.xsd schema is in the same directory as the instance document.

```
<ActivityReports xmlns = "http://ns.medbiq.org/activityreport/v1/"
xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance"
xmlns:lom = "http://ltsc.ieee.org/xsd/LOM"
xmlns:m = "http://ns.medbiq.org/member/v1/"
xmlns:n = "http://ns.medbiq.org/name/v1/"
xmlns:hx = "http://ns.medbiq.org/lom/extend/v1/"
xmlns:a="http://ns.medbiq.org/address/v1/"
xsi:schemaLocation = "http://ns.medbiq.org/activityreport/v1/
activityreport.xsd">
```

Please note that changing the location of the schemas used for validation does not affect the conformance status of Activity Report instance document.

3.5 Declaring Imported Schema

The activityreport.xsd schema imports – directly or indirectly - the following schemas containing or referencing data elements:

- member.xsd
- address.xsd
- name.xsd
- healthcarelom.xsd
- healthcaremetadata.xsd

Activity Report instance documents must declare the namespaces of referenced schemas if elements from those schemas are included in the instance document. In the following example, the namespaces are declared in the root element and assigned prefixes according to the following table.

member.xsd	m
address.xsd	a
name.xsd	n
healthcarelom.xsd	lom
healthcaremetadata.xsd	hx

Elements are then referenced using the prefix label.

```
<ActivityReports xmlns = "http://ns.medbiq.org/activityreport/v1/"
xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance"
xmlns:lom = "http://ltsc.ieee.org/xsd/LOM"
xmlns:m = "http://ns.medbiq.org/member/v1/"
xmlns:n = "http://ns.medbiq.org/name/v1/"
xmlns:hx = "http://ns.medbiq.org/lom/extend/v1/"
xmlns:a="http://ns.medbiq.org/address/v1/"
xsi:schemaLocation = "http://ns.medbiq.org/activityreport/v1/
activityreport.xsd">
   <DateTimeCreated>2006-04-15T02:30:00</DateTimeCreated>
   <ActivityReport>
      <ReportingOrganization>American College of
Surgeons</ReportingOrganization>
      <Member>
         <m:UniqueID domain = "American College of
Surgeons">654321</m:UniqueID>
         <m:Name>
            <n:GivenName>Mary</n:GivenName>
            <n:FamilyName>Shelley</n:FamilyName>
            <n:Degree>MD</n:Degree>
         </m:Name>
      </Member>
      <Activity>
         <ProviderOrganization>American College of
Surgeons</ProviderOrganization>
         <ActivityName>92nd Annual Clinical Congress</ActivityName>
         <Module>
            <ModuleName>92nd Annual Clinical Congress</ModuleName>
            <Metadata>
               <lom:lom>
               <hx:healthcareMetadata>
               <hx:healthcareEducation>
               <hx:activityLocation>
                  <a:City>Chicago</a:City>
                  <a:StateOrProvince>IL</a:StateOrProvince>
                  <a:Country>
                     <a:CountryCode>US</a:CountryCode>
                  </a:Country>
               </hx:activityLocation>
               </hx:healthcareEducation>
               </hx:healthcareMetadata></lom:lom>
            </Metadata>
            <Status>Completed</Status>
         </Module>
      </Activity>
   </ActivityReport>
</ActivityReports>
```

4. Adapt the Schema to Meet Your Requirements

If an analysis of the schema shows a gap between the data the schema addresses and the data required for exchange, the schema may be extended to incorporate new data. To extend the Activity Report, take the following steps.

1. **Write a new XML schema for new data elements and declare a targetNamespace.**
   Develop a new XSD schema that defines the data elements that are missing. All new elements must be associated with a namespace. This can be achieved by using the XSD targetNamespace attribute. The following example defines an element called Updates that indicates whether the individual wants to receive relevant updates from the organization. The schema defines http://ns.myurl.com/updates/ as the targetNamespace, so the Updates element is associated with that namespace.

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema targetNamespace="http://ns.myurl.com/updates/"
xmlns="http://ns.myurl.com/updates/"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified" attributeFormDefault="unqualified">
   <xs:element name="Updates" type="xs:boolean"/>
</xs:schema>
```

2. **Place new namespace qualified elements in the XtensibleInfo element in the XML instance document.**
   The XtensibleInfo element of the Activity Report was designed to enable extensions. When creating an instance document of the Activity Report, declare the namespace of the schema with new data elements in the instance document. Usually this is done by declaring the namespace in the root element and assigning a prefix to the namespace. Then the prefix can be used when referencing the new elements. You may also declare a default namespace for an element and its subelements by declaring the namespace in the uppermost element belonging to that namespace.

   In the example below, the prefix t is declared for the http://ns.myurl.com/updates/ namespace within the ActivityReports root element. The u prefix is then used to label the Updates element, which is referenced within XtensibleInfo.

```
<ActivityReports xmlns="http://ns.medbiq.org/activityreport/v1/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:lom="http://ltsc.ieee.org/xsd/LOM"
xmlns:m="http://ns.medbiq.org/member/v1/"
xmlns:n="http://ns.medbiq.org/name/v1/"
xmlns:hx="http://ns.medbiq.org/lom/extend/v1/"
xmlns:a="http://ns.medbiq.org/address/v1/"
xmlns:u="http://ns.myurl.com/updates/"
xsi:schemaLocation="http://ns.medbiq.org/activityreport/v1/
activityreport.xsd">
<DateTimeCreated>2006-04-15T02:30:00</DateTimeCreated>
   <ActivityReport>
      <ReportingOrganization>American Heart
Association</ReportingOrganization>
      <Member>
         <m:UniqueID domain = "American Heart Association">54321</m:UniqueID>
         <m:Name>
            <n:GivenName>Allen</n:GivenName>
            <n:FamilyName>Ginsberg</n:FamilyName>
            <n:Degree>MD</n:Degree>
         </m:Name>
```

```
      </Member>
      <Activity>
         <ProviderOrganization>American Heart
Association</ProviderOrganization>
         <ActivityName>92nd Annual Clinical Congress</ActivityName>
         <Module>
            <ModuleName>92nd Annual Clinical Congress</ModuleName>
            <Status>Registered</Status>
         </Module>
      </Activity>
      <XtensibleInfo>
         <u:Updates>true</u:Updates>
      </XtensibleInfo>
   </ActivityReport>
</ActivityReports>
```

5. Embedding Activity Report XML in PDF Documents

The Adobe Portable Document Format (PDF) specification provides a mechanism for binding XML to a PDF document, thereby producing a file that is both human and machine readable. Organizations that are more technically advanced may opt to extract XML data from the PDF document to incorporate in a database without a human ever accessing the original PDF document. Organizations without the means for such systems could allow humans to open and read the PDF document. Thus PDF serves as an important bridge technology between those with XML enabled systems and those that do not have XML enabled systems.

There are many benefits to binding XML to a PDF document when representing a CME Certificate or Maintenance of certification activity certificate. Specialty and certification boards can easily receive, store, and track these electronic files. Learners can easily download the files to their personal computers to track their own learning and certification activities. Ultimately, the PDF documents could be uploaded and imported to portfolio systems that track a learner's certification or CME activities.

Adobe LiveCycle Designer (http://www.adobe.com/products/server/adobedesigner/) provides the capability to develop XML enabled forms. Because Adobe makes its specification publicly available, third party developers have developed code libraries that enable organizations to bind XML to PDF forms without the use of Adobe products. These products include open source offerings from Big Faceless Organization (http://big.faceless.org/) and IText (http://www.lowagie.com/iText/). In addition, ColdFusion can automatically generate a PDF document from a data source.

To create PDF certificates with embedded Activity report XML, follow these general guidelines.

1. Develop a pdf that is based on the Activity Report XML Schema. Each field in the form should map directly to an Activity report element.
2. If you plan to have the form populated by a database (eliminating the need to type in certificate data for each certificate), link the form and its field to a database and its fields.
   If you plan to have a person manually type in the certification data, develop an interactive form that allows users to choose values based on what the schema allows.

Adobe Reader version 6 or later is required for reading most PDF files with embedded XML data. Acrobat Professional and Acrobat Standard can export or import XML data from or to the PDF form. Adobe Reader can export from the form as well. In some cases, Adobe LiveCycle Reader Extensions may be necessary for users to use

the form with Adobe Reader if the user will be either: 1) making comments or annotations; 2) saving modified forms to their own computer; or 3) digitally signing documents.

.

6. Exchanging Activity Report Data using Web Services

Organizations may choose to use Web services to exchange Activity Report data. You may download web services descriptions from: http://ns.medbiq.org/activityreport/service/v1/ For more information, contact Valerie Smothers (valerie.smothers@medbiq.org).

7. References

Healthcare Learning Object Metadata Specifications and Descriptions Document, version 1.0. Available at: http://medbiq.org/working_groups/learning_objects/HealthcareLOMSpecification.pdf

MedBiquitous Healthcare Professional Profile Specifications Document, version 1.0. Available at: http://www.medbiq.org/working_groups/professional_profile/ProfessionalProfileSpecifications.pdf

8. Appendix 1: Identity Resolution

The duplication of names within databases makes it difficult to resolve and individual's identity across organizations different identity schemas. The ideal solution for this would be to have a single unique identifier for each clinician to be used by all organizations that track their professional data. Without such an identifier in wide use, it is necessary for organizations that wish to work together to undergo an identity resolution process. Identity resolution typically consists of the following steps.

1. Establishment of match points
   Together the organizations involved identify what combinations of professional profile elements constitute a match. For example, the organizations may decide that the following elements, when matched across organizations or systems, constitute an identity match:
   - GivenName
   - FamilyName
   - BirthDate
   - TaxNumber
   - GraduationDate

2. Exchange of profile data.
   Organization A sends Organization B a subset of its member/professional database using the Professional Profile standard format. The subset must include the data used as match points as well as the unique identifier for the individual used by Organization A.

3. Comparison of data to determine matches
   Organization B writes a program to compare received data with data in their database. The program maps data records from one database to the other based on the match points identified in step 1. If there are near matches, staff from Organization B may work with staff from Organization A to resolve those identities. Some records will likely go unmatched.

4. Recording unique ids of data partners
   For those matches considered a match, Organization B records the unique identifier used by Organization A in its database. Organization B then sends Organization A Professional Profile data indicating both the

Organization A unique identifier and the Organization B unique Identifier, allowing Organization A to save the Organization B identifier in its database.

5. Web services resolution
   Once the initial matching has been achieved, the organizations may choose to use Web services to match individual identity records on an as needed basis. For more information, see Professional Profile Web Services Description (pending) or contact Valerie Smothers (valerie.smothers@medbiq.org).

9. Appendix 2: Sample Activity Reports

For Maintenance of Certification

```
<ActivityReports xmlns="http://ns.medbiq.org/activityreport/v1/"
xmlns:m="http://ns.medbiq.org/member/v1/"
xmlns:n="http://ns.medbiq.org/name/v1/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://ns.medbiq.org/activityreport/v1/
activityreport.xsd">
   <DateTimeCreated>2008-09-24T00:00:00</DateTimeCreated>
   <ActivityReport>
       <ReportingOrganization>American Academy of
Pediatrics</ReportingOrganization>
       <Member>
           <m:UniqueID domain="The American Board of
Pediatrics">123456</m:UniqueID>
           <m:Name xmlns="http://ns.medbiq.org/member/v1/">
            <n:GivenName
xmlns="http://ns.medbiq.org/name/v1/">John</n:GivenName>
            <n:FamilyName
xmlns="http://ns.medbiq.org/name/v1/">Doe</n:FamilyName>
           </m:Name>
       </Member>
       <Activity>
           <ProviderOrganization>American Academy of
Pediatrics</ProviderOrganization>
           <ActivityName>eQIPP</ActivityName>
           <Module>
               <ModuleName moduleID="2">Education in Quality Improvement
(eQIPP)</ModuleName>
               <Status>Completed</Status>
               <StartDateTime>2008-09-24T00:00:00</StartDateTime>
           </Module>
       </Activity>
   </ActivityReport>
</ActivityReports>
```

For Journal CE

```
<ActivityReports xmlns:hx="http://ns.medbiq.org/lom/extend/v1/"
xmlns:lom="http://ltsc.ieee.org/xsd/LOM"
xmlns:n="http://ns.medbiq.org/name/v1/"
xmlns="http://ns.medbiq.org/activityreport/v1/"
xmlns:m="http://ns.medbiq.org/member/v1/"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
```

```
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="activityreport.xsd">
  <DateTimeCreated>2007-05-08T07:00:00</DateTimeCreated>
  <ActivityReport>
     <ReportingOrganization>HighWire Press</ReportingOrganization>
     <Member restrictions="Unrestricted">
        <m:UniqueID domain="AHA">TDDT</m:UniqueID>
        <m:Name>
           <n:FormattedName>HighWire Team</n:FormattedName>
        </m:Name>
     </Member>
     <Activity>
        <ProviderOrganization>AHA</ProviderOrganization>
        <ActivityName>Circulation: October 3, 2006, Volume 114, Number
14</ActivityName>
        <Module>
           <ModuleName moduleID="cmeaha_course;circ-2006-114-14">Circulation:
October 3, 2006, Volume 114, Number 14</ModuleName>
           <Metadata>
              <lom:lom>
                 <hx:healthcareMetadata>
                    <hx:healthcareEducation>
                       <hx:expirationDate>2007-10-03-
07:00</hx:expirationDate>
                       <hx:creditsAvailable>yes</hx:creditsAvailable>
                       <hx:credits>
                          <hx:accreditingBody>ACCME</hx:accreditingBody>
                          <hx:activityCertification>AMA PRA Category
1</hx:activityCertification>
                          <hx:creditType>CME</hx:creditType>
                          <hx:creditUnit>Credit</hx:creditUnit>
                          <hx:pacing>learner paced</hx:pacing>
                          <hx:accreditedProvider>AHA</hx:accreditedProvider>
                          <hx:releaseDate>2006-10-03-07:00</hx:releaseDate>
                          <hx:expirationDate>2007-10-03-
07:00</hx:expirationDate>
                          <hx:numberOfCredits>1.0</hx:numberOfCredits>
                       </hx:credits>
                       <hx:targetAudience>

<hx:audienceCategory>professional</hx:audienceCategory>
                       </hx:targetAudience>
                    </hx:healthcareEducation>
                 </hx:healthcareMetadata>
              </lom:lom>
           </Metadata>
           <Status>Completed</Status>
           <CreditCertificate>
              <CreditReceived>
                 <hx:accreditingBody>ACCME</hx:accreditingBody>
                 <hx:activityCertification>AMA PRA Category
1</hx:activityCertification>
                 <hx:creditType>CME</hx:creditType>
                 <hx:creditUnit>Credit</hx:creditUnit>
                 <hx:pacing>learner paced</hx:pacing>
```

```
                  <hx:accreditedProvider>AHA</hx:accreditedProvider>
                  <hx:releaseDate>2006-10-03-07:00</hx:releaseDate>
                  <hx:expirationDate>2007-10-03-07:00</hx:expirationDate>
                  <hx:numberOfCredits>1.0</hx:numberOfCredits>
               </CreditReceived>
               <CreditID>ccid:ahajournals.org:ACCME:AHA::cmeaha_course;circ-
2006-114-14:CME:AMA.PRA.Category.1:TDDT:1:2007-05-08T15:52:52.413-
07:00</CreditID>
            </CreditCertificate>
         </Module>
      </Activity>
   </ActivityReport>
</ActivityReports>
```

For Point of Care Learning

```
<?xml version = "1.0" encoding = "UTF-8"?>
<ActivityReports xmlns = "http://ns.medbiq.org/activityreport/v1/"
xmlns:m = "http://ns.medbiq.org/member/v1/"
xmlns:hx = "http://ns.medbiq.org/lom/extend/v1/"
xmlns:n = "http://ns.medbiq.org/name/v1/"
xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation = "http://ns.medbiq.org/activityreport/v1/
activityreport.xsd">
   <DateTimeCreated>2009-07-31T02:30:00</DateTimeCreated>
   <ActivityReport>
      <ReportingOrganization>MedPage Today</ReportingOrganization>
      <Member>
         <m:UniqueID domain = "medpagetoday">pld@nosuchemail.org</m:UniqueID>
         <m:Name>
            <n:GivenName>Paul</n:GivenName>
            <n:FamilyName>Dunbar</n:FamilyName>
         </m:Name>
      </Member>
      <Activity>
         <ProviderOrganization>University of
Pennsylvania</ProviderOrganization>
         <ActivityName>Point of Care Learning</ActivityName>
         <Module>
            <ModuleName>Point of Care Learning</ModuleName>
            <Status>Completed</Status>
            <CreditCertificate>
               <CreditReceived>
                  <hx:accreditingBody>ACCME</hx:accreditingBody>
                  <hx:activityCertification>AMA PRA Category
1</hx:activityCertification>
                  <hx:creditType>CME</hx:creditType>
                  <hx:creditUnit>Credit</hx:creditUnit>
                  <hx:accreditedProvider>University of
Pennsylvania</hx:accreditedProvider>
                  <hx:numberOfCredits>.5</hx:numberOfCredits>
               </CreditReceived>
               <CreditID>ccid:upenn.edu:123456789</CreditID>
            </CreditCertificate>
```

```
         </Module>
         <PointOfCareLearningData>
            <ClinicalQuestionOrTopic>Is it appropriate to use antivirals to
treat flu in pregnant women?</ClinicalQuestionOrTopic>
            <SearchParameters>flu</SearchParameters>
            <SearchParameters>pregnancy</SearchParameters>
            <ResourceUsed>
               <Title>Pregnancy Increases Risk of Severe H1N1 Disease</Title>
               <Collection>MedPage Today</Collection>
               <CollectionID>15284</CollectionID>
               <ResourceLocation>
                http://www.medpagetoday.com/InfectiousDisease/SwineFlu/15284
               </ResourceLocation>
               <Relevant>true</Relevant>
            </ResourceUsed>
            <ResourceUsed>
               <Title>Europe tries to Contain H1N1 Flu with Drugs</Title>
               <Collection>MedPage Today</Collection>
               <CollectionID>14174</CollectionID>
               <ResourceLocation>
                http://www.medpagetoday.com/InfectiousDisease/SwineFlu/14174
                </ResourceLocation>
               <Relevant>true</Relevant>
            </ResourceUsed>
            <ApplicationToPractice>Prescribed antiviral and requested
followup visit.</ApplicationToPractice>
         </PointOfCareLearningData>
      </Activity>
   </ActivityReport>
</ActivityReports>
```